



National Electrical Manufacturers Association

PHILIP A. SQUAIR

Vice President, Government Relations

November 16, 2018

By email: <https://www.regulations.gov/> keywords Smart Products RFI

Ms. Jennifer Tiedeman
U.S. Department of Energy
Office of the General Counsel,
GC-33, 1000 Independence Avenue SW,
Washington, DC 20585-0121

NEMA Comments on Smart Products Request for Information

Dear Ms. Tiedman,

As the leading trade association representing the manufacturers of electrical and medical imaging equipment, the National Electrical Manufacturers Association (NEMA) provides the attached comments on the DOE Request for Information concerning the Emerging Smart Technology Appliance and Equipment Market. These comments are submitted on behalf of NEMA Member companies.

The National Electrical Manufacturers Association (NEMA) represents nearly 350 electrical equipment and medical imaging manufacturers that make safe, reliable, and efficient products and systems. Our combined industries account for 360,000 American jobs in more than 7,000 facilities covering every state. Our industry produces \$106 billion shipments of electrical equipment and medical imaging technologies per year with \$36 billion exports.

We appreciate the opportunity to comment on this important, emerging product services sector. If you have any questions on these comments, please contact Alex Boesenberg of NEMA at 703-841-3268 or alex.boesenberg@nema.org.

Sincerely,

A handwritten signature in black ink that reads "Philip A. Squair". The signature is written in a cursive, flowing style.

Philip Squair
Vice President, Government Relations
National Electrical Manufacturers Association

NEMA Comments on Smart Products Request for Information

1. NEMA appreciates the opportunity to comment on this important topic. As the number of connected devices continues to grow and the Internet of Things (IoT) and Industrial Internet of Things (IIoT) emerge, it is important to not interfere with innovation and product development, except where absolutely necessary.
2. NEMA appreciates the DOE's interest in this topic and the evidenced acceptance that the power consumption of connected products is not inherently a localized issue, meaning that the connectability of the device is a consumer-demanded feature and not an ancillary, unimportant service. This is evidenced by the lack of appearance of the term "standby power" in the DOE's RFI text. This is an important distinction, and we commend the DOE on looking at the greater connected environment instead of looking solely at individual devices.
3. NEMA believes the proper approach with respect to power consumption of connected products should consider the services delivered by the connection(s) and thus that power consumption is not simply a small allowance tacked onto the primary power draw associated with primary services. In fact, connectivity and the ability to interface with other devices and networks is at times becoming a primary function, with the user interface point of the device becoming an equal or even subordinate function.
4. To expand on the preceding comment, NEMA believes that because the power consumption associated with a device's connectivity can vary depending on the type and extent of connection, it follows that the power allowances must also be flexible. There is no one-size-fits-all answer for connectivity power allowances.
5. NEMA has written a white paper on this topic and refers the DOE and other interested parties to it for more discussion of the concept of connectivity as a service:
<https://www.nema.org/Standards/Pages/Standby-Power-of-Connected-Devices-and-the-Internet-of-Things.aspx>
6. NEMA agrees that the network power consumption of a device must be assessed, if standards are to be established, but we urge further study and time for this technology to mature before establishing test procedures. Existing test procedures have grown out of Standby Power allowances, and these are short-sighted and too locally focused on single devices.
7. As to Cybersecurity related issues, NEMA reminds the DOE that the Consumer Product Safety Commission has a working group on potential consumer hazards associated with connected products, and several other entities have similar working groups. More information about these efforts can be found in NEMA's comments to the CPSC's public meeting of May 16, 2018¹.
8. We also refer the DOE and interested parties to our comments² to recent solicitations for information from the California Energy Commission and to related Joint Association comments³ on the same topic.

¹ https://www.nema.org/Policy/SiteAssets/Pages/Rulemaking-Comments/NEMA%20Comments%20CPSC%20Connected%20Products%2015June2018%20v4_2.pdf

² <https://www.nema.org/Policy/SiteAssets/Pages/Rulemaking-Comments/Ph2%20Pre-Rule%20Low%20Power%20Mode%20NEMA%20Comments.pdf>

9. There is much work to be done in bringing this emerging technology sector into mainstream use for the benefit of U.S. consumers. One of the biggest concerns, as is duly noted in the DOE's RFI, is that too-restrictive requirements will blunt the potential benefits of this technology from being fully realized or that already-regulated products will be the first impacted by this and thus risk being written out of the future by too-restrictive requirements.
10. We note that there are some advocates who claim that allowing unrestricted connectivity power allowances will result in unnecessary additional energy consumption nationwide. We disagree with these pessimistic opinions. Many products associated with connectivity are portable, and thus they are already incentivized by consumer demands to minimize unnecessary power consumption in all states of operation. Furthermore, many devices like many consumers are cost-constrained, so adding connectivity to every product circuit board while possible, is not cost-feasible. For those products which possess unused connectable capability, the associated power consumption of the unused connectivity package is logically quite low.
11. It is the position of the National Electrical Manufacturers Association that national attention on this important emerging topic is warranted, to avoid a patchwork of differing and burdensome State-level requirements.

³ <https://www.nema.org/Policy/SiteAssets/Pages/Rulemaking-Comments/Ph2%20Low%20Power%20Mode%20Joint%20Assn%20Comments.pdf>