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July 12, 2010

U.S. Department of Energy
Office of the General Counsel
1000 Independence Avenue, SW
Room 6A245
Washington, DC 20585
Attn: Maureen McLaughlin

Re: *NBP RFI: Data Access*

Ms. McLaughlin:

The Consumer Electronics Association ("CEA") respectfully submits this response to the Department of Energy's ("DOE") Request for Information on Implementing the National Broadband Plan by Empowering Consumers and the Smart Grid: Data Access, Third Party Use, and Privacy ("RFI").[1] CEA is the principal U.S. trade association of the consumer electronics and information technology industries. CEA's approximately 2,000 member companies include leading manufacturers and providers of consumer- and utility-facing smart grid products and services.

CEA commends DOE for initiating this important proceeding. The Association agrees that Smart Grid technologies will "play a critical role in achieving national priorities like enabling new ways to enhance energy efficiency, enhancing national competitiveness, improving national security by increasing our energy independence, and developing sustainable, long-term energy strategies that protect our environment and economy."[2] A critical component to Smart Grid's success will be unleashing energy innovation in homes and buildings by making energy data readily accessible to consumers.[3]

[1] Implementing the National Broadband Plan by Empowering Consumers and the Smart Grid: Data Access, Third Party Use, and Privacy, *Request for Information*, FR Doc. 2010-11127, 75 Fed. Reg. 26203 (May 11, 2010) ("*Data RFI*").
[2] *Id.* at 26205.
[3] The National Broadband Plan indicated that "unleashing innovation in smart homes and buildings" through the use of broadband networks was one of the six high-level policy goals for the nation. *See* FEDERAL COMMUNICATIONS COMMISSION, CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN XIV (March 16, 2010).

Smart Grid technologies will enable consumers to gain critical information and make choices that can lead to more efficient homes and businesses. Smart Grid technologies will also enable consumers to reduce energy bills by becoming generators of electricity through their plug-in electric vehicles and solar homes. CEA urges DOE and other policymakers to take actions to ensure that the data access, privacy and security policies facilitate informed consumer choices. In addition, while Smart Grid deployments will occur on a state-by-state basis, Federal-state coordination is essential to ensure that the data access, privacy and security policies are consistent and do not impose unnecessary barriers to the creation of national markets for Smart Grid products and services. National markets and interoperability standards will facilitate innovation and the development of these sectors.

CEA appreciates the opportunity to provide its preliminary views on some of the issues impacting the Smart Grid. CEA provides responses to questions 1-4, 6, 9-11, 13-15, and 18.

1. Who owns the energy consumption data?

Consumers should own their own energy consumption data. As importantly, consumers should be able to control and monitor access to their energy consumption data, including the data managed and collected by the consumers' electric distribution utility or retail energy provider.

2. Who should be entitled to privacy protections relating to energy information?

Consumers should be afforded privacy protections for energy consumption information if it directly relates to such consumer's own consumption data, or where the consumer's personally identifiable information ("PII") would be easily determined by its disclosure.[4]

CEA notes that aggregated, anonymized, consumption information can be valuable in informing policymakers and participants regarding general consumer energy usage patterns, consumer needs and ways to enable demand response applications. It can also be used to promote significant energy savings. Utilities and third party aggregators should be able to use and disclose aggregated, anonymized, consumption information, provided that consumers are informed of this practice and utilities and third party aggregators implement industry standard mechanisms to protect against someone being able to infer a consumer's PII or individual usage information by comparing the aggregated information with other publicly available data.[5] Third

[4] We acknowledge that the U.S. Department of Commerce, National Institute for Standards and Technology ("NIST") Home-to-Grid Domain Expert Working Group is working on policies regarding the de-correlation of usage data from the location of the premises. We support public-private collaborative efforts to obtain industry consensus on policy and technical issues related to the Smart Grid.

[5] *See* Smart Grid Interoperability Panel – Cyber Security Working Group, Smart Grid Cyber Security Strategy and Requirements, Draft NISTIR 7628, at 110 (Feb. 2010), *available at* http://csrc.nist.gov/publications/drafts/nistir-7628/draft-nistir-7628_wnd-public-draft.pdf ("*Smart Grid Cyber Security Report*") (noting the privacy concerns regarding the ability of third parties to combine aggregated usage information with other available data sets to obtain a consumer's individual usage information).

parties should also have non-discriminatory access to this information as further discussed in the response to question 13.

3. What, if any, privacy practice should be implemented in protecting energy information?

CEA recognizes that protecting consumers' privacy will be important in encouraging consumer adoption of Smart Grid technologies. CEA believes however that Smart Grid technologies do not require the development and adoption of prescriptive Smart Grid-specific privacy rules. Existing privacy best practices and policies exist and can be used to support this nascent industry. In the RFI, DOE highlights several ongoing privacy policy initiatives potentially applicable to the Smart Grid, including the Fair Information Practice Principles ("FIPP") and the privacy principles developed by the Privacy sub-group of the Smart Grid Interoperability Panel – Cyber Security Working Group ("SGIP-CSWG").[6] At this early stage, CEA is generally supportive of efforts to drive toward the adoption of industry consensus on generally applicable privacy policies. Public-private initiatives, such as SGIP-CSWG, will help foster an appropriate forum for developing generally applicable privacy best practices. CEA looks forward to working with the SGIP-CSWG and other initiatives in efforts to develop industry consensus on privacy best practices.

CEA is concerned that the creation of multiple, state Smart Grid specific privacy regimes could hinder innovation and Smart Grid deployments. The SGIP-CSWG's preliminary findings indicate that existing privacy regimes vary widely by state.[7] There is a real possibility that multiple, inconsistent state Smart Grid privacy regimes could be developed without coordination among states and Federal policymakers. The Federal Energy Regulatory Commission ("FERC")-National Association of Regulatory Utility Commissioners ("NARUC") Smart Grid Collaborative[8] is a good example of the type of collaborative effort necessary to achieve a coordinated national Smart Grid policy strategy.

4. Should consumers be able to opt in/opt out of smart meter deployment or have control over what information is shared with utilities or other third parties?

From CEA's perspective, DOE raises two important decision points for consumers: (1) whether they want to participate in the Smart Grid, smart meter deployments and dynamic pricing programs, and (2) whether consumers can consent to information sharing.

Smart Meter Deployments. As this time, CEA does not opine on whether consumers should have the ability to opt out of smart meter deployments and dynamic pricing programs. As a general matter, however, CEA notes that ubiquitous deployment of smart meters in conjunction

[6] *See id.* at 104-09.
[7] *Id.* at 103.
[8] *See* NARUC, Smart Grid Collaborative, http://www.naruc.org/Ferc/default.cfm?c=3 (last visited July 12, 2010).

with the widespread implementation of dynamic pricing plans are necessary components to creating vibrant and effective home energy markets. Additionally, utility-sponsored consumer education programs should go hand-in-glove with these smart meter deployments and dynamic pricing plan implementations. As noted by the Maryland Public Service Commission, many of the potential energy savings of the Smart Grid rely upon a fundamental change in the way consumers use energy and think about energy pricing, and comprehensive consumer education programs are necessary to bring about this change.[9]

Information Sharing. As previously noted, consumers should have the right to control access to energy consumption information if it directly relates to such consumer's own consumption data, or where the consumer's personally identifiable information would be easily determined by its disclosure. CEA believes that consumers should be able to make informed decisions regarding the sharing and privacy of their personal information but that the appropriate consent mechanism could vary based on the circumstances. For example, certain programs may require more than a "yes or no" opt-in mechanism in which consumers have a list of information sharing options to choose between, while other programs may only require an "opt out" consent mechanism. Mandating a particular mechanism at this early stage could hinder the development of creative processes to enable informed consumer consent and the widespread deployment of Smart Grid technologies.

6. How do policies and practices address the needs of different communities, specifically low-income rate payers or consumers with low literacy or limited access to broadband technologies?

Smart Grid technologies have the capability to empower all consumers including low-income consumers to more effectively manage their utility bills and reduce consumption. For example, results of Pepco's recent PowerCentsDC pilot program—a pilot to test an integrated Smart Grid combination of dynamic pricing, multi-faceted consumer energy information feedback, and smart appliance control—indicated that consumers reduced their demand by up to 50% and that low income consumers enrolled at higher rates than other consumers.[10]

Policymakers should be mindful of all segments of society in considering Smart Grid deployments to ensure that they all can benefit from Smart Grid technologies. All consumers are best served by open and interoperable standards, competitive markets and widespread deployments and adoption of products. These policies will improve economies of scale, reduce per unit production costs, and make Smart Grid products more affordable for all consumers.

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[9] *See* In the Matter of the Application of Baltimore Gas and Electric Company for Authorization to Deploy a Smart Grid Initiative and to Establish a Surcharge for the Recovery of Cost, Md. Pub. Serv. Comm'n, *Order No. 83410*, at 31 (June 21, 2010).

10 eMeter, Press Release, eMeter to Brief Federal Officials on PowerCentsDC Smart Grid Pilot Results (July 1, 2010), *available at* http://www.emeter.com/2010/emeter-to-brief-federal-officials-on-powercentsdc-smart-grid-pilot-results.

If policymakers believe that low-income consumers need additional assistance in receiving the benefits of Smart Grid technologies through the use of governmental rebates or tax credits, these rebates or credits should not stifle innovation or upset the competitive landscape by picking technological winners or losers. CEA does not take a position, however, on the appropriateness of, or need for, such rebates or credits with respect to Smart Grid technologies.

9. Because access and privacy are complementary goods, consumers are likely to have widely varying preferences about how closely they want to control and monitor third-party access to their energy information: what mechanisms exist that would empower consumers to make a range of reasonable choices when balancing the potential benefits and detriments of both privacy and access?

CEA agrees that consumers should be empowered to make informed decisions regarding their energy information and third party access. Consumers should have the ability to "dial the knob" on the privacy-access continuum to strike an appropriate balance between these complementary goods. CEA believes that existing industry best practices regarding privacy policy disclosures can be leveraged for the Smart Grid marketplace. As noted in CEA's response to question 4 above, policymakers should not mandate any particular technological process at this time by which consumers make such choices. Different Smart Grid technologies may require different approaches or technological processes, and proscribing rules now could stifle innovation in this nascent marketplace.

10. What security architecture provisions should be built into Smart Grid technologies to protect consumer privacy?

Smart Grid technologies, once deployed, have the potential to fundamentally alter the way we as a society generate and consume energy. CEA acknowledges that the increased connectivity of the Smart Grid also presents certain security concerns and it believes that industry best practices and procedures can be used to address these concerns.

Under its Congressional mandate,[11] NIST has taken significant steps to build industry consensus on interoperability standards and security best practices through the public-private Smart Grid Interoperability Panel ("SGIP") and the SGIP-CSWG. CEA and its members have been active participants in both the SGIP and SGIP-CSWG, and a number of representatives from CEA and its members are SGIP board members. CEA is supportive of consensus-building initiatives, as they can create a valuable forum for interested stakeholders to evaluate national interoperability standards and privacy best practices.

[11] Energy Independence and Security Act of 2007 § 1305(a) ("The Director of the National Institute of Standards and Technology shall have primary responsibility to coordinate the development of a framework that includes protocols and model standards for information management to achieve interoperability of smart grid devices and systems.").

11. **How can DOE best implement its mission and duties in the Smart Grid while respecting the jurisdiction and expertise of other Federal entities, states and localities?**

As DOE notes "Smart Grid technologies [also] implicate traditional State interests in autonomy, utilities-regulation and privacy-management."[12] Ensuring that the nation can achieve both federal and state policy objectives will necessarily require Federal-state coordination. This coordination will minimize the risk of multiple, inconsistent rules being applied to the Smart Grid. Inconsistent rules could potentially hinder the industry's ability to develop nationwide markets for Smart Grid products and services and could undermine important national objectives.

DOE can serve an important role by creating a national dialogue on these issues and helping to foster the development of best practices and standards in this area. This RFI, and its sister Request for Information on communications requirements of the Smart Grid, appropriately builds upon the FERC-NARUC Smart Grid Collaborative and other efforts to create a national conversation on Smart Grid policy and technical issues.

13. **What third parties, if any, should have access to energy information? How should interested third parties be able to gain access to energy consumption data, and what standards, guidelines, or practices might best assist third parties in handling and protecting this data?**

Third parties should have access to an individual's consumption data once a consumer consents to this access. In addition, consumers, or their designees, should be able to direct their distribution utilities or retail energy providers to make consumption data available to third parties in a consistent, machine-readable format and on a nondiscriminatory basis. As noted by the California Public Utilities Commission, "the availability of information on usage and prices in a consistent format can lead to energy management solutions that at this time we can only begin to imagine."[13] CEA further believes that data access that relies upon national interoperability standards and data formats will reduce product development costs and make Smart Grid products more widely available. By contrast, multiple access rules and standards could hinder innovation and increase the cost of Smart Grid technologies.

CEA notes that data access rules can positively or negatively affect the competitive landscape for Smart Grid technologies. Distribution utilities currently are the central repository for all consumption data generated by their ratepayers. They should not be able to use this special position to gain an unfair competitive advantage in the home energy marketplace.

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[12] *Data RFI*, *supra* note 1, at 26205.

[13] *See id.* at 26205 (citing *Order Instituting Rulemaking to Consider Smart Grid Technologies Pursuant to Federal Legislation and on the Commission's Own Motion to Actively Guide Policy In California's Development of a Smart Grid System*, http://docs.cpuc.ca.gov/published/FINAL_Decision/95608.htm at § 4.1.2).

Nondiscriminatory access rules, along with open interoperability standards, will help ensure that consumers have meaningful choices in a competitive home energy marketplace.[14]

14. **What forms of energy information should consumers or third parties have access to?**

15. **What types of personal energy information should consumers have access to in real-time, or near real-time?**

As a general matter, broad availability of energy information will lead to the development of products and services that are beneficial to consumers and empower them to make informed decisions regarding their energy consumption. Consumers should have access to all information regarding their energy consumption and pricing information, including real time (or near real time) usage information and rates, historical usage information and generation source. At this nascent stage of the Smart Grid industry, there should not be unreasonable and artificial caps placed on the amount or types of information that a consumer could request from utilities or retail energy providers.

18. **Should DOE consider consumer data accessibility policies when evaluating future Smart Grid grant applications?**

Yes. DOE should consider consumer data accessibility policies when evaluating Smart Grid applications to ensure that such policies are furthering national policy objectives.

[14] *See* Joseph Farrell & Philip J. Weiser, *Modularity, Vertical Integration, and Open Access Policies: Towards a Convergence of Antitrust and Regulation in the Internet Age*, 17 HARV. J.L. & TECH. 86, 105-07 (2003) (the authors acknowledge that regulated platform monopolies may have the incentive to leverage their monopoly power downstream to the applications markets in order to maximize monopoly rents). Structural protections such as open interoperability standards and nondiscriminatory data access provisions could help preserve competition in the home energy marketplace.

CONCLUSION

CEA commends DOE's efforts to create a dialogue on Smart Grid data access issues and its efforts to promote successful Smart Grid deployments. CEA looks forward to participating in this ongoing national conversation.

Sincerely,

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