

July 12, 2010

U.S. Department of Energy  
Office of the General Counsel  
ATTN: NBP RFI: Data Access  
1000 Independence Avenue, SW  
Room 6A245  
Washington, DC 20585

**Re: DOE Request for Information – Implementing the National Broadband Plan by Empowering Consumers and the Smart Grid: Data Access, Third Party Use, and Privacy**

## **I. INTRODUCTION**

Idaho Power Company (“Idaho Power”) hereby submits the following comments in response to the Department of Energy’s (“DOE” or “Department”) request for information from interested parties on state efforts to enact Smart Grid privacy and data collection policies; individual utility practices regarding data access and collection; third party access to detailed information; the role of the consumer in balancing the benefits of access and privacy; and what policies and practices should guide policymakers in determining access to consumers’ energy information and under what conditions.<sup>1</sup>

Idaho Power is an Idaho public utility corporation with its principal place of business in Boise, Idaho. Idaho Power owns and operates transmission and distribution facilities in Idaho and Oregon, seventeen hydroelectric generating facilities on the Snake River and its tributaries in Idaho, and one combustion turbine generator located

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<sup>1</sup> NBP RFI: Implementing the National Broadband Plan by Empowering Consumers and the Smart Grid: Data Access, Third Party Use and Privacy, 75 FR 26,203, May 11, 2010 (“Notice”).

in Idaho, and has an ownership interest in three coal-fired generating facilities operated by others.<sup>2</sup> Idaho Power also buys and sells electricity on the wholesale market. Idaho Power is authorized to do business in Idaho, Oregon, and Nevada. Idaho Power provides bundled retail electric service to approximately 406,000 customers in a franchised electric service territory of 24,000 square miles. Idaho Power is subject to the jurisdiction and regulation of the Federal Energy Regulatory Commission (“FERC”), Idaho Public Utilities Commission (“IPUC”), and the Oregon Public Utilities Commission (“OPUC”). Idaho Power utilizes and relies extensively on sophisticated communications systems, including broadband communications and networks.

Idaho Power and its customers may be directly or indirectly affected by the instant proceeding as users of broadband communications and services. Accordingly, Idaho Power’s primary interest in this proceeding is to promote policies for the advancement of Smart Grid that ensure energy data is properly collected, reported, managed, shared, and disclosed in a manner that protects customer privacy as well as Idaho Power’s ability to provide safe and reliable electric service.

## **II. EXECUTIVE SUMMARY**

Idaho Power appreciates the opportunity to provide comments to the DOE regard in the collection and use of energy data. Idaho Power supports the advancement of Smart Grid technology and the DOE’s efforts to collect information regarding the use and access of energy data. Customer Specific Energy Data (“CSED”) plays a key role in the

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<sup>2</sup> These facilities are the Bridger Power Station in Wyoming operated by PacifiCorp; the Valmy Generating Station in Nevada operated by Sierra Pacific Power Company and the Boardman Generating Station in Oregon, operated by Portland General Electric Company.

operation of the utility and is relied upon extensively by Idaho Power to provide safe and reliable service to its customers. CSED is incorporated into and drives a number of key utility functions, including but not limited to, billing, resource planning, facility operation, and facility maintenance. More importantly, protection of customer privacy is key component of Idaho Power's efforts to maintain strong relationships with its customers. Protection of customer privacy and information from misuse or exploitation is a long standing, well established, and key priority for Idaho Power. Idaho Power has long standing policies and procedures in place that limits access to CSED to preserve the privacy of customers as well as to protect against misuse and unauthorized access to CSED.

It is Idaho Power's position that as Smart Grid evolves, strong data access and privacy policies are needed to protect against unauthorized access and use of CSED. Idaho Power believes that unrestricted broad access to CSED will adversely impact its operations, impose greater regulatory challenges, and adversely impact customers. Idaho Power believes that any policy related to the collection, access, or use of CSED should require any party seeking to use such information to provide notice to customers and to accept full responsibility for the use of CSED information.

### **III. COMMENTS**

Idaho Power supports and adopts the comments of the Edison Electric Institute ("EEI") submitted to the DOE in response to the Request for Information. Set forth below are Idaho Power's additional comments which are intended to support the comments of EEI and to provide the DOE with additional information from the perspective of a regulated utility.

## **1. Energy Consumption Data Ownership**

Idaho Power concurs with EEI that the critical policy question is not “ownership” of the data, but how access, usage, and disclosure to CSED should be governed.

“Ownership” varies based on the laws and regulatory schemes of each state. “Ownership” can also vary as a result of how equipment that collects energy data is used or configured. For example, in Idaho Power’s system there can be two streams of energy usage data collected from a single utility energy meter. One stream is used by the utility to collect, validate, and maintain CSED for the purpose of billing the customer for energy consumed. The same meter can be configured with a “Home-Gateway Device” that will provide a stream of un-validated, raw, energy use data directly to the customer. In this circumstance, the ownership of each stream of data could come into question. In the case of the utility’s use of the information collected from the meter, there is a clear obligation on Idaho Power to utilize the information to accurately bill the customer and to protect the customer’s privacy. In the case of the customer, any rights associated with ownership to disclose CSED are not as clear. CSED requires protection, regardless of “ownership” interest. Idaho Power believes this kind of circumstance illustrates the need to Smart Grid polices that include data access and privacy standards independent of ownership interests to ensure protection of sensitive CSED.

## **2. Privacy Protections for Energy Information**

Idaho Power believes strongly all customers are entitled to privacy protection related to CSED collected by the utility. Idaho Power maintains CSED should not be shared outside the utility without the customer’s express written permission.

Moreover, Idaho Power believes that customer privacy is so important that by policy internal utility use of specific CSED is limited to those employees who have a verified legitimate need to access and use specific CSED data. It is also Idaho Power's policy to aggregate and "scrub" CSED data of all customer information for use of other employees in need of usage data, but not customer specific information, in the utility's day-to-day operations. All customers are entitled to protections and safeguards similar to those employed by Idaho Power should be included in energy data collection policies related to Smart Grid.

### **3. Privacy Practices for Protection of Energy Information**

Idaho Power maintains privacy practices to protect CSED. Idaho Power advocates continued flexibility for utilities to utilize practices such as: (1) required disclosure of intent to use CSED to customers; (2) written consent of customers prior to access or use of CSED; and (3) appropriate limitations on the scope of use and access. Idaho Power recognizes the Smart Grid is still evolving and new or additional approaches may be required to protect CSED. Accordingly, the DOE should require practices such as these but preserve some flexibility for utilities as it develops policies for data collection related to smart grid. Additionally, the DOE should also consider what restrictions, if any, should be placed on customers who have direct access to energy data through devices similar to the home gateway device used by customers.

### **4. Consumer Ability to Opt In/Out of Smart Meter Deployment and Ability to Control Information Shared with Utilities or Third Parties.**

Customers should not have the option to opt in/out of smart meter deployment. An opt in/out structure would result in significant cost and administrative burden to the utility. For example, costs would rise and efficiencies would be lost if a utility such as Idaho power was required to maintain to separate process for reading meters manually as well as electronically. Disclosure over CSED information shared between the utility and third parties should require the consent of the customer.

#### **5. Customer Mechanisms to Report Smart Meter Concerns or Problems.**

Utilities and their regulators maintain significant process, procedures, facilities, and other mechanisms to receive, process, and resolve customer concerns. Idaho Power believes that it both efficient and cost effective to utilize existing systems to process customer concerns or problems related to Smart Grid. Accordingly, and new policies intended to promote Smart Grid should consider existing systems.

#### **6. Policies and Practices Addressing Needs of Different Communities, Including Low Income Rate Payers.**

Idaho Power agrees with and supports the comments of EEI.

#### **7. Data Privacy Standards of Relevance to Smart Grid Deployment**

Idaho Power agrees with and supports the comments of EEI.

#### **8. Data Privacy Standards Best Suited to Provide A Framework for Opportunities to Experiment, Rewards for Successful Innovators and Flexible Protections.**

Idaho Power agrees with and supports the comments of EEI. Further, Idaho Power believes NIST should continue to develop privacy standards in an open and transparent environment so that privacy concerns can be appropriately balanced with the need to promote innovations in technology. Additionally, an open and

transparent process will provide customers an opportunity to participate by providing information as they deem appropriate.

**9. Mechanisms to Empower Consumers to Make a Range of Reasonable Choices When Balancing Potential Benefits and Detriments of Privacy and Access.**

Smart Grid technologies are evolving, the level of consumer interest in controlling CSED access varies and is unknown at this time, and it remains uncertain exactly what types of services will be available to consumers. Different types of Smart Grid technologies will demand different mechanisms to empower customers to make reasonable privacy choices. For example, Idaho Power's Smart Grid program allows customers a great deal of access to CSED through a customer owned "Home Gateway" device which allows the customer a great deal of autonomy in determining how much and what kind of data to share with third parties. At the same time, Idaho Power's Smart Grid program utilizes utility meters and utility equipment that collects information that is anonymized and shared at the utility's discretion. Idaho Power recognizes that other programs may contain more or less restrictive requirements. Given the evolving nature of the technology, it is likely premature to identify and implement generally applicable specific protection mechanisms for privacy and data access at this time.

**10. Security Architecture Provisions for Smart Grid Technologies**

Idaho Power believes the most important architecture provisions that should be built into Smart Grid technologies to protect consumer privacy are those that respect and support a clear customer-utility demarcation line between the Utility and the customer.

Utility equipment should be kept outside of the customer's residence and only provide resolution of usage to the degree necessary to meet its needs. For example, if the bill is based upon kilowatts per hour, then the maximum resolution should be an hourly measurement. The utility should also support interoperability standards providing necessary information to the customer. For example, time-of-use notifications via a standard signal that either a customer-owned "Home Gateway" or "Smart Appliance" could receive. Utility systems that handle customer data should utilize authentication mechanisms to restrict access of the data to authorized individuals; these systems should also encode or encrypt the data to prevent unauthorized access to the data when it transits systems.

"Home Gateway" devices and services, if they provide a remote access feature, should at a minimum, require authentication for access and encrypt communications. High resolution (measurement intervals smaller than those needed for Utility billing) data, such as "15-minute data" should be provided at the customer's option and expense, enabling those who desire it to both monitor and connect this information to any 3<sup>rd</sup> parties they choose. "Smart Appliances" should be configurable by customers without the need to communicate with a "Home Gateway," the appliance vendor, or any other third-party without the explicit consent of the customer. These devices must exist on the customer side of the customer-utility demarcation.

#### **11. DOE Implementation of Smart Grid Mission and Duties While Respecting Jurisdiction and Expertise of Other Federal Entities, States and Localities**



The DOE should defer to state utility commissions and provide them the authority to regulate and develop policy regarding “local” issues such as population density and available infrastructure.

#### **12. Access to Energy Consumption Data By Authorized Federal, State or Local Government Agents**

Idaho Power generally agrees with the comments of EEI. Federal, State, and Local government agencies routinely present, and utilities routinely comply, with lawful requests or orders for production such as warrants, subpoenas, or other court orders. Any policy related to CSUED should consider existing legal and regulatory requirements applicable to utilities under existing laws and regulations.

#### **13. Third Party Access to Energy Information: Who Should Have Access; How Should Access be Gained; What Standards Would Assist Third Parties in Protecting Energy Information**

Idaho Power believes that CSED should not be disclosed to any third part absent the express written consent of the customer. Appropriate practices such as written requests, customer review, and verified customer consent should be included in any policy dealing with the disclosure of CSED information.

#### **14. Forms of Energy Information Available to Consumers and Third Parties**

Idaho Power believes it is appropriate that customers have access to reasonable energy use history, such as daily and hourly energy information. Third parties should have access to only the information the customer has agreed to release.

#### **15. Customer Access to Real Time Personal Energy Information**

The utilities ability and the cost to provide real time, or near real time, information to customers must be considered. For example, Idaho Power is capable of

providing validated, billing accurate data within a few days with its existing systems. If it were required to make such information available in real time, the utility would incur a significant administrative burden as well as an increase in cost. Additionally, other alternatives for providing real time or near real time data should be considered such as the utilization of “Home Gateway” or similar devices capable of interacting with existing meters and providing information directly to customers quickly.

**16.State Implementation of Smart Grid Privacy, Data Collection and Third Party Privacy Information Policies.**

Idaho has consistently utilized existing legal and regulatory constructs to protect customer’s privacy. Privacy protection provisions specifically tailored to address Smart Grid implementation have not yet been developed.

**17.Efforts of Investor-Owned Utilities, Municipalities, Public Power Entities and Electric Cooperatives to Implement Policies for Smart Grid Privacy, Data Collection and Third Party Use of Information**

Idaho Power has utilized existing policies and procedures to protect CSED data and customer privacy. As Smart Grid technology and policies implementing them evolve, Idaho Power may adopt more stringent protections and requirements for the benefit of its Customers.

**18.Consideration of Consumer Data Accessibility Policies When Evaluating Future Smart Grid Grant Applications**

The DOE should consider consumer data accessibility policies when evaluating future grant applications. Preference should be given to those applications that demonstrate appropriate consideration and protection of customer privacy and CSED data and make appropriate distinctions in responsibilities between customers and the utility.

## **Conclusion**

Idaho Power respectfully requests that the Department consider these comments and ensure that any DOE action recommended regarding the communications requirements of electric utilities is consistent with them.

Respectfully submitted,

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