existing implementations of these requirements.

List of Questions for Commenters

The following list of questions represents a preliminary attempt to identify and respond to the issues that have been raised in a variety of public and private forums, including but limited to: DOE's historic investment in Smart Grid technology through the Smart Grid Investment Grants and the Smart Grid Demonstrations projects; Smart Grid Forum blog initiated by the Office of Science and Technology policy titled "Consumer Interface with the Smart Grid [33]"; and the National Broadband Plan regarding the Smart Grid and issues of data access and collection, third party access to detailed energy information, and privacy. This list is to assist in the formulation of comments and is not intended to restrict the issues that might be addressed in the comments.

In addressing these questions or others, commenters must also recognize that this RFI is intended to assist and inform DOE's efforts to address the aspects of these questions that most directly implicate the duties and responsibilities assigned by law to DOE and the Secretary of Energy. This qualification is important because the global concept of a Smart Grid inevitably implicates the jurisdiction and expertise of many other Federal agencies as evidenced in the composition of the Federal Smart Grid Task Force, not to mention Federal law enforcement agencies, and others. DOE fully intends to respect the jurisdiction and expertise of these and other Federal entities. Consequently, comments directed to matters deemed more relevant to the jurisdiction and expertise of other Federal entities will provide little assistance relevant to this RFI.

(1) Who owns energy consumption data?

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

(3) What, if any, privacy practices should be implemented in protecting energy information?

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

(5) What mechanisms should be made available to consumers to report concerns or problems with the smart meters?

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

(7) Which, if any, international, Federal, or State data-privacy standards are most relevant to Smart-Grid development, deployment, and implementation?

(8) Which of the potentially relevant data privacy standards are best suited to provide a framework that will provide opportunities to experiment, rewards for successful innovators, and flexible protections that can accommodate widely varying reasonable consumer expectations?

(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?

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

(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?

(12) When, and through what mechanisms, should authorized agents of Federal, State, or local governments gain access to energy consumption data?

(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?

(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?

(16) What steps have the states taken to implement Smart Grid privacy, data collection, and third party use of information policies?

(17) What steps have investor owned utilities, municipalities, public power entities, and electric cooperatives taken to implement Smart Grid privacy, data collection and third party use of information policies?

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

[33] TMCnet, Consumer Interface with the Smart Grid, *http://sip-trunking.tmcnet.com/news/2010/02/09/4613238.htm (last visited Apr. 27, 2010)*

Issued in Washington, DC on May 5, 2010.

Scott Blake Harris,

General Counsel.

[FR Doc. 2010–11127 Filed 5–10–10; 8:45 am]

BILLING CODE 6450–01–P

DEPARTMENT OF ENERGY

Implementing the National Broadband Plan by Studying the Communications Requirements of Electric Utilities To Inform Federal Smart Grid Policy

AGENCY: Department of Energy.

ACTION: Request for information (RFI).

SUMMARY: The Department of Energy (DOE) is seeking comments and information from interested parties to assist DOE in understanding the communications requirements of utilities, including, but not limited to, the requirements of the Smart Grid. This RFI also seeks to collect information about electricity infrastructure's current and projected communications requirements, as well as the types of networks and communications services that may be used for grid modernization. Specifically, DOE seeks information on what types of communications capabilities that the utilities think that they will need and what type of communications capabilities that the communications carriers think that they can provide.

DATES: Comments must be postmarked by no later than July 12, 2010. Reply comments must be postmarked by no later than July 26, 2010.

ADDRESSES: You may submit comments, identified by "NBP RFI: Communications Requirements," by any of the following methods:

Federal eRulemaking Portal: http://www.regulations.gov. Follow the instructions for submitting comments.

E-mail: broadband@hq.doe.gov. Include "NBP RFI: Communications Requirements" in the subject line of the message.

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

FOR FURTHER INFORMATION CONTACT: Maureen C. McLaughlin, Senior Legal Advisor to the General Counsel (202) 586–5281; *broadband@hq.doe.gov.*

For Media Inquiries you may contact Jen Stutsman at 202–586–4940.

SUPPLEMENTARY INFORMATION:

Background

In early 2009, Congress directed the Federal Communications Commission (FCC) to create the recently released

National Broadband Plan (NBP).[1] As Congress instructed, the NBP makes recommendations to various government entities, including Executive Branch agencies like DOE. In particular, the NBP recommended that DOE, in collaboration with the FCC, should conduct a thorough study of the communications requirements of electric utilities, including, but not limited to, the requirements of the Smart Grid.[2] As the National Broadband Plan correctly notes, understanding the evolving communications requirements of electric utilities and other energy infrastructure entities will help in developing informed Smart Grid policies for the nation. Therefore, DOE seeks to collect information about current and projected communications requirements in sustaining and modernizing the grid, as well as the types of networks and communications services that may be used. Specifically, DOE seeks information on what types of communications capabilities that the utilities think that they will need and what type of communications capabilities that the communications carriers think that they can provide.

A Smart Grid uses information and communications technologies to improve the reliability, availability, and efficiency of the electric system. In Smart Grid projects today, these technologies are being applied to electric grid applications, involving devices at the consumer level through the transmission level, to make our electric system more responsive and more flexible.

The potential promises [3] of the Smart Grid include, improved reliability and power quality, reduction in peak demand, reduction in transmission congestion costs, the potential for increased energy efficiency, environmental benefits gained by increased asset utilization, increased security, ability to accommodate more renewable energy and increased durability and ease of repair in response to attacks or natural disasters.

But in order to provide these, and other, benefits that the Smart Grid can offer, utilities and other participants in the nation's electricity infrastructure need to employ adequate communications technologies that serve their needs from both a critical infrastructure and business standpoint. This RFI thus focuses on enhancing DOE's understanding of both what these needs are and how they might best be met.

This RFI seeks to create a dialogue that will help DOE study the communications requirements of electric utilities in order to better inform Federal Smart Grid policy.

The Smart Grid will have many new applications for consumers, retailers, utilities, and others, and it will be composed of several vast, developing, and interrelated systems. The communications requirements of these systems will be a critical component of both the Smart Grid and the other technologies that will evolve and change how electricity is produced, consumed, conserved and distributed. Moreover, just as there is no "one-size-fits-all" utility solution, illustrated by investor-owned, municipally-owned, and rural electric cooperatives—we also cannot expect any "one-size-fits-all" communications solution to accommodate all reasonable Smart Grid implementations and applications.

One of the key technology areas of the Smart Grid is integrated two-way communications, which make the Smart Grid a dynamic, interactive, real-time infrastructure. An open architecture creates a plug-and-play environment that securely networks grid components and operators, enabling them to talk, listen and interact.[4]

Request for information: DOE seeks information about current and projected communications needs for the Smart Grid from electric utilities, regional transmission operators and other interested parties, as well as the types of networks and communications services they use.

DOE recognizes that many communications and networking technologies can be used in Smart Grid applications, including, but not limited to: fiber optic; microwave; copper lines; satellite; broadband wireless; unlicensed wireless mesh; licensed point-to-point and point-to-multipoint, low latency wireless; Power Line Carrier and Broadband over Power Line; Internet; and, wired broadband. These and other networking technologies can be used by a variety of Smart Grid applications, including, but not limited to: Home Area Networks (HAN); Phasor Measurements and wide area situational awareness; Substation SCADA; Distributed Generation Monitoring and Control; Protective Relaying; Demand Response and Pricing; and Plug-in Electric Vehicles.

DOE also recognizes that while it may be possible to estimate the current required communications needs of the entities now deploying the Smart Grid, it may be unrealistic to precisely quantify their future communications needs, as the Smart Grid is not fully developed and its future requirements or applications may dramatically increase or change. Nevertheless, even unavoidable uncertainty should not deter either DOE, utilities or other interested parties from assessing both current communications needs and the best-available estimates of whether or how they may evolve.

For example, certain Smart Grid and demand response applications have been deployed by utilities for many years.[5] These applications use a variety of communications technologies, and these technologies may vary from implementation to implementation. These technologies have traditionally involved private networks. Utilities have cited higher rates of survivability following a natural disaster,[6] the ability to maintain service throughout a utility's service territory,[7] the lack of priority of services when outages occur,[8] and the cost of service [9] as reasons why commercial services cannot adequately replace private networks.

While it appears from comments filed with the FCC that many commenting utilities want to use private, non-commercial networking options, some utilities have also commented that dedicated utility spectrum may be beneficial, but perhaps not essential to continue current Smart Grid deployments like backhaul for meters in an AMI system.[10] One commenter

[1] Fed. Commc'n Comm'n, *The National Broadband Plan: Connecting America, http://www.broadband.gov* (last visited Apr. 26, 2010).

[2] *Id.* at Recommendation 12.6.

[3] A smart meter is a good example of an enabling Smart Grid technology that can empower both utilities and consumers to extract value from two-way communications and real-time access to usage data. Smart meters play an important role in the success of the Smart Grid because they can generate an array of useful data including historical energy consumption data, real-time data, convey pricing and control information, and enable a variety of demand response approaches to reduce peak load.

[4] Dep't of Energy, *What the Smart Grid Means to You and the People You Serve* (Aug. 31, 2009), *available at http://www.oe.energy.gov/DocumentsandMedia/Utilities.pdf.*

[5] Fed. Energy Regulatory Comm'n, *Assessment of Demand Response and Advanced Metering,* 8, 65 (Dec. 2008), *available at http://www.ferc.gov/legal/staff-reports/12–08-demand-response.pdf.*

[6] United Telecomm. Council, *Hurricanes of 2005: Performance of Gulf Coast Critical Infrastructure Communications Networks,* 2, 24 (Nov. 2006).

[7] S. Co. Serv. Inc., *Comments—National Broadband Plan Public Notice #2,* GN Docket No. 09–47, 09–51, and 09–137, 15, 21 (Oct. 2 2009).

[8] Util. Telecomm. Council, *Comments—National Broadband Plan Public Notice #2,* GN Docket No. 09–47, 09–51, and 09–137, 11, 24 (Oct. 2 2009).

[9] Sempra Energy Util., *Comments regarding the Implementation of Smart Grid Technology,* GN Docket No. 09–47, 09–51, and 09–137, 13, 22 (Oct. 2 2009).

[10] Util. Telecomm. Council, Comments in response to the National Broadband Plan Public

Continued

expressed the need for greater industry collaboration to build a better case for dedicated spectrum.[11]

Utilities have also expressed a need for dedicated spectrum for fast power restoration in an emergency or natural disaster, reliable service, and for protection from a cyber attack on the electric grid.[12] DOE thus seeks to better understand this need for dedicated spectrum; what compels the need for additional spectrum in addition to the increased amount of data that utilities are expected to handle as the deployment of Smart Grid applications multiplies.

List of Questions

The following list of questions represents a preliminary attempt to identify and respond to the issues that have been raised in the National Broadband Plan regarding the Smart Grid and DOE, as outlined in the summary of this Inquiry. This list of questions does not represent a determination of the final list of topics that should be addressed to best carry out the recommendations of the Plan. Rather, this list is intended only to assist in the formulation of comments—not to restrict the issues that might be addressed in the comments.

In addressing these questions or others, commenters must also recognize that this RFI is intended to assist and inform DOE's efforts to address the aspects of these questions that most directly implicate the duties and responsibilities assigned by law to DOE and the Secretary of Energy. This qualification is important because all interstate information technologies, including the Smart Grid, inevitably implicate the jurisdiction and expertise of the States and many other federal agencies—a few of the most obvious examples include federal law-enforcement agencies, the Department of Homeland Security, and the FCC. DOE fully intends to respect the jurisdiction and expertise of these and other governmental entities. Consequently, comments directed to matters deemed more relevant to the jurisdiction and expertise of other governmental entities will provide little assistance relevant to this RFI.

(1) What are the current and future communications needs of utilities, including for the deployment of new Smart Grid applications, and how are these needs being met?

(2) What are the basic requirements, such as security, bandwidth, reliability, coverage, latency, and backup, for smart grid communications and electric utility communications systems in general—today and tomorrow? How do these requirements impact the utilities' communication needs?

(3) What are other additional considerations (*e.g.* terrain, foliage, customer density and size of service territory)?

(4) What are the use cases for various smart grid applications and other communications needs?

(5) What are the technology options for smart grid and other utility communications?

(6) What are the recommendations for meeting current and future utility requirements, based on each use case, the technology options that are available, and other considerations?

(7) To what extent can existing commercial networks satisfy the utilities' communications needs?

(8) What, if any, improvements to the commercial networks can be made to satisfy the utilities' communications needs?

(9) As the Smart Grid grows and expands, how do the electric utilities foresee their communications requirements as growing and adapting along with the expansion of Smart Grid applications?

Issued in Washington, DC, on May 5, 2010.

Scott Blake Harris,

General Counsel.

[FR Doc. 2010–11129 Filed 5–10–10; 8:45 am]

BILLING CODE 6450–01–P

Notice #2, GN Docket No. 09–47, 09–51, and 09–137, 3, 24 (Oct. 2 2009); Nat'l Rural Elec. Coop. Ass'n, Comments in response to the National Broadband Plan Public Notice #2, GN Docket No. 09–47, 09–51, and 09–137, 12, 14 (Oct. 2 2009).

[11] S. Co. Serv., Comments in response to the National Broadband Plan Public Notice #2, GN Docket No. 09–47, 09–51, and 09–137, 15, 21 (Oct. 2 2009).

[12] Nat'l Ass'n of Regulatory Util. Comm'rs, Comments in response to the National Broadband Plan Public Notice #2, GN Docket No. 09–47, 09–51, and 09–137, 3, 11 (Oct. 2 2009).

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Project No. 12731–004]

Natural Currents Energy Services, LLC; Notice of Preliminary Permit Application Accepted for Filing and Soliciting Comments, Motions To Intervene, and Competing Applications

April 30, 2010.

On March 2, 2010, and revised on April 7, 2010, Natural Currents Energy Services, LLC, filed an application for a preliminary permit, pursuant to section 4(f) of the Federal Power Act, proposing to study the feasibility of the Angoon Kootznahoo—Killisnoo Tidal Energy Project, located in Kootznahoo Inlet on the western shore of Admiralty Island, near the City of Angoon in the Skagway-Hoonah-Angoon Census Area of southeastern Alaska. The sole purpose of a preliminary permit, if issued, is to grant the permit holder priority to file a license application during the permit term. A preliminary permit does not authorize the permit holder to perform any land disturbing activities or otherwise enter upon lands or waters owned by others without the owners' express permission.

The proposed project would include two developments; a 200-kilowatt-(kW) development in Kootznahoo Inlet and a 200-kW-development at Killisnoo Island. Each development would consist of: (1) A moored test platform or dock, or underwater tethering device, pending evaluation of specific site conditions; (2) eight 25-kW Red Hawk in-stream turbine modules with a total generating capacity of 200 kW; (3) an approximately 650-foot-long, 480-volt underwater transmission line connecting the Red Hawk modules to an existing above-ground local distribution system; and (4) appurtenant facilities. The project would have a total installed capacity of 400 kW and an estimated average annual generation of 1,600 megawatt-hours.

Applicant Contact: Roger Bason, President, Natural Currents Energy Services, LLC, 24 Roxanne Boulevard, Highland, NY 12528; phone: (845) 691-4008.

FERC Contact: Jennifer Harper, (202) 502–6136.

Deadline for filing comments, motions to intervene, competing applications (without notices of intent), or notices of intent to file competing applications: 60 days from the issuance of this notice. Competing applications and notices of intent must meet the requirements of 18 CFR 4.36. Comments, motions to intervene, notices of intent, and competing applications may be filed electronically via the Internet. *See* 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's Web site (*http://www.ferc.gov/docs-filing/ferconline.asp*) under the "eFiling" link. For a simpler method of submitting text only comments, click on "Quick Comment." For assistance, please contact FERC Online Support at *FERCOnlineSupport@ferc.gov;* call toll-free at (866) 208–3676; or, for TTY, contact (202) 502–8659. Although the Commission strongly encourages electronic filing, documents may also be paper-filed. To paper-file, mail an original and eight copies to: Kimberly D.