Xcel Energy®

414 Nicollet Mall
Minneapolis, MN 55401

July 12, 2010

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

Re: Request for Information
NBP RFI: Data Access

To the Office of the General Counsel:

Xcel Energy, a combination electricity and natural gas utility operating in eight Midwestern states, submits these Comments in response to the Department of Energy's May 11, 2010 Request for Information: "Implementing the National Broadband Plan by Empowering Consumers and the Smart Grid: Data Access, Third Party Use, and Privacy."

Pursuant to the instructions provided at 75 Fed. Reg. 26203, we have submitted these Comments by mail to: U.S. Department of Energy, Office of the General Counsel, 1000 Independence Avenue SW, Room 6A245, Washington, DC 20585.

Please contact Megan Hertzler at (612) 215-4589 or megan.hertzler@xcelenergy.com if you have any questions regarding these Comments.

SINCERELY,

MEGAN J. HERTZLER
ASSISTANT GENERAL COUNSEL AND DIRECTOR OF DATA PRIVACY
XCEL ENERGY SERVICES INC.

Before the
DEPARTMENT OF ENERGY
Washington, D.C. 20585

In the Matter of	)
	)
Implementing the National Broadband	)
Plan by Empowering Consumers and	)
the Smart Grid: Data Access, Third	)
Party Use, and Privacy	)

NBP RFI: Data Access

COMMENTS OF XCEL ENERGY INC.

INTRODUCTION

Xcel Energy welcomes the opportunity to provide these Comments to the Department of Energy ("DOE") on current and potential practices and policies to empower consumers through access to detailed energy information. Our Company is actively discussing ways to expand customer access to energy information and addressing the implications of doing so.[1] Through our work on innovative projects like SmartGridCity™, as a participant in dockets at the Colorado[2] and Minnesota[3] Public Utilities Commissions, and in internal initiatives, Xcel Energy has taken proactive steps to manage privacy concerns and to develop information access policies. In addition to recently creating a new Director of Data Privacy position,[4] Xcel Energy has also organized a cross-disciplinary internal Customer Data Taskforce

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[1] Xcel Energy is not alone. Congress directed the National Institute of Standards and Technology (NIST) to take a leadership role in Smart Grid coordination; the National Association of Regulatory Utility Commissioners (NARUC) is working with the Federal Regulatory Commission (FERC) to facilitate the transition to the Smart Grid; and the Edison Electric Institute is currently at work drafting Customer Data Access Guidelines.

[2] *In the Matter of the Investigation of Security and Privacy Concerns Regarding the Deployment of Smart-Grid Technology*, Colorado Public Utilities Commission Docket No. 09I-593EG.

[3] *In the Matter of Commission Consideration of Standards Related to Smart Grid Investments and Information Under the Federal Independence and Security Act of 2007*, Minnesota Public Utilities Commission Docket No. E999/CI-08-948.

[4] The Director of Data Privacy position was created to task an individual with responsibility for leadership on activities related to the development, implementation, maintenance of and adherence to Xcel Energy's policies and procedures covering the privacy of, and access to, private customer and employee data, in compliance with federal and state laws and Xcel Energy's privacy policies. Vesting this responsibility with a single individual ensures that issues of privacy receive the attention and focus which they require.

to explore all the issues implicated by expanded access to customer consumption and billing data. As a multi-state utility subject to the jurisdiction of eight different public utilities commissions, Xcel Energy supports the development of uniform policies to govern the management of customer data and other critical issues. Consistent, clear regulations will help us maintain operational excellence and fulfill our mission: To be a responsible environmental leader and to provide reliable and safe energy at a reasonable cost.[5]

Xcel Energy supports the development and deployment of technology that helps our customers save money and energy while preserving our environment. However, energy consumption data has the potential to be misused, possibly compromising a customer's privacy or the security of the home. Xcel Energy takes our responsibility as stewards of our customers' data very seriously. Our vigilance in maintaining the privacy and security of customer information is crucial to maintaining our customers' trust. Without this trust, Xcel Energy would have difficulty securing the broad customer participation that projects like SmartGridCity™ require.

We recognize the importance of increasing access to consumption and billing data to further federal and state conservation and climate mitigation goals. We feel, however, that we have an obligation to identify the privacy concerns raised by such enhanced access because of the trust placed in us by our customers and regulators. The benefits available from and the concerns raised by enhanced access vary depending on the categorization of the end user and the degree to which the data reveals individual customer consumption.

Providing customers with their own standard usage data is a component of utility service. "Standard usage data" are those data elements that are provided on the customer's bill and any other information available to all customers of the same class within that jurisdiction. Providing our customers or third parties they designate with customized non-standard usage data, however, traditionally has not been a part of utility service.[6]

Informed customer consent must be a precondition of releasing any customer usage data to a third party not assisting the utility in the provision of service. An

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[5] For our complete Mission Statement and more, see our Code of Conduct at: http://www.xcelenergy.com/SiteCollectionDocuments/docs/CodeOfConductup.pdf.

[6] Traditionally, requests for customer billing or usage information have been limited to entities seeking to facilitate participation in conservation programs or energy assistance, or from law enforcement. With the increasing focus on conservation and carbon mitigation, we have begun to receive annual requests from communities and state entities for customer energy usage information to measure the success of their own conservation or carbon mitigation initiatives. With the advent of smart meters, we are now getting requests from third parties related to a broader use of the data.

appropriate regulatory body should promulgate rules that govern consent in this area and these rules should address the elements of informed consent, including: (1) the allowable uses of data by third parties; (2) the duration of time for which the consent is valid; and (3) the process by which the customer may revoke consent. Third parties should also be required to implement adequate privacy safeguards. These safeguards include, but are not limited to, ensuring the data's physical security, making responsible use of the information received, and limiting its further dissemination.

Because providing customers with standard usage information is a component of traditional utility service, costs associated with fulfilling this obligation should be recoverable through base rates and not through a separate charge. Providing non-standard individualized usage data, however, is not part of our traditional service to customers. Releasing this data to an unlimited number of third parties is also not part of our traditional service and will result in significant cost. When a customer seeks non-standard usage information or a third party not assisting the utility in the provision of service seeks any information, utilities should be allowed to charge a rate which covers the Company's costs and includes an allowable return.

We appreciate the attention that the DOE is bringing to these issues, and respectfully submit our comments in response to the questions that were raised in the Request for Information on Data Access, Third Party Use, and Privacy.

DOE Question 1: Who owns energy consumption data?

Xcel Energy believes that providing a customer with its standard usage information is a component of utility service. To fulfill this obligation, Xcel Energy invests capital to install the facilities and information technology systems which enable the collection and analysis of customer usage information. Xcel Energy also incurs ongoing expenses to collect and validate raw consumption data. It is by applying these systems and efforts that raw consumption data becomes a meaningful, user-friendly conservation tool for customers. Accordingly, energy usage data should be the property of the utility.

Xcel Energy recognizes that it is often a single source for energy usage data. We support efforts that empower our customers to make educated decisions about their energy consumption, but we must fulfill this goal in a way that accounts for costs incurred and ensures customer privacy. Xcel Energy agrees with the Edison Electric Institute that to protect the security and privacy of customer data, customer or third party data access must occur only on terms and conditions agreed to by the utility or deemed to be appropriate by regulatory authorities.

DOE Question 2: Who should be entitled to privacy protections relating to energy information?

The customer should be entitled to privacy protections relating to his or her energy information. Individual electric usage data has the potential to expose living patterns in the home in an unprecedented level of detail. This data can be extrapolated to reveal personal habits, including the time and duration that a customer is: awake or asleep; at home or away from home; preparing meals; watching television; laundering clothing; or engaged in other household activities. Illegitimate acquisition or use of energy usage data can compromise the customer's privacy and may also put personal security at risk. Any entity with access to this data must be required by law to implement physical security and privacy protections that are commensurate with the gravity of the consequences implicated by the misuse of this information.

DOE Question 3: What, if any, privacy practices should be implemented in protecting energy information?

Xcel Energy has developed strict internal policies governing the relationship between our company and our customers. We abide by these policies, and continue to revise and update them as necessary.

Xcel Energy utilizes a number of vendors and partners in the course of providing utility service to its customers. Some of transactions involve the provision of individual customer data to these vendors and partners to facilitate utility service. In these instances, Xcel Energy secures contractual obligations from its vendors and partners that assure customer data will be treated with the same level of security and privacy utilized by Xcel Energy itself. These contractual obligations include a prohibition on the use or dissemination of such information by the vendor or partner for their own purposes.

As is discussed in more detail in our response to DOE Question 13 below, requiring informed consent before releasing individual customer usage data to third parties who are not assisting the utility with the provision of service is also an essential privacy practice. Xcel Energy believes that a fundamental difference exists between customers and third parties, and this distinction dictates treating access requests differently. As part of our efforts to protect our customers, Xcel Energy intends to ultimately file a tariff in all our jurisdictions outlining customer data protections and third party access limitations.

DOE Question 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 third parties?

An individual smart meter may educate a single household's consumption choices. Broad deployment of this technology, however, has the potential to deliver transformative educational, operational, and regulatory benefits. With smart meter saturation, utilities will be better able to tune feeders, optimize certain outage processes, and increase the reliability of service enjoyed by the consumer. State public utilities commissions, in turn, will be able to develop appropriate tariffs and to better incorporate innovative tiered rates into the local regulatory framework. In light of the significant benefits that can be realized through smart metering, "opt-in" deployment should be considered as one of a variety of ways to promote smart metering. The discussion on deployment strategy should evolve along with the technology.

Even in a dynamic Smart Grid world, some aspects of information sharing will be static. For example, a utility's need to collect meter data to provide accurate billing and gauge its operational performance will be unchanged by smart meters. Customer usage data is necessary for the operation of the system and as such, consumers may not opt out of sharing this information with utilities. However, a consumer should be able to opt out of certain uses of the data that is collected. Customers should be able to limit uses of data that do not affect the Company's core operational requirements. Striking this balance allow us to protect the customer's privacy and maintain customer trust and confidence, while still fulfilling our mandate to provide reliable service and our need to ensure system stability and security.

Xcel Energy's response to DOE Question 13 outlines our concerns regarding customer information and third parties. Because of the misuse of this data implicates the customer's privacy and physical security, customers should have the ability to grant or withhold informed consent concerning the information that is shared with third parties who are not part of the utility's provision of service to the customer.

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

Although there is currently no single international, Federal, or State data-privacy standard that comprehensively addresses this issue, Xcel Energy is an active participant in the National Institute of Standards and Technology's Smart Grid Interoperability Panel ("SGIP"). This initiative is developing comprehensive recommendations for communications, data processing and security for the Smart Grid.[7] We intend to continue our engagement in this process, and look forward to incorporating SGIP's recommendations into our future Smart Grid implementations.

[7] Work on this initiative is in process on multiple fronts. For example, the draft *NIST Interagency Report (NISTIR) 7628, Guidelines for Smart Grid Cyber Security* is currently under review. This document is the Smart Grid Interoperability Panel—Cyber Security Working Group's (SGIP-CSWG's) report for individuals and organizations who will be

Xcel Energy also finds the Fair Information Practice Principles (FIPPs)[8] adopted by the U.S. Department of Homeland Security to be useful in framing the conversation on Smart Grid issues. Regardless of the particular standards adopted, however, the paramount concern must be the security and privacy of the customer's data.

DOE Question 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?

Xcel Energy supports opportunities to experiment and rewards for successful innovators. As is noted in our introduction, we believe customer trust is crucial to securing participation in innovative energy use projects. We are concerned, however, that without strong protections of customer energy usage data, our customers would be reluctant to embrace Smart Grid and other new technologies. At this juncture, it is the level of protection afforded customer data, rather than any particular standard, that is of paramount importance. We look forward to being an active participant in an ongoing dialogue about data privacy standards.

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

Xcel Energy's response to DOE Question 2 illustrates the highly personal nature of customer electric usage data. Utilities should not be required to release information that could allow for the identification of individual customers to any third party not assisting the utility with the provision of service, unless the request is: (1) made by entities administering customer-initiated requests for federal or state energy assistance programs or state public utility commission-approved conservation programs, provided that these entities are acting with the customer's authorization; (2) made by the customer to Xcel Energy and accompanied by informed consent; or (3) subject to law, such as a warrant, court-issued subpoena, or information request from a regulatory agency with a statutorily-conferred right to compel the information.

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addressing cyber security for Smart Grid systems. This includes, for example, vendors, manufacturers, utilities, system operators, researchers, and network specialists, and individuals and organizations representing the IT, telecommunications, and electric sectors. Individuals reading this report are expected to have a basic knowledge of the electric sector and a basic understanding of cyber security.

[8] As the DOE notes in its Data Access RFI, these principles are: Transparency, Individual Participation, Purpose Specification, Data Minimization, Use Limitation, Data Quality and Integrity, Security, and Accountability and Auditing. 75 Fed. Reg. 26205, citing Cal. Pub. Util. Comm'n, *Order Instituting Rulemaking to Consider Smart Gird 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*, Pub. Util. No. 08-12-009 (Dec. 18, 2009), available at http://docs.cpuc.ca.gov/published/FINAL_DECISION/95608.htm.

The Right to Financial Privacy Act of 1978[9] establishes a framework governing access by authorized agents of Federal, State, or local governments to information held by financial institutions. While energy usage data may not be completely analogous to financial information, the spirit of the Right to Financial Privacy Act of 1978 could help inform the development of protections for energy usage information.

In recent months, Xcel Energy has received several requests for aggregate level customer usage information from different municipalities to assist them in evaluating their progress in meeting climate change goals. Xcel Energy may make aggregated customer usage information available to statutorily or legislatively created entities designed to administer energy assistance or conservation programs, non-profit organizations seeking the information for energy assistance or conservation purposes, and other governmental bodies that are measuring performance toward conservation or carbon mitigation goals or that have the authority to compel such data. To protect our customer's privacy, however, any data released must be sufficiently anonymous to reasonably address data privacy concerns and maintain customer anonymity. Ensuring the customer's anonymity is of paramount concern, particularly because the level of data available from Smart Meters may reveal living patterns and allow identification of specific behaviors.

DOE Question 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?

A third party not assisting the utility with the provision of service should only receive access to individual customer usage information if the customer has given his or her informed consent to its release. Providing such information to a third party without the customer's knowledge raises significant privacy concerns. Any customer energy usage data regulation should address the elements of informed consent, including: (1) the allowable uses of data by third parties; (2) the duration of time for which the consent is valid; and (3) the process by which the customer may revoke consent. The DOE may not have regulatory authority over a third party to which the customer grants consent to receive data; it may, however, encourage the promulgation of standards that require truly informed consent prior to the release of any customer-specific information. In this way, the DOE can help to protect utility customers.

There is intense interest among third parties in utility customer information. Xcel Energy regularly receives thousands of requests for the information of tens of

[9] 12 U.S.C. § 3401 et seq. (2006).

thousands of its customers. For example, Xcel Energy recently received over 200,000 attorney-issued subpoenas for the production of Social Security Numbers, last known addresses, and bank account numbers for individuals believed to be residents in the eight states of our service territory. These 200,000 subpoenas were the product of a request which likely sought to enforce debt collection on behalf of the requesting law firm's clients. Our response was to refuse to release this data absent a court order. We believe strongly that a utility should not be a source of personally identifiable information for third parties not assisting the utility in the provision of service, such as social security numbers, as this violates the principle that the individual owns and controls such information.

We anticipate that our historically high volume of requests represents only the vanguard of commercial interest in utility customer data. Xcel Energy has noticed an increase in both the number and specificity of third party data requests for customer consumption and billing data in connection with our Colorado SmartGridCity™ project. In a Smart Grid world, it is likely all utilities will face similar requests. Therefore, limits must be established on the appropriate uses of customer consumption data obtained by third parties not assisting the utility in the provision of service. Regulators should consider whether the release of customer usage information to third parties should be limited to public policy purposes, such as furthering conservation or climate change mitigation goals, facilitating energy assistance, or supporting energy policy advocacy. While customer usage data may be commercially valuable to third parties, including those seeking to target marketing to consumers, this third party commercial interest does not outweigh customers' personal privacy interests. Customers may understandably be disinclined to participate in any program, no matter how socially or environmentally worthy, without adequate assurance that personal data will remain secure and confidential. If Smart Grid data is marshaled to annoy rather than to empower customers, the productive capacity of this information would be grossly underserved and the customer's willingness to participate in innovative energy programs will be undermined.

DOE Question 14: What forms of energy information should consumers or third parties have access to?

Xcel Energy believes that providing a customer with its standard usage data is a component of traditional utility service. "Standard usage data" are those data elements that are provided on the customer's bill and any other information available to all customers of the same class within that jurisdiction.

Providing customized non-standard individualized data to customers and third parties, however, is not part of our traditional service to customers. Any release of information to third parties not assisting the utility in the provision of service must be accompanied by the customer's informed consent and that third party must maintain adequate safeguards for any data received. These safeguards include, but are not limited to, physical security, making responsible use of the information received and limits on further dissemination. Recognizing that a fundamental difference exists between the interests of customers and third parties dictates treating access for each differently. Informed consent should be a prerequisite for releasing standard individual customer usage data to third parties.

As mentioned above, Xcel Energy may make aggregated energy consumption data available under limited circumstances. In these circumstances, the impact on the individual customer's privacy must be mitigated by an appropriate level of data aggregation. Aggregate data must be sufficiently anonymous to reasonably remove the potential that the individual's actual usage data could be reverse engineered, preserving the customer's privacy.

We will also not release aggregate data if doing so would compromise system security. For example, a request for information about the loading in a particular neighborhood where there are limit feeders could unintentionally result in an indication of how important a specific feeder or substation is to the distribution of electricity to a city. System security must be ranked among the highest priorities in the Department's ongoing discussions on energy information access, as it is in our internal conversations.

DOE Question 15: What types of personal energy information should consumers or third parties have access to in real-time, or near real-time?

Xcel Energy recognizes the value of timely information in encouraging customers to adjust their energy usage. As we noted above, Xcel Energy believes that providing a customer with raw standard usage data at the point of metering is a component of traditional utility service. Real-time or near real-time data, however, is unverified by the normal processes that ensures reliability for billing purposes. Xcel Energy maintains rigorous equipment performance standards and as a result, equipment failures are rare. In the exceptional circumstances where malfunction occurs, however, correction or recalculation of meter data may be required. Raw meter data is therefore best relied upon only for comparative purposes.

Xcel Energy will strive to provide meaningful and timely information to our customers while balancing our mandate to provide reliable service at a reasonable

cost. Providing real-time and near real-time access to processed, enhanced usage information requires the utility to develop sufficient storage capacity to maintain vast quantities of data. Setting appropriate consumer expectations about the availability of this kind of data first requires an evaluation of the accompanying costs. In meeting our information delivery goals, we will distinguish between raw, unprocessed meter data and processed, enhanced consumption data and will also remain cognizant of potential differences in the accompanying delivery systems' costs. Hand-held power meters, for example, are among the promising technologies that may be able to empower conservation-minded residential consumers without sacrificing rate affordability for our broader customer population.

In addition to reliability limitations, Xcel Energy noted in our response to Question 15 our concern that system security and energy market stability are implicated by third party access to real-time or near real-time customer energy usage data. As a result, any real-time or near real-time access to customer energy usage data must be afforded similar privacy guarantees and procedural protections as other customer energy usage data.

DOE Question 17: What steps have investor owned utilities . . . taken to implement Smart Grid privacy, data collection, and third party use of information policies?

As described in our introductory paragraphs, Xcel Energy has vigorously pursued the development and implementation of policies covering customer privacy, data collection, and third party use of information. Our initiative has not been limited to Smart Grid data, though the increased deployment of Smart Grid technology has prompted us to revisit our existing information policies with a view toward operating in a Smart Grid world. Xcel Energy's Director of Data Privacy and its Customer Data Taskforce actively monitor and address emerging concerns, and we intend to continue updating our policies to reflect evolving customer needs and regulatory requirements. Xcel Energy ultimately intends to file a tariff in all our jurisdictions outlining customer data issues protections and third party access limitations.

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

Xcel Energy encourages the DOE to consider consumer data privacy and accessibility policies when evaluating future Smart Grid grant applications. In our response to DOE Question 15, we noted our concern that access to real-time or near real-time customer data implicates system security and energy market stability. Because Xcel Energy's system security could be affected by other providers' data accessibility policies, we strongly encourage the DOE to consider consumer data

accessibility policies when evaluating future Smart Grid grant applications. In order to achieve successful deployment and implementation of innovative technologies, our customers must be willing to embrace and engage with these new tools. Without our customers' trust, the full promise of Smart Grid's impact on customer energy usage cannot be fully realized.

CONCLUSION

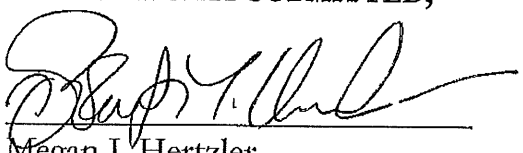
Xcel Energy appreciates the opportunity to provide these Comments. We are entering new era where energy information communicated via developing broadband technologies can provide useful information to customers and utilities alike. Smart Grid has the potential to provide reliability improvements and a new outlook on energy usage. This technology, however, also raises privacy, security, and cost concerns that must be considered in tandem with these benefits.

We look forward to further participating in these important discussions.

Dated: July 12, 2010

Xcel Energy Services Inc.

RESPECTFULLY SUBMITTED,



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