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June 19, 2009

--Via Electronic Filing--

Patricia Van Gerpen  
Executive Director  
South Dakota Public Utilities Commission  
Capitol Building, 1<sup>st</sup> Floor  
500 East Capitol Avenue  
Pierre, SD 57501

RE: COMMENTS  
CONSIDERATION OF THE NEW PURPA STANDARDS  
DOCKET NO. EL08-028

Dear Ms. Van Gerpen:

Northern States Power Company, a Minnesota Corporation operating in South Dakota, respectfully submits these comments to the South Dakota Public Utilities Commission ("Commission") regarding the Commission's Order for and Notice of Procedural Schedule and Hearing and the Staff's subsequent issuance of questions concerning the Federal 2007 Energy Independence and Security Act ("EISA") Standards in the docket noted above.

An electronic version of this filing has been served on the Commission and on those listed on the attached service list.

Please feel free to contact me at (605) 339-8350 if you have any questions or comments regarding this filing.

SINCERELY,

JAMES C. WILCOX  
Manager, Government & Regulatory Affairs

Enclosures



In the Matter of the Consideration of the New PURPA Standards

EL08-028 - 6-19-09

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**STATE OF SOUTH DAKOTA  
BEFORE THE  
SOUTH DAKOTA PUBLIC UTILITIES COMMISSION**

NORTHERN STATES POWER COMPANY, A  
MINNESOTA CORPORATION

**COMMENTS**

IN THE MATTER OF THE CONSIDERATION  
OF THE NEW PURPA STANDARDS

DOCKET No. EL08-028

**INTRODUCTION**

Pursuant to the South Dakota Public Utilities Commission (the “Commission”) Order for and Notice of Procedural Schedule and Hearing in this matter issued on March 9, 2009 and the Staff’s subsequent issuance of questions on April 29, 2009, Northern States Power Company, a Minnesota corporation operating in South Dakota (“Xcel Energy” or the “Company”) offers the following comments in this proceeding.

**SUMMARY**

On December 19, 2007 the federal Energy Independence and Security Act of 2007 (“EISA”) was enacted. The EISA amends the Public Utility Regulatory Policies Act of 1978 (“PURPA”), in part, to require each state regulatory authority to consider adopting new energy policy standards.

Section 532 of the EISA amends PURPA Section 111(d) to require that states conduct an investigation and issue a decision whether to adopt two new electric policy standards regarding (1) integrated resource planning and (2) rate design modifications to promote energy efficiency investments.

Section 1307 requires consideration of two new PURPA electric policy standards regarding (1) consideration of smart grid investments and (2) smart grid information.

The Company believes that with the exception of smart grid investments, aspects of the EISA Standards have already been addressed in South Dakota through laws, administrative rules and Commission proceedings and orders. In our comments below we provide answers to the specific questions provided by the Commission Staff as well as our thoughts about areas that we believe should be part of this discussion.

## DESCRIPTION OF THE APPLICANT

Xcel Energy is a Minnesota corporation duly authorized to conduct business in the State of South Dakota as a public utility subject to the jurisdiction and regulation of the Commission. The full name and address of the Company is:

Northern States Power Company,  
a Minnesota corporation  
414 Nicollet Mall  
Minneapolis, Minnesota 55401

The Company also operates in South Dakota from the following address:

Northern States Power Company  
500 West Russell Street  
Sioux Falls, South Dakota 57104  
(605) 339-8350

Xcel Energy has service territory in three upper Midwest states including South Dakota. NSP-WI has service territory in Wisconsin and Michigan.

### INTEGRATED RESOURCE PLANNING (“IRP”)

**1. Are you currently required to go through an IRP process in any of your regulated jurisdictions?**

Yes.

**If yes:**

**a. Which jurisdiction(s)?**

While Xcel Energy develops resource plans for the entire NSP System that includes Minnesota, Wisconsin, Michigan, North Dakota and South Dakota approximately every two years, we only formally file the plans in the state of Minnesota.

As a result of our most recent rate case settlement in North Dakota, we will also be submitting resource planning information more specific to North Dakota requirements on July 1 of this year. In the future, we will file North Dakota versions of our system resource plan in conjunction with our bi-annual resource planning process in the State of Minnesota.

**b. How long has this been required?**

The Company's first resource plan was submitted to the Minnesota Commission on October 1, 1991 (Docket No. E-002/RP-91-682).

**c. Explain the input process.**

The Company uses the Strategist™ computer model in the preparation of our resource plans. The Strategist model consists of four primary components:

Load Module: This module contains the Company's load forecast, load management resources, and conservation programs. It produces long-range estimates of the Company's hourly load, net energy requirements, and annual peak load.

Generation Module: This module contains the operating costs and performance characteristics for our thermal units, renewable resources, and energy transactions. It uses an hourly dispatch simulation to estimate how customer demand will be met and what the associated costs and emissions will be.

Capital Project Module: This module estimates the revenue requirements for capital projects. It keeps track of rate base, depreciation, taxes, and rate of return.

Expansion Planning Module (Proview™): This module uses a dynamic programming algorithm to derive the least cost combination of possible new generation resources. It calculates the ratepayer and societal costs for thousands of different resource combinations to arrive at a least-cost plan.

**Strategist™ Model Input Assumptions**

The inputs to the Strategist™ model represent the Company's estimate of future conditions at the time of the filing. By their nature, forecasts are imprecise. To mitigate forecast and assumption uncertainty, the Company employs sensitivity analyses to test the impacts of inputs. Each of the major inputs and how the Company employs them in the analysis are discussed next.

**(i) Generation Resources**

In the Strategist™ model, the Company models all the generation resources in the NSP System. The operating characteristics are based on historical data and modified to reflect any planned changes to the units.

## (ii) Load Forecast

The load forecast used in the Company's analysis is based on historical data but also integrates the expected impact of the recent economic contraction on consumer demand. Both a low load growth and a high load growth scenario are used to test the sensitivity of the model results to the load forecast.

## (iii) Fuel Cost Forecasts

The Company uses a variety of resources to develop our long-range fuel cost forecast, including both publicly available data and competitively sensitive information not available to the public.

## (iv) Other Input Assumptions

Other inputs to the Strategist™ model that are important to the evaluation of our plans are assumptions regarding the future of environmental regulation such as the regulation of carbon dioxide ("CO<sub>2</sub>"). We also include assumptions regarding the life of the federal production tax credit ("PTC") for renewable energy resources.

One of the Company's resource planning philosophies is to plan for future needs as if the NSP System were a stand-alone system. This approach ensures that the Company will meet customers' needs regardless of developments elsewhere in the market. However, since the launch of the Midwest Independent Transmission system Operator ("MISO") energy market, the operation and costs of the NSP System have been intertwined with all of the NSP System's neighboring utilities. Thus, we run the Strategist™ model with all MISO market interactions turned off, and only NSP units and firm bilateral transactions being used to meet customer demand. As a sensitivity test, we can turn the market interactions on and allow the model to purchase energy from or sell excess energy into the market.

### **d. How often is the plan revised/reviewed?**

Minnesota rules require plans to be submitted every two years. However, because it often takes two years to review the plans, this timeline is somewhat flexible. For example, the Company's most recent resource plan was submitted to the Minnesota Public Utilities Commission ("Minnesota Commission") in December of 2007. We have not yet received a final order in this docket. We have proposed that the Minnesota Commission look for ways to bring this docket to conclusion and have recommended that our next resource plan be submitted in 2010.

**e. Historically, have you followed the resulting plans?**

Yes. When we have found it necessary to deviate from these plans, we have submitted a notice of changed circumstances to the Minnesota Commission.

**f. Explain how energy efficiency resources have been integrated into this process.**

Our plans include energy efficiency programs as an integral part of meeting future energy and demand needs. In fact, in our most recent resource plan covering the 2008 through 2022 planning period, the Company has proposed to reduce energy consumption by approximately 5,740 GWhs and demand by 1,880 MW during the planning period.

**g. Please provide an analysis of the cost and benefits associated with the current process.**

The Company would engage in resource planning with or without the requirement to submit plans to the regulatory commissions. The benefit of the process is that it formalizes the Company's plans. The disadvantage of the process is the fact that circumstances can change from the time the plan is submitted until it is approved. For example, our demand and energy forecast has been reduced once since we submitted our 2007 resource plan in Minnesota and we have updated much of the plan to incorporate this reduction.

**2. Were you previously required to go through an IRP process in another jurisdiction that no longer requires it?**

Yes, throughout the 1980s and 1990s we were required to participate in an integrated resource planning process in our Wisconsin jurisdiction. With the advent of the regional independent system operators, i.e., MISO, and other State-mandated policy changes in Wisconsin we are no longer required to develop an IRP, but we do participate in a biennial strategic energy assessment process that requires reporting of expected sales, gross conservation efforts, and generation to satisfy the estimated need.

**3. Should the Commission adopt an IRP process? Explain.**

It does not appear that an IRP process is necessary. The Commission already accomplishes the same objectives of an IRP process with rate cases, siting permit processes, the ten-year plan processes, permitting requirements, and energy efficiency requirements. In each of these forums, requirements similar to an IRP are required. In particular, demonstration of need by projecting demand and energy requirements are included in each rate case. And, demonstrating efforts relating to load management and committing to energy efficiency programs would be included in our proposed annual demand side management ("DSM") filing.

As Xcel Energy operates an integrated generation and transmission system across multiple state jurisdictions and resource planning requires a regional perspective, the Company believes that any IRP process should not be limited to any specific state perspective.

If the Commission believes that an IRP process should be added, we would recommend that for utilities serving in more than one jurisdiction, the requirement be such that the utility can combine the submittal with that in other jurisdictions. The South Dakota component could be an inclusion of specifics on the effect of the plan on South Dakota customers rather than a plan that does not incorporate a system wide perspective.

**4. If the commission adopted an IRP process in South Dakota:**

**a. How should energy efficiency resources be integrated?**

We would recommend that energy efficiency resources be integrated as they are now as discussed in response to question 3.

**b. How often should the plan be revised/reviewed?**

Our experience is that plans should not be submitted any more frequently than every two years. We would also recommend that if the Commission chooses to implement an IRP process, the 10-year plan process be eliminated in order to reduce duplication of effort and allowing for more time for the Company to prepare IRPs and the Commission Staff to review the IRP.

**c. How would this benefit you?**

We would see no benefit to the addition of this process as we are already engaging in IRP efforts and believe that other processes already provide much of the information that would be in the IRP.

**d. How would you be negatively affected?**

As long as we could combine the IRP process with that of other jurisdictions and the 10-year plan requirements were eliminated, we do not see negative implications.



## RATE DESIGN MODIFICATIONS TO PROMOTE ENERGY EFFICIENCY INVESTMENTS

**1. If a federal or state energy efficiency resource standard is established, what is the best way to meet the target? Or will several programs need to be employed? If so, what are those programs?**

The best way to meet federal or state energy efficiency resource standards is to implement utility-sponsored energy efficiency programs. Xcel Energy has a long history of offering cost-effective energy efficiency programs. Since 1992, Minnesota's programs have resulted in savings of more than 2,000 MW and 4,500 GWh, creating more than \$2.8 billion in net economic benefits.

To achieve this level of savings, we offer a portfolio of business and residential programs targeting multiple end-uses. Currently in South Dakota we already offer Peak and Energy Control and both business and residential Saver's Switch load management programs. In our petition to establish a DSM program in South Dakota that we filed on December 28, 2007 (Docket No. EL07-036), we proposed the following energy efficiency programs, which are similar to programs we offer in other states:

### Business Programs

#### *Conservation*

- Cooling Efficiency
- Energy Design Assistance
- Lighting Efficiency
- Motor Efficiency

#### *Indirect Impact*

- Energy Analysis

### Residential Programs

#### *Conservation*

- Home Lighting Direct Purchase

#### *Indirect Impact*

- Consumer Education

We have been asked to make some changes to our proposal and plan to submit an updated proposal within the next couple of months.

We believe that a successful DSM portfolio contains direct and indirect impact programs. Direct programs result in measurable energy savings and include

conservation and load management programs. The conservation programs offer rebates to customers for the installation of energy efficient equipment. The load management programs offer rate savings or bill discounts for reducing demand during peak times. The indirect programs offer tools to help business and residential customers learn about their energy use and identify potential energy-saving opportunities.

**2. Some states have created an independent organization, funded through a charge to customers based on a percentage of sales, which develops and monitors energy efficiency programs. what are your thoughts on an independent organization administering energy efficiency programs? What percent of sales should customers contribute if that benchmark is employed? how would large differences among utilities' sales affect programs? Should there be a baseline standard for programs and then an "adder" based on percentage of revenue?**

We believe that utilities are generally in the best position to offer energy efficiency programs to their customers because they have existing relationships with their customers and an existing administrative infrastructure to manage the programs. At Xcel Energy, we have more than twenty years of experience offering energy efficiency programs, earning national recognition for our successful and innovative programs. We have extensive marketing, sales, engineering and operations staff devoted to managing the programs. By using the existing utility infrastructure, many start-up costs are avoided, making programs more cost-effective to administer. Additionally, we have long-term relationships with our larger business customers, which can be of particular value when these customers are undertaking large, complex energy efficiency projects.

The remaining questions relate to design issues that would have to be addressed when an independent program is being developed. For example, the percent of sales that customers should contribute depends on the desired scope and size of the energy efficiency program. In Wisconsin, where we collect funds from our customers for the third party administrator (Focus On Energy), annual contributions are approximately 1.2% of utility revenues. The percent of revenues or sales that a given utility's customers would pay also depends on the allocation of costs to each utility. If one utility has far greater sales than another, that utility may be assigned a larger portion of the program's costs. Similarly, whether there should be a baseline standard is a design and policy issue that would need to be addressed during the development phase of the program.

### **3. What alternative mechanisms besides decoupling would promote energy efficiency investments? How do they compare to decoupling?**

One of the goals of a decoupling mechanism is to sever the link between utility earnings and sales, such that a utility does not have an incentive to increase sales in order to increase revenue. A properly designed decoupling mechanism allows a utility to recover its fixed costs regardless of the volume of energy sold. Because a utility's fixed cost recovery is not at risk, decoupling removes the utility's disincentive to promote energy efficiency, making a utility indifferent to whether it is selling energy or helping customers save energy. If sales and fixed cost recovery are below the rate case assumptions, the utility adjusts rates higher to recover the difference. If sales and fixed cost recovery exceed the rate case assumptions, the utility adjusts rates lower to refund the difference.

Alternatives to decoupling include lost revenue recovery and straight fixed variable rate design. Lost revenue recovery refers to the recovery of the fixed cost revenues lost as a result of the energy efficiency program. It is typically calculated by multiplying the energy saved for each customer class by the fixed cost charges associated with that class. A utility loses revenue from those sales until a rate case is filed and new rates are implemented. A rate case allows the utility to incorporate the impact of the lost fixed cost revenues into the calculation of new rates. In contrast to a properly designed decoupling mechanism, lost revenue recovery does not break the link between utility sales and earnings; it simply makes a utility whole for the revenues lost due to energy efficiency.

Straight fixed variable rates work by increasing customer charges to fully recover fixed costs through the fixed customer charge. Only the variable costs are assigned to a volumetric rate. Because this type of charge will cover all the fixed costs, the utility would be indifferent to how much energy a customer used. However, this mechanism is often criticized because many believe it reduces a customer's incentive to implement energy efficiency because it reduces the portion of the bill that can be reduced through energy efficiency and increases customer payback periods.

While decoupling removes the disincentive for utilities to reduce sales, it does not provide an incentive for the utility to aggressively promote energy efficiency. Performance incentives are commonly used to provide utilities with an incentive to pursue ever-increasing levels of energy efficiency and reach state-sponsored energy efficiency goals. The most common performance incentive models include:

- Shared Savings Incentives
- Performance Target Incentives

- Rate of Return Adders

Under a shared savings model, a utility retains a percent of the net benefits generated by the energy efficiency programs. The percent retained can be fixed or vary depending on the level of performance. The latter method is typically used when the utility has a state-sponsored goal, such that the percent of net benefits retained increases as the percent of goal achieved increases. We believe that this is a reasonable and desirable incentive model because it encourages cost-effective efficiency programs and the ratepayers retain the vast majority of the net benefits. Xcel Energy currently has shared savings incentive models in Minnesota and Colorado.

Performance target incentives are typically based on a utility earning an incentive equal to a given percent of program expenses depending on the level of savings achieved relative to a goal. This model is often criticized for encouraging utilities to increase their budget in order to increase the incentive.

Under a rate of return model, utilities can earn a bonus return on equity if they meet or exceed their performance targets. Typically, this model is only used when a utility's energy efficiency expenditures are capitalized.

While performance incentives serve a different function than decoupling or lost revenue recovery, performance incentives can be designed to approximate the losses resulting from energy efficiency programs. Whether a utility has a decoupling mechanism should be considered when establishing the award levels of an incentive mechanism, such that a utility without a decoupling mechanism may have a higher performance incentive than one with decoupling.

**4. Energy efficiency can occur in a number of ways including utility programs and improvements made solely by customers. How should credit be given appropriately for efficiency improvements? How can such credit be determined? Without such a determination can the Commission treat all parties fairly?**

Utilities should receive credit for the savings resulting from customers participating in their programs. Xcel Energy has tracking systems that record the measures installed by each customer, the associated savings, the rebates paid and other information. The savings claimed are based on technical assumptions, which can be provided by the state in the form of deemed savings or derived from information collected by our product developers and engineers. The program savings are verified through a multi-step process that can vary depending on state requirements, but typically includes validation of all information on a rebate application form and the accompanying invoices or proof of purchase.

While we recognize that some customers implement energy efficiency measures without participating in utility programs, we are unaware of any widely accepted methodologies to determine savings from non-participants. Some customers may have been influenced by our programs or marketing, but chose not to submit a rebate form. Other customers may have chosen energy efficiency for reasons independent from utility programs. Because it is very difficult to track the measures installed by customers outside of the programs, we don't record any savings outside of our programs. If the policy of only claiming savings for direct program achievements is applied consistently, all parties should be treated fairly.

**5. What forum should be used to adjust rates for new consumption patterns?**

Typically rate cases are the best forum to use for adjusting rates, as different customers will be affected differently by changes in rate design. It is more difficult to explain to a customer that their rates have gone up outside of a rate case. Then within the rate case, designs that include increased recovery of fixed costs through fixed charges should be pursued. If a decoupling mechanism is pursued, it too is often established through a general rate case process in order to establish a baseline. Some states have also used attrition or annual rate case adjustments to adjust for consumption pattern changes. While these forums will not change major components decided in a rate case, they will allow the utilities to update their rates for consumption changes.

**6. What methods can be used to determine if a sales decline was due to energy efficiency or other possible factors (weather, economy, loss of large customer, etc.)?**

The Company uses Ordinary Least Squares ("OLS") multiple regression models as the foundation for our class-level sales forecasts. OLS multiple regression techniques are very well known, proven methods of forecasting and are commonly accepted by forecasters throughout the utility industry. This method provides reliable, accurate projections, accommodates the use of predictor variables, such as economic or demographic indicators and weather, and allows clear interpretation of the model, thus providing the ability to determine if sales declines are due to weather or the economy. In addition, the Company quantifies the results of our Company-sponsored energy efficiency or demand side management programs.

**7. Can a decoupled rate promote electricity usage efficiency, or perhaps reduce electricity usage through a transfer of energy usage from the customer to another entity, or from fuel switching? In effect could rate design induce greater overall energy usage even through electricity usage is reduced?**

In general, because customers have no instantaneous knowledge of how their usage is going to affect their bill, they are not often influenced by rate design. Customers are more affected by their total bill than the rate design. Customers are more likely to take action to reduce usage because of their total monthly bill than the rate design. Studies of residential time-of-use rates show that the most successful programs provide periodic feedback to customers as to how much energy they are saving, etc. This encourages the customers to continue to participate and reduce consumption in peak periods. Without these messages, some tire of the extra work involved with moving their usage to lower cost periods.

Similar findings were made in the aftermath of the California energy crisis, that is, when the message, “You need to save energy”, was in the media every day, customers responded. But, when the crisis was over, consumption started to increase again. There have also been studies that show a “take-back” effect, that is, after a customer has their home weatherized, they will increase their usage as they realize they can have great comfort for the same price as they did previously.

Additionally, while most appliances are becoming more efficient, customers find the need to have more and more appliances resulting in consumption levels remaining constant or even slightly increasing.

In summary, it is very rare that a rate design actually promotes consumption. To do so, the bill would have to be lower as a result of the design. One way this could occur is where a utility gets the transition between demand levels for commercial and/or industrial customers wrong. This would result in a lower demand level customer falsely raising their demands to qualify for rate applicable to higher demand level customers thereby benefiting from the lower energy charges on this rate. But this is rare, as the rate has to be designed such that the offsetting higher demand and customer charges don't make the bill higher for the customer switching schedules.

In looking strictly at decoupling, the bill often goes up, thus, customers don't increase usage when there is a decoupling mechanism present.

**8. Describe in detail how the Commission should proceed in reviewing (i) through (vi) below, including any options for doing so. What questions should be asked in each category to obtain information which should be part of the Commission's consideration? Be specific for each category.**

(B) POLICY OPTIONS- In complying with subparagraph (A), each State regulatory authority and each nonregulated utility shall consider-

- (i) removing the throughput incentive and other regulatory and management disincentives to energy efficiency;
- (ii) providing utility incentives for the successful management of energy efficiency programs;
- (iii) including the impact on adoption of energy efficiency as 1 of the goals of retail rate design, recognizing that energy efficiency must be balanced with other objectives;
- (iv) adopting rate designs that encourage energy efficiency for each customer class;
- (v) allowing timely recovery of energy efficiency-related costs; and
- (vi) offering home energy audits, offering demand response programs, publicizing the financial and environmental benefits associated with making home energy efficiency improvements, and educating homeowners about all existing Federal and State incentives, including the availability of low-cost loans, that make energy efficiency improvements more affordable.

The Company already has various tariffs in place that encourage energy efficiency, including:

- time of day rates,
- seasonal rates,
- limited off peak service,
- customer buy back program,
- real time pricing, and
- standby service.

In addition, charging energy costs through a fuel cost rider versus base rates provides customers with a better price signal than having energy costs recovered through base rates which are only updated in a general rate case.

The Commission may want to consider further the issue of aligning utility incentives with energy efficiency. Various incentives have been presented in response to question 3. The best forum for discussing incentives would be through a DSM proceeding. As mentioned earlier, rate design changes are more appropriate for a rate

case forum. The Company believes that rate design is an evolving process and will continue to explore rate design issues in future rate cases. Thus, we do not believe the Commission needs to adopt any rate design standards to promote electric energy efficiency at this time but encourage utilities to engage in these discussions in rate cases and DSM filings.

### **SMART GRID INVESTMENT**

We believe that more information will need to be gathered on the costs involved in developing and implementing smart grid systems (however such systems are eventually defined) before we can advance this work further. Because of this, we do not believe we can respond appropriately to the questions posed by Staff and can only offer information on our current program.

The Commission is most likely aware that Public Service Company of Colorado, a Colorado corporation and a subsidiary of Xcel Energy Inc., is currently in the process of building the nation's first fully integrated smart grid in Boulder, Colorado, a project we call SmartGridCity™. It is the densest concentration of smart grid technologies in a single location to date. For more than a year, we have been working with a consortium of smart grid technology vendors to assist us and provide guidance, products and services to design and deploy our version of a smart grid. In March 2008, we chose Boulder, Colorado, to be the location of SmartGridCity™.

Construction began in May and today crews are nearly done installing a high-speed communication network and sensing equipment on the distribution network. About 15,000 smart meters are installed in homes, with an additional 10,000 smart meters available for installation at customers' request. Crews are also in the process of installing 300 commercial and industrial meters. The Company will begin marketing in-home energy control devices to customers very soon. By mid-summer 2009, SmartGridCity™ will utilize distributed generation, advanced monitoring, energy storage, smart substations and in-home energy control devices.

As we are in the process of testing a number of smart grid elements and features, we have not reached the point at which we can evaluate them for possible large-scale implementation. As we envision it, a smart grid involves the entire energy pathway from generation to transmission and distribution to the customer, and we are consciously striving to remain open to all potential smart grid technologies at all points in the energy pathway.



We are very fortunate that we were able to leverage our SmartGridCity™ with numerous vendors thereby minimizing costs to the Company and our customers. We are concerned that smart grid technology will be very expensive to implement until some significant cost saving technology improvements come to fruition. For example, for years there has been discussion as to how to make appliances talk to each other and at one point there was supposed to be standards set for this but not all manufacturers have agreed to the same standards.

We believe smart grid technology will provide better information to customers so they can better utilize rate designs such as time-of-use or curtailable rates. We believe smart grid technology will also allow a lower cost method of water and air conditioning control.

Based on our interpretation of smart grid technology, we believe system benefits will include:

- Significant reductions in residential peak demand and energy consumption by providing real-time price and environmental signals in conjunction with advanced in-home technologies;
- Potential carbon dioxide footprint reduction as a result of lowered residential peak demand and energy consumption, improved distribution losses and increased conservation options;
- Possible reductions in the number of customer minutes out as a result of improved abilities to predict and/or prevent potential outages, and more effective responses to outages and restoration;
- Expected deferral of capital spending for distribution and transmission projects based on improved load estimates and reductions in peak load from enhanced demand management; and
- Potential utility cost savings from remote and automated disconnects/reconnects, elimination of unneeded field trips and reduced customer outage and high-bill calls through home automation.

It is too soon to predict how and where we will implement smart grid technology. We believe that smart grid technology will allow for a greater use of renewable resources as we will be able to do such things as supplement generation with hybrid car batteries, for example, when the wind isn't blowing.

## **Communications and Service List**

We respectfully request that the following persons be placed on the Commission's official service list for all official communications in this case:

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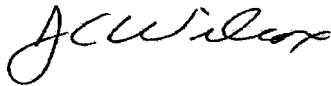
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## CONCLUSION

The Company appreciates this opportunity to provide feedback regarding the potential affects of the Energy Independence and Security Act of 2007. As we discussed above in response to your questions, we believe that most of the standards have already been addressed. Due to the newness of smart grid technologies, we are at an early stage of investigation and testing with regard to which features and functionalities make sense for smart grid systems. We believe there needs to be further evolution of smart grid systems, costs, etc. before Commissions can establish more specific smart grid policies.

Dated: June 19, 2009

Northern States Power Company  
a Minnesota corporation and  
wholly owned subsidiary of  
Xcel Energy Inc.



By: \_\_\_\_\_  
JAMES C. WILCOX  
Manager, Government & Regulatory Affairs

