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December 22, 2014

– Via Electronic Filing –

Dr. Burl W. Haar  
Executive Secretary  
Minnesota Public Utilities Commission  
350 Metro Square Building  
121 Seventh Place East  
St. Paul, MN 55101

Re: REQUEST FOR PLANNING MEETING AND DIALOGUE  
ROADMAP FOR SUPPORTING THE E21 INITIATIVE

Dear Dr. Haar:

Northern States Power Company, doing business as Xcel Energy, submits to the Minnesota Public Utilities Commission this letter offering a roadmap for implementing the recommendations of the e21 Initiative. To adapt to the evolutionary changes confronting the energy industry, e21 brought together a diverse group of stakeholders to create a vision for aligning Minnesota's regulatory framework with State policy goals, changing customer expectations, new technologies, and innovation.

We support this vision and would like to help make it a reality. Minnesota has long been a leader in energy policy; implementing the e21 recommendations would do much to take the state to the next level of accomplishment -- benefiting customers, shareholders, the state's economy, and the environment in the process.

To that end, we see exciting opportunities for Xcel Energy to enact various components of the e21 vision, including:

- *Lead the effort to achieve carbon reduction by 40 percent.* Confronting environmental challenges in the most economical way is one of the most significant challenges facing our industry. In our upcoming Resource Plan, we provide a path that could cost-effectively achieve a 40 percent or greater reduction in carbon emissions by 2030. Importantly, this path preserves and enhances the benefits of a diverse supply portfolio, thus offering significant price and risk mitigation that will benefit and protect customers during this period of rapid industry change.

- *Advance distribution grid modernization.* Distributed resources, for example solar, will play a more significant role in the future, while reliability will become even more important as our economy becomes increasingly electricity-driven. We would welcome the opportunity to take the lead in working with stakeholders to create a plan for evolving our distribution system to serve 21<sup>st</sup> century demands, such that we enable a more distributed energy future, maximize the value of the grid, and ensure and enhance reliability.
- *Provide our customers with a platform of innovative service and product offerings.* Our customers are interested in better managing their energy use and bills, and purchasing green or otherwise streamed energy while ensuring safety and reliability, among other things. We want to respond by offering products and services that align with those goals. New services, alternative rate structures and pilot programs will be needed, as well as potentially new standards and approval processes so as to encourage innovation and bring new services to market in a timely and effective manner.
- *Implement a new regulatory framework that provides both predictable rates for customers and a more timely and nimble review while retaining the key benefits of existing processes, thus freeing valuable time for regulatory agencies, stakeholders, and utilities to focus on achieving policy objectives.* The e21 Initiative highlighted the importance of developing a supportive regulatory framework to align achievement of policy objectives with business objectives. Minnesota has long been a leader in this effort, but the increasing complexity of our industry requires a rethinking of the current framework to ensure it is still aligned. We believe the rate setting process can improve by evolving to a model that allows us to recover the costs associated with implementing this roadmap with greater frequency, certainty and predictability while incenting us to manage our business in a competitive manner.

We are excited about the possibilities and would welcome the opportunity to help make the e21 vision a reality. To do so, we believe the collaborative spirit embodied by the e21 Initiative will need to carry forward and that additional dialogue with the Commission and stakeholders would be beneficial. We thus request that the Commission schedule a planning meeting for further exploration of the appropriate procedure advancing the e21 Initiative.

The remainder of this letter:

- Provides a brief background about the e21 Initiative,
- Discusses the guiding principles upon which we built our roadmap,
- Explains each element of our execution plan in more detail, and
- Outlines our proposed next steps.

We recognize the non-traditional nature of this request, and appreciate the Commission's consideration.

*The Evolving Energy Industry and the e21 Initiative*

The energy industry is at a pivotal point. While we have experienced periods of change in the past, the last several years point to a fundamental shift in what the energy system will look like, what it will be able to do, and how people will use it.

Earlier this year, the Company joined a diverse group of stakeholders, known as the e21 Initiative, to identify potential changes to the regulatory system that would better align utility revenue and business models with public policy goals and changing customer expectations. The group initially identified fundamental changes in the electric industry, including positive evolutionary shifts that have had impacts not fully reflected in historic regulatory norms. These include:

- *Environmental Policy Shifts* - Environmental policy changes have emerged over recent years, beginning in large part with Minnesota's Renewable Energy Standard.<sup>1</sup> In addition, this year the federal government released initial rules to limit greenhouse gas emissions from existing power plants, making long-term carbon reductions necessary. While it is not yet clear how the final federal rules will take shape, it is critical for electric utilities to not only respond to environmental mandates, but also to develop the investor support necessary for any utility to be a proactive environmental leader.<sup>2</sup>

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<sup>1</sup> Elisabeth Graffy & Steven Kihm, *Does Disruptive Competition Mean a Death Spiral for Electric Utilities?*, 13 Energy L.J. 1, 6-7 (2014) (discussing how state renewable portfolio standards have already significantly impacted utility obligations).

<sup>2</sup> Hal Harvey & Sonia Aggarwal, *Rethinking Policy to Deliver a Clean Energy Future*, America's Power Plan 1, 5 (citing changing "national security, public health, economics and climate change" policy concerns as a major factor driving change in America's power sector).

- *Impacts of Greater Conservation* - Years of successful conservation programs and increased awareness about the value of energy efficiency, as well as advancements in technology, have slowed and in some cases reversed the sales growth trends characteristic of the past century.<sup>3</sup>
- *Customer Demand for Choice* - Energy consumers are showing greater interest in receiving the same kinds of choices from their energy provider that they are offered in other areas of their lives, such as access to more detailed energy data, more advanced energy management capabilities, and a more customized energy mix.<sup>4</sup>
- *Competition and New Technologies* - Declines in the cost of distributed generation technologies, growing customer interest in expanded energy options, and supportive public policies have prompted a surge in the adoption of distributed generation, bringing increased competition.<sup>5</sup> Minnesota has the opportunity to be proactive and put a framework in place that will support continued expansion and potentially avoid the kinds of regulatory and operational challenges seen in places like Hawaii. Energy storage technologies will likely follow a similar path, as will energy management and other customer-facing technologies.<sup>6</sup>

The e21 Initiative spent months learning and discussing these topics, including how regulatory bodies in this country and abroad have tried to tackle adapting to the evolutionary change sweeping through the energy industry. An early point of consensus in the e21 Initiative was that the current regulatory framework is becoming increasingly incompatible with the State's energy policy goals and with industry trends, and could be improved to better serve the needs of customers and stakeholders.

On December 18, 2014, the e21 Initiative published its recommendations, which are attached as **Attachment A**. At the heart of the e21 Initiative's recommendations is a

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<sup>3</sup> Steven Nadel & Garrett Herndon, *The Future of the Utility Industry and the Role of Energy Efficiency*, ACEEE Report No. U1404, 1-4 (June 2014).

<sup>4</sup> Harvey & Aggarwal, *supra* note 2, at 4 (citing another major factor driving change in America's power sector as the "advent of competition").

<sup>5</sup> *Id.* at 4 (the first major factor driving change in America's power sector as the "large number of new technologies [that] are becoming commercially viable," such as renewable generation technologies and smart grid systems).

<sup>6</sup> Peter Kind, *Disruptive Challenges: Financial Implications and Strategic Responses to a Changing Retail Electric Business*, Edison Electric Institute 1, 3 (January 2013) (discussing how more emerging technology, such as battery storage, will place additional pressure on the traditional regulated utility model); Graffy & Kihm, *supra* note 1, at 15-16 (innovations in power storage "accelerating the potential for off-grid systems").

shift to a more customer-centric and sustainable framework for utility regulation in Minnesota that better enables:

- Innovation and new customer options;
- Grid modernization and integration of distributed resources;
- Achievement of policy goals; and
- The financial health necessary for utilities to implement this vision.

While much work needs to be done, the e21 Initiative recommendations provides a commendable vision of potential changes to the State regulatory system that can better align utility business model and economic incentives with Minnesota's public policy goals and expanding customer expectations.

### *Guiding Principles*

We are looking forward to participating in Phase II of the e21 Initiative, but instead of waiting for that effort to produce a concrete set of recommended next steps, we believe there are several recommendations from Phase I that we can further explore now to advance the goals of the State and our customers. We looked to four guiding principles to help us create our road map.

First, our customers and being responsive to them is our top priority. Our customers are changing from primarily valuing reliability to wanting to feel good about the energy they use and having greater choice in the service and products they purchase from us. While providing safe and reliable service will be a cornerstone of our business, we also want to be responsive to our customers' changing values.

Second, we believe it is in the best interest of the State and our customers to have a healthy vertically integrated utility today and into the future. For that reason, our ideas and vision build upon our existing infrastructure and regulatory platform instead of breaking those apart. We recognize some may think it best to concentrate our efforts on dismantling this utility. We respectfully disagree with that sentiment and believe we can spend this time now cooperatively evolving the Company into the utility this State and our customers want.

Third, the elements of our roadmap are interrelated and will work best to accomplish the goals of the State and our customers when kept together. Currently, resource and customer choice related policy, and ratemaking decisions happen in different

proceedings, which the Commission may or may not decide near in time. We have seen this cause frustration and confusion from time to time. Reducing carbon emissions, modernizing the distribution grid and offering our customers diversified services and products will require the Company to make significant investments. We will have to recover the costs associated with these investments. We believe it would be an improvement to the existing process to make decisions about cost recovery at the same time as we decide whether to move forward with investments. Therefore, our roadmap keeps policy and ratemaking decisions connected.

Fourth, we need to consider a change in the way we approach the ratemaking process within the existing ratemaking framework. Rate cases take up a lot of resources and because of that make it challenging for us to talk to the Commission and our stakeholders about policy initiatives such as the ones outlined here. We concluded that our roadmap should suggest several evolutionary steps that could be applied to the existing ratemaking process so that the Company, Commission and our stakeholders can have an un-interrupted, non-distracted dialogue about the e21 Initiative recommendations and our roadmap for implementing them.

#### *Achieving Forty-by-Thirty*

The e21 Initiative has a vision that to align the regulatory model with the changing landscape, utilities need to be incented to be proactive environmental policy leaders. Our roadmap for this vision is to exceed the State's carbon emission goals by reducing carbon emissions by 40 percent, or more, by 2030.

Achieving such a historic reduction in carbon emissions provides a unique opportunity to create a partnership between the Company and the State. Environmental leadership is one of our core values and we have a strong track record of success. Likewise, the State of Minnesota has been a leader in environmental policy for many years. For example, recent legislation established a solar energy mandate and more accessible solar-based products, and set the goal for Minnesota to be the first state to use only renewable-based generation. By partnering together we believe we can cost-effectively achieve one of the State's key energy policy goals.

We will be laying out our preferred plan for achieving a 40 percent reduction in carbon emission in our next Integrated Resource Plan, which we will file in January 2015. In our upcoming IRP, we also present our thoughts and ideas about the future of Sherco 1 and 2. While the plan is still being prepared, we expect to take a multifaceted approach that meets several key objectives, including:

- Accelerating the pace of emissions reduction;
- Expanding renewable energy on our system;
- Preserving system diversity and flexibility; and
- Moderating rate impacts and keeping rates competitive.

Our preferred plan also allows for accelerating cost-effective investments and using other tools to achieve carbon reduction if renewable costs are higher than predicted.

The e21 Initiative did a laudable job in offering a forward-looking vision to help evolve the regulatory model. We believe there are success stories from our past that can also help guide us through these changing times. For example, with the Minnesota Metro Emission Reduction Project, the Company made significant investments in our metro area generating units to reduce carbon emissions with the assistance of an incentive base rate mechanism. We believe the interests of the State and our customers were furthered with the use of our suggested diversified ownership portfolio as part of complying with the Next Generation Act (NGA). As we look to the investments that will be needed to reduce carbon emissions by 40 percent, we believe our partnership with the State could be enhanced by using MERP-like creative rate recovery mechanisms, and value could be driven by encouraging the Company to be part of the growth in renewable resources through NGA-like diversified ownership portfolios.

We are excited about our carbon reduction plan, but note that not all states we serve have the same energy and environmental goals and policies. At this time, Minnesota and North Dakota are on diverging paths. Reconciling these differences is becoming increasingly difficult for the Company and regulators which may ultimately adversely affect our customers in each state. We are working on solutions and expect to present a proposal as part of our IRP filing in early January 2015.

#### *Facilitating Grid Modernization*

The e21 Initiative recognized existing distribution systems will be called on to do more in the future, such as accommodating higher levels of solar generation, as well as other distributed energy resources, optimizing system performance, and enabling emerging technologies. To accelerate progress on realizing a fully modern distribution grid, the e21 Initiative recommends a robust stakeholder process that results in a plan describing the steps and investments needed to be responsive to 21<sup>st</sup> century

demands. This process could document the current capabilities of the distribution system and explore a range of planning and investment issues, including:

- Foundational communications and control technologies to create a more intelligent grid;
- Strategies for optimizing distributed resources on the system, including *locational value mapping*;
- Evaluation of the role of energy storage and micro-grids; and
- Requirements for a secure and resilient grid.

Through this process, the Company can share what we have done and are doing to develop a more intelligent and integrated grid. For example, we are developing an advanced distribution management system, which will enable additional system automation and support intelligent electric field devices. Additionally, our distribution engineers are actively involved in industry efforts to research and test new technologies and operational models. In the past, we partnered with the Electric Power Research Institute (EPRI) on a solar-to-battery research project and are now working with the Midcontinent Independent System Operator (MISO) on a broad-based system monitoring and control project using synchrophasors to improve power system reliability and visibility. These efforts allow us to experiment with new technologies and practices in a low-risk and low-cost environment and learn from the experience of other industry partners.

We believe there may be a greater role for pilot and demonstration projects going forward. As part of the continued dialogue on grid modernization, we will explore launching a pilot project that assesses the impact of a stand-alone micro-grid on our distribution system and will consider others identified through the stakeholder process.

Because some of what we do may be new and based on evolving technologies, it will be important to receive input and cost recovery guidelines upfront. Investment in and modernizing of the distribution grid in a thoughtful, comprehensive manner based on established policies, actual customer needs, and understood technological capabilities will focus resources and save money.

### *A Platform for Creating Customer Optionality*

We agree with the e21 Initiative that a more responsive customer choice tariffing platform is needed; a platform which allows us to work with and even anticipate the kinds of new products and services our customers want, resolve customer requests for new tariff provisions, and develop clean energy partnerships.

While we agree with the e21 Initiative on creating more customer optionality, not all of our customers want the same thing, and we are continuing to learn what our customers want. For that reason, our roadmap offers a number of pilots and test-offerings. This will allow us to better understand the needs, wants and desires of our customers before implementing products and services that are permanently part of our tariff.

Specific examples of products, services and pilots making up our roadmap are as follows:

- Develop and if the interest further matures, offer a carbon-free or sustainability rate to our residential customers;
- Develop and offer a pilot program to our energy intensive trade exposed customers that offers different, more tailored, rate options;
- Develop and offer a pilot program that provides a streamed renewable offering;
- Provide additional supply-side options, including renewable rate options that price renewable energy close to existing General Service and Time-of-Day rates to interested communities and commercial customers;
- Develop and offer a pilot which provides more detailed data on energy use, and the ability to better control how and when they use energy, to our interested residential customers.

### *Evolving Rate Recovery*

The last element of our intertwined roadmap is evolving the rate recovery process. The e21 Initiative recognized that utilities should be incented to pursue outcomes sought by stakeholders, should not be financially harmed for doing so, and drive cost excellence within the aspects of the existing rate recovery framework that works. As we reflect on the current ratemaking process and mechanisms, the e21 Initiative findings and recommendations and our roadmap, we believe there are opportunities

for evolving what we are doing today both within and beyond the existing statutory framework.

We believe a place to start is transitioning the rate recovery process to one that creates a tie between our investment plan, the cost of the plan, and a path for the rate growth needed to address the costs of the plan. We believe this is a good place to start based on our experience in our recent rate cases. Our recent cases were driven by significant capital investments we have made into our system. We decided to move forward with many of these investments several years ago during a period of growth. We are now recovering the costs during a period of sluggish growth. What we are seeing with the current ratemaking process is that many years pass from the time we decide to pursue an investment and when we recover the costs in rates. During that time changes occur that make it harder to create ties between the policy rationale supporting an investment and rate recovery.

Another key evolutionary point is creating efficiencies and predictability within the process. Rate cases take a significant amount of resources and can take a year or more to complete. As we look to the immediate horizon, we are still working through our current investment cycle during a period of sluggish growth. We believe the rate case cycle will continue for a few more years. In fact, we are currently forecasting a sizeable deficiency over the next few years. This means we will likely have to file for rate increases, which will consume significant resources from the Company, state agencies and other stakeholders. Evolving the current ratemaking process to create efficiencies and predictability could make future rate cases less resource intensive and create opportunities to have more un-interrupted discussions about policy initiatives.

The last evolutionary point is balancing affordable, competitive rates with preserving our financial health as we execute this roadmap. The roadmap we have laid out in this letter will result in significant capital investment in renewables, distributed technologies, and our distribution grid. We also expect to see changes to our revenue structures as we provide more optionality to our customers. Furthermore, our customers will continue to expect we provide safe and reliable service, which means on-going investments in existing and new infrastructure. Cost-effectively, and cost-consciously working through this roadmap while allowing us the opportunity to recover all of our costs and earn our authorized return should help strike the right balance between competitive, affordable rates, and preserving our financial health.

Other commissions have taken steps to evolve their traditional rate making processes and mechanisms to be more incentive and performance based, and efficient. For

example, the Alberta Utilities Commission uses performance based or incentive regulation as part of multi-year rate plans. The primary objective of performance-based rates is to improve cost efficiency and efficiency within the regulatory process. Another model that was studied is “going-in” rates. With this model, which is used as part of a multi-year rate plan, the case is expedited since the starting rates are based off the most recently approved rates, subject to minor adjustments. The Washington Utilities and Transportation Commission used this model in the Puget Sound Energy case.

We have considered a few high-level models that could work well in this State. One approach is to expand the scope of the existing multi-year rate plan construct to allow for the recovery of O&M as well as all capital. Consistent with the e21 Initiative Findings and Recommendations, O&M expense could be pegged to an inflationary index to create an incentive for us to more competitively manage our business. Another approach is to use an annual rate recovery mechanism, which allows us to recover the investments made in carbon-free energy, grid modernization and providing customer optionality. Since this mechanism does not address O&M or investments made to preserve safe and reliable service, we believe incorporating efficiencies and incentives into the existing rate case process would be necessary.

Our plan is to bring forward a straw man proposal to the Commission planning meeting so that we may share more details about several of the models discussed above.

### *Next Steps*

At the outset we recognize the spirit of collaboration that was embodied within the e21 Initiative will be needed as we embark on the roadmap we have outlined in this letter. We look forward to facilitating that collaboration as best as we can.

We also recognize this is a non-traditional filing but believe it is appropriate considering the way in which the energy industry is changing. We request that this letter follow a different procedural path than would be used for a typical filing. By submitting information that is more conceptual in nature, our intention is to offer a roadmap for moving forward with the e21 recommendations and to use this document as a guide for further stakeholder conversation. Thus, we respectfully request that the Commission delay initiating a comment period to allow for additional collaboration prior to the start of a formal proceeding.

Instead, as a first step, we request the opportunity to discuss this letter with the Commission at a planning meeting in January or February. Our goal for that meeting is to be available to answer questions and address comments the Commission may have and elaborate on our roadmap as appropriate.

We also note that there is a high likelihood that our roadmap will become disjointed right away. We are filing our IRP in early January 2015, which means discussions regarding achieving 40 by 30 will likely begin before we can substantively discuss the other intertwined elements of our roadmap. For instance, it will be hard to substantively discuss evolving the rate recovery process until our currently pending rate case and prudence review are addressed by the Commission. We look forward to obtaining the Commission's guidance at our planning meeting as to its thoughts about moving through our roadmap in a connected manner.

Ultimately, to make the e21 vision a reality we believe we will need to implement our roadmap through our upcoming integrated resource plan, as well as, our next rate case.

At the same time, we intend to work with stakeholders to consider Minnesota legislation in 2015 that would further clarify and encourage the Commission's use of these approaches and provide additional authority or rate making tools as necessary. We believe this will provide greater certainty, if needed.

### *Conclusion*

We have appreciated the opportunity to work with stakeholders in the e21 process and look forward to continued dialogue and implementation of a regulatory framework best suited to meet Minnesota's evolving energy landscape. We believe this approach will serve as a model of collaborative, fruitful development of regulatory processes and mechanisms that will benefit from the advance input of stakeholders with varying interests and needs.

Dr. Burl W. Haar  
December 22, 2014  
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If you have any questions regarding this filing, please contact me, or Aakash Chandarana at 612-215-4663 or email [aakash.chandarana@xcelenergy.com](mailto:aakash.chandarana@xcelenergy.com)

Sincerely,

/s/

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