414 Nicollet Mall
Minneapolis, MN 55401

January 29, 2018

—Via Electronic Filing—

Patricia Van Gerpen
Executive Director
South Dakota Public Utilities Commission
Capitol Building, 1st Floor
500 East Capitol Avenue
Pierre, SD 57501-5070

RE: PETITION FOR APPROVAL OF A PROXY PRICING PROPOSAL
DOCKET NO. EL18 - ____

Dear Ms. Van Gerpen:

Northern States Power Company, doing business as Xcel Energy, submits the attached petition for approval of a proxy pricing proposal to address the treatment of certain power purchase costs that flow through the South Dakota fuel clause rider.

In accordance with ARSD §§ 20:10:01:39 through 42, Xcel Energy respectfully requests confidential treatment of certain information contained in this filing. In compliance with ARSD § 20:10:01:41, we have clearly marked each page containing confidential information as "CONFIDENTIAL" and submitted it as a separate document along with this filing.

Pursuant to ARSD § 20:10:01:41, we provide the following information in support of our request:

(1) We request confidential treatment of the cost and bidding information identified as confidential in Schedules 2, 3 and 5 of Mr. Martin's Direct Testimony.

(2) We request these documents be treated as confidential forever.

(3) If you have questions regarding this request, please contact:

Amanda J. Rome
Managing Attorney, Federal and State Regulatory
Xcel Energy Services Inc.
414 Nicollet Mall, 401 8th Floor
Minneapolis, MN 55401
(612) 215-5331

(4) We request confidential treatment on the grounds that the material is proprietary and trade secret information, the disclosure of which would result in material damage to the Company's financial or competitive position. The claim for confidential treatment is based on ARSD § 20:10:01:39 (4) and SDCL § 1-27-30. The information contained within the referenced documents meets the definition of "trade secret" under SDCL § 37-29-1(4)(1), the South Dakota Uniform Trade Secrets Act, which is defined as information that "Derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use, and… is the subject of efforts that are reasonable under the circumstances to maintain its secrecy." The information also meets the definition of "proprietary information" under SDCL § 1-27-28, which is defined as "information on pricing, costs, revenue, taxes, market share, customers, and personnel held by private entities and used for that private entity's business purposes."

(5) The noted documents qualify for confidential treatment because they contain proprietary business information which the Company does not disclose to the public.

A copy of this Request for Confidential Treatment, along with Confidential documents, will be electronically filed as separate documents and marked "CONFIDENTIAL."

If you have any questions regarding this filing or our request for confidential treatment of information, please contact Tim Edman at timothy.j.edman@xcekebergt.com or 612-330-2952.

Sincerely,

/s/

AAKASH H. CHANDARANA
REGIONAL VICE PRESIDENT, RATES AND REGULATORY AFFAIRS
NSP-MINNESOTA

Enclosures

STATE OF SOUTH DAKOTA
BEFORE THE
SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE PETITION OF NORTHERN STATES POWER COMPANY FOR APPROVAL OF A PROXY PRICING PROPOSAL TO ADJUST CERTAIN FUEL CLAUSE RIDER POWER PURCHASE COSTS	DOCKET NO. EL18-____ **PETITION**

OVERVIEW

Northern States Power Company, doing business as Xcel Energy, submits to the South Dakota Public Utilities Commission this petition for approval of a proxy pricing proposal to address the treatment of certain power purchase costs that flow through the South Dakota fuel clause rider.

In this petition, we review and compare various proxy pricing methods. While these methods produce different results, they are all based on the principle that (1) the involved resources provide both a capacity benefit and resource benefit to South Dakota customers, and (2) regardless of the resource type, such energy and capacity benefits should be paid for by all Company jurisdictions consistent with that value.

More specifically, we present eight proxy pricing options including system average pricing, market pricing, index pricing, synthetic resource pricing, and actual resource pricing. We then recommend a proxy pricing solution to address the costs associated with a limited number of existing wind and solar projects that currently flow through the South Dakota fuel clause. Further, we introduce the concept of pseudo separation, which could serve as a long-term method for the approval and cost recovery associated with future resource additions.

Consistent with proxy pricing principles and based on our analysis, we request Commission approval of:

- A market-based proxy price using the Company's Fall 2014 Forecast for our 187 MW Solar Portfolio as well as three Renewable Development Fund (RDF) solar projects and one RDF biomass project;
- An index-based proxy price using the 2016 Lawrence Berkley Laboratory Market Report for the Company's Community-Based Energy Development (C-BED) wind projects and two RDF wind projects; and
- Implementation of our proxy pricing proposal beginning retroactively on

December 1, 2016, which, consistent with the Settlement Stipulation in Docket EL16-037, is the date of the initial suspension of our fuel clause adjustment.

We believe our recommended proposal is reasonable and prudent in that it:

- Provides South Dakota customers with a reasonable degree of certainty regarding the costs of a limited set of generation resources currently recovered through the fuel clause;
- Reflects a balanced approach that is just and reasonable from a ratepayer perspective and Company perspective; and
- Maintains the basic tenents of NSP's integrated system[1] and the benefits that accrue to South Dakota customers as part of this system.

I. GENERAL FILING INFORMATION

A. Name, Address, and Telephone Number of the Utility

Northern States Power Company
500 West Russell Street
Sioux Falls, SD 57104
(605) 339-8303

B. Name, Address, and Telephone Number of Utility Attorney

Amanda Rome
Managing Attorney, Federal and State Regulatory
414 Nicollet Mall, 401 – 8th Floor
Minneapolis, MN 55401

C. Service List Request

The Company requests that the following persons be placed on the Commission's official service list for this proceeding:

Amanda Rome
Managing Attorney
Xcel Energy
414 Nicollet Mall, 401 – 8th Floor
Minneapolis, MN 55401
amanda.j.rome@xcelenergy.com

Carl Cronin
Regulatory Administrator
Xcel Energy
414 Nicollet Mall, 401 – 7th Floor
Minneapolis, MN 55401
regulatory.records@xcelenergy.com

[1] The electric production and transmission system operated in five states (Minnesota, North Dakota, South Dakota, Michigan and Wisconsin) by Northern States Power – Minnesota and Northern States Power – Wisconsin.

Any information requests in this proceeding should be submitted to Mr. Cronin at the e-mail address above.

E. Proposed Effective Date

Consistent with the 30-day notice requirement under South Dakota Codified Laws 49-34A-17, we propose to implement our proposal in conjunction with South Dakota's fuel clause rider (FCR) monthly filing beginning 90 days following Commission approval.

II. DESCRIPTION AND PURPOSE OF FILING

The Company seeks approval to modify the current method for the recovery of costs that currently are included in the Company's monthly fuel clause rider filing. This Petition is submitted in compliance with the Commission's September 19, 2017 Order[2] *(Granting Joint Motion for Approval of Settlement Stipulation*) in Docket EL16-037 *(In the Matter of Commission Staff's Request to Investigate Northern States Power Company's Proposed Fuel Clause Rider.* The petition includes information regarding different proxy pricing options, a rationale for the Company's recommended proxy pricing methodology, and other relevant information.

Our petition is organized as follows:

- Background Information
- Proxy Pricing Options
- Analysis and Recommended Proxy Prices
- Proxy Price Impact
- Proxy Pricing True-Up
- Psuedo Separation Concept
- Request for Confidential Data Protection

A. Background Information

In its September 19, 2017 Order, the Commission approved a Settlement Stipulation between the Company and the Commission's Staff. Key components of the Settlement Stipulation include:

- Continued recovery of the costs associated with the Mankato Energy Center I and Cannon Falls capacity power purchase agreements (PPAs),

[2] Effective date October 1, 2017.

- Recovery of a credit equal to the Company's system average cost of fuel and purchased power per kWh for the South Dakota share of the output of the Aurora solar PPA,
- Continued recovery of the costs of certain biomass PPAs, and an option to request that the Commission approve recovery or special accounting treatment of the South Dakota share of the costs for terminating any of the biomass PPAs,
- No recovery from South Dakota customers of the costs associated with Minnesota net metered resources, and
- An agreement that the Company shall include additional information in its monthly FCR filings regarding any new PPA with a term of one year or more which would be recovered through the FCR.

The Company and Staff also agreed that an additional proceeding was necessary to determine an energy proxy price for the Company's 187 MW solar PPA portfolio[3], as well as an energy and capacity proxy price for fifteen Community-Based Energy Development (C-BED) projects and six Renewable Development Fund (RDF) projects. The Settlement also stipulated that the proposed energy and capacity proxy prices need not be the same for all of the C-BED and RDF projects.

The parties further agreed that the capacity proxy price applicable to the 187 MW Solar PPAs would be the 2014 Cost of New Entry (CONE) as established by the Midcontinent Independent System Operator, Inc. (MISO) escalated on an annual basis at two percent until 2024 and applied to the MISO accredited capacity of these resources; provided, however, that no capacity proxy shall be applicable to the 187 MW Solar PPAs until 2024.[4] In addition, the parties agreed the "costs of the RDF and C-BED PPAs should be replaced with an energy and capacity proxy representing the energy and capacity contributions of these resources in the NSP System."[5]

With respect to process, the Company and Staff agreed that the Company would meet and confer with Staff regarding the contents of the initial filing not later than 30 days prior to making its initial filing, and that the initial filing would be made "not later than 120 days following the Commission's adoption of the Settlement, make its initial filing to commence the additional proceeding." The Company believes it has complied with its "meet and confer" obligations, having twice travelled to Pierre to meet with Staff and discuss proxy pricing issues.

[3] On May 10, 2016, MN Solar I notified the Company that it was exercising its right to terminate their PPA. Thus, the Company's 187 solar portfolio was reduced by 24.75 MW.
[4] Settlement Stipulation, Docket EL16-037, page 6.
[5] Settlement Stipulation, Docket EL16-037, page 7.

As specified in the Settlement, the initial filing shall include:

- Information regarding different proxy pricing options,
- A rationale for the Company's proposed proxy prices, and
- Other information that the Company deems appropriate.

In addition, the Company committed upon resolution of the additional proceeding on proxy pricing to file a revision to the FCR tariff to permanently incorporate the resolution of these issues.

B. Proxy Pricing Options

As addressed in Docket EL16-037, proxy pricing recognizes that state commissions may place different values on various resource types. Notwithstanding such differences, proxy pricing is based on the principle that all states in the NSP System accept the fact that those resources provide, at a minimum, energy and capacity value to the NSP System and that the benefits of such energy and capacity should be paid for by each jurisdiction in the NSP System consistent with that value.

Of course, a key element in establishing a proxy pricing structure is selection of the appropriate proxy price option. The Company has identified and developed several energy and capacity proxy pricing options for the Commission to consider as summarized in Table 1below.

Table 1

Proxy Price	**Proxy Value**	**Description**	**Attachment**
Market Price – Fixed	Energy	MISO Market Energy Forecast at Time of Acquisition	A
Market Price – Floating	Energy	Actual Hourly MISO Market Settlement	B
System Average Fuel – Fixed	Energy	Average NSP System Fuel Cost at Time of Acquisition	C
System Average Fuel - Floating	Energy	Actual Hourly NSP Average System Fuel Cost	D
Index Proxy – Fixed	Energy and Capacity	Publicly Available Benchmark such as the Lawrence Berkley Lab Market Report	E
Synthetic Resource Proxy – Fixed	Energy	Production Cost of Generic Combined Cycle Based on Gas Price Forecast at Time of Acquisition	F
Synthetic Resource Proxy – Floating	Energy	Production Cost of Generic Combined Cycle based on Actual Gas Prices	G
Actual Resource Proxy	Energy and Capacity	Cost of Actual Resource of Similar Type Acquired in the Same Timeframe	H

We discuss each option in turn.

(a.) Market Price

A market price proxy relies on the market price of energy at pre-defined market nodal locational marginal price (LMP) for each MWh of energy production rather than the PPA price. A market price proxy could rely on pricing at the generator node, pricing at the load nodes or some combination. For resource planning the Company uses the Minnesota (MN) Hub forward curve, which is a blend of third-party provided forecasts and current market data, for a representative forecast of energy prices in the region. The energy market price proxy could be fixed at the forecasted market energy price at the time of the resource acquisition or the market price proxy could float based on actual day-ahead MISO LMPs.

Since the energy production from these resources is typically displacing fuel that would be burned or market purchases that otherwise would have been occurring, our South Dakota customers are receiving the benefits of avoided fuel and purchases and therefore should pay something in return. The MN Hub 7x24 day-ahead averages are currently in the mid-$20 range, so this methodology could result in a fairly significant discount relative to the pricing associated with some of the contracts in question.

Utilizing a forecasted fixed market price provides similar price certainty to a fixed price contract and provides a hedge against market fluctuations as comparted to a floating market price. A floating market price is also often more complex and difficult to implement as it requires an after-the-fact settlement of hourly LMPs compared to hourly generation of the disputed resource. In addition, a fixed market price proxy reflects forecasted market conditions at the time the resource was procured. Using the LMP as a proxy price does not capture any of the capacity benefits that a PPA provides to the NSP System. See Attachments A and B.

(b.) System Average Fuel

The system average cost approach would result in South Dakota customers paying the NSP system average fuel cost, adjusted to exclude the PPAs at issue for each MWh of energy production, rather than the PPA contract price. The system average fuel proxy could be fixed based on the time of the disputed resource acquisition or floating based on actual system costs over time. System average cost in $/MWh terms are reflective of all fuel and purchased power costs divided by total MWh retail sales. System average fuel costs are currently in the $25/MWh range. See Attachments C and D.

This methodology is consistent with the system average cost of fuel methodology used to calculate the amounts to be recovered through our South Dakota FCR.

However, it reflects historical average costs rather than prevailing market dynamics at the time of the resource addition. A marginal cost proxy, such as LMP, better represents the costs avoided due to a new resource addition. Additionally, as a mere $/MWh replacement methodology, which also includes system cost of fuel, utilizing the system average cost methodology does not fully account for the capacity value of a particular resource at the time of evaluation as a system addition. In addition, using an annual or monthly average system fuel cost value rather than an hourly value does not accurately account for the production weighted value of the resources in question.

(c.) Index Proxy

An index proxy relies on a publicly available benchmark to determine the market price for a resource at the time the resource was acquired. The Lawrence Berkley Lab Market Report (LBL Market Report) provides data on the cost of installing, operating, and maintaining utility-scale wind and PV projects, along with capacity factors. The LBL Market Report relies on data compiled from FERC Electronic Quarterly Reports, FERC Form 1, EIA Form 923, and a variety of regulatory filings. For PV projects, the LBL Market Report presents trends in PPA prices among a large sample of utility-scale PV projects in the U.S., including 136 contracts totaling 9,097 MW. For wind projects, the LBL Market Report relies on several sources including EIA Form 412, EIA Form 860, FERC Form 1, FERC's *Electronic Quarterly Reports,* various Securities and Exchange Commission filings, and other regulatory filings. See Attachment E.

The index proxy methodology differs from the system average fuel cost and MISO LMP methodologies, as it establishes a proxy price inclusive of both energy and capacity at the time a decision is made on the selection of a new resource.

(d.) Synthetic Resource Proxy

The synthetic resource proxy is an energy proxy based on the costs to operate a new generic combined cycle plant. The synthetic resource proxy makes a simplifying assumption that the cost of a MWh at a new combined cycle plant will approximate the avoided energy costs due to the generation from a disputed resource. In order to calculate a per MWh proxy price, the heat rate of a new combined cycle plant is multiplied by the variable cost to operate the combined cycle plant. The variable costs include the operations and maintenance cost as well as the costs of natural gas fuel and delivery. The synthetic resource proxy can be fixed by relying on a gas forecast, or floating by relying on current gas commodity costs based on the heat rate, variable O&M costs, gas commodity costs forecast, and gas delivery charges used in the Company's analysis of the solar Request For Proposal resources. See Attachments F and G. These forecasts reflect expected representative combined cycle production costs at the time of selecting the solar portfolio resources. The

synthetic resource proxy does not include a capacity proxy.

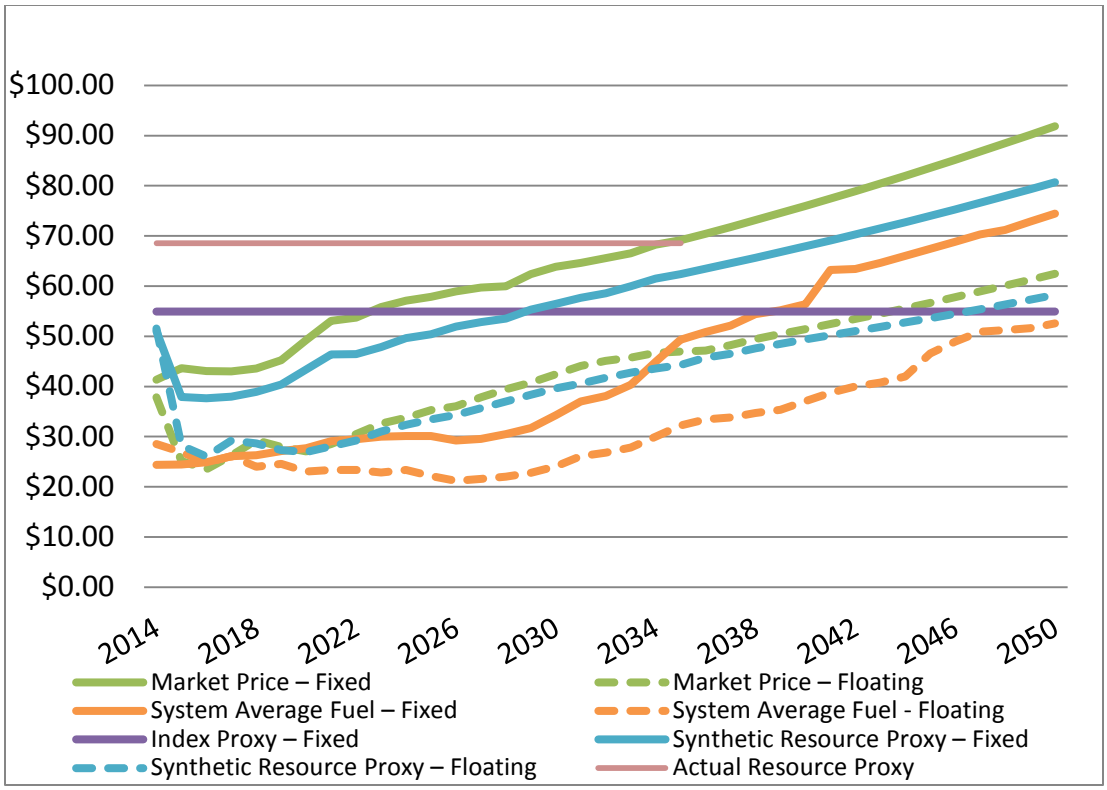
(e.) Actual Resource Proxy

The cost of another resource of a similar type acquired in the same timeframe could serve as a proxy price. If an existing resource was acquired through a competitive process in the same timeframe as a disputed resource, the cost of the existing resource may indicate the market price at the time of acquisition. For this option, we are using the annual and levelized cost of the Nobles Wind project which was acquired in the same timeframe as many of the disputed C-BED resources. See Attachment H.

(f.) Summary Results

The goal of each proxy pricing method described above is the same, that is, recognize and recover through the South Dakota fuel clause the costs and benefits of generation resources required to meet the electrical energy needs of South Dakota customers on a reliable basis. However, these methods can produce significantly different results. The following chart depicts the pricing that would result from these various options:

PROXY PRICE OPTIONS ($/MWh)*



* See Attachment I for supporting Chart data.

C. Analysis and Recommended Proxy Prices

As outlined above, there are numerous methods for calculating a proxy price—whether energy or capacity. Moreover, the type of resource at issue often drives the choice of a proxy price. Accordingly, in this section, we provide our rationale and recommendations with respect to the resources at issue.

1. Solar Portfolio Proxy Pricing

There is no dispute that solar resources provide both an energy and capacity benefit. As reflected in the Settlement, the parties have agreed that the capacity proxy for the 187 MW Solar PPAs shall be the 2014 Cost of New Entry (CONE) as established by the Midcontinent Independent System Operator (MISO) escalated on an annual basis at two percent until 2024. Thus, our solar proxy pricing recommendation addresses the energy value of the solar resources in question. With respect to the energy proxy, the Company proposes to apply the Company's Fall 2014 on-peak market price forecast for the MISO Minn Hub.

Using a fixed price forecast provides for a hedge against market price fluctuation, similar to the benefit a solar facility would provide. As solar generally provides energy during peak hours, an on-peak price forecast better reflects the production profile of solar than an average price forecast.

We propose to use the Fall 2014 Forecast because it reflects the energy and gas prices in effect at the time we conducted our Strategist analysis and made our solar portfolio acquisition decisions. This forecast is provided in Attachment A. We believe an on-peak fixed energy price as relied on at the time the solar resources were acquired provides a fair and reasonable proxy price for the 187 MW Solar PPAs.

2. C-BED Wind Projects

C-BED wind projects, like other wind resources, provide energy and capacity to the NSP system and a hedge against fuel price fluctuations. The Company procured the C-BED wind projects within the same timeframe (2008 – 2012) as other, non-C-BED wind resources after determining they were reasonable and prudent resource additions to our system. Therefore, the Company proposes to apply an index proxy to the C-BED resources to account for any premium above the market price of wind at the time the resource were acquired.

The 2016 LBL Market Report for wind provides levelized PPA prices by region and by the year the PPA was executed. We propose to apply the generation-weighted

average levelized wind PPA prices for a 2009 PPA execution date for the Interior region for each C-BED PPA that exceeds the LBL Market Report price. The application of the LBL Market Report proxy provided an all-in proxy, including the energy and capacity value, for wind resources acquired in the interior region. The generation-weighted average levelized wind PPA prices are include in Attachment E. In order to limit the administrative complexity, we propose to apply the 2009 price to any C-BED PPA that exceeds the 2009 price, which includes PPAs executed in 2008 – 2010. We believe an all-in index price provides a fair and reasonable proxy price for the CBED wind PPAs.

3. RDF Projects

While relatively small in terms of capacity, RDF wind and solar projects also reflect an energy and capacity benefit to all NSPM jurisdictions. The RDF resources include three solar PPAs, two wind PPAs and one biomass PPA. The Company proposes that the capacity and energy proxy price established for the 187 MW Solar PPAs also be applied to the RDF solar PPAs, and the proxy price established for the C-BED PPAs also be applied to the RDF wind PPAs. The remaining biomass PPA, Diamond K Dairy, is a small 350 kW facility and the PPA expires in 2024. Diamond K Dairy provides relatively consistent energy production during on and off peak periods. The Company proposes that the energy proxy applied to the Diamond K Dairy PPA should be the Company's Fall 2014 7x24 average market price forecast for the MISO Minn Hub. The 7x24 average market price forecast should serve as a good proxy for Diamond K given the relatively flat production profile of the biomass facility. Based on the small size and expiration date of the current PPA, the Company is not requesting a capacity proxy price for the Diamond K Dairy PPA at this time.

D. Proxy Pricing Impact

The Company has prepared an estimated impact of our proposed proxy proposal, based on our Strategist Resource Planning Model. See Attachment J. Actual impacts will depend on actual production of the resources and selected proxy price.

E. Proxy Pricing True-Up

Subject to Commission approval, we propose to apply our proxy pricing to the power purchase resources identified in this docket as of December 1, 2016. This is consistent with the Settlement which notes that the application of the proxy energy and capacity pricing "shall be retroactive" to the date of the Commission's suspension of the fuel clause adjustment in Docket EL16-037. Accordingly, we will calculate and present to the Commission a true-up reflecting the approved proxy prices along with

a proposed timeframe for providing South Dakota customers with any associated refund.

F. Psuedo Separation Concept

While our proxy pricing proposal meets the requirements set forth in the Settlement Stipulation, we view proxy pricing as a short-term solution that does not address how to handle a future where there is regular disagreement among our jurisdictions as to resource additions. Consequently, we think there is merit to exploring pseudo separation as a long-term solution to address the selection and cost recovery associated with future resource additions. We note that the Company is currently engaged in pseudo separation discussions with the North Dakota Public Service Commission (Case No. PU-12-813, et. al.) and we are open to engaging in further discussions with this Commission on the topic.

Our concern is that disagreement on the size and type of a resource, and when that resource should be placed in-service, goes beyond solving for a specific and limited set or generation resources, or the unique renewable energy policies and concerns of a single state. Furthermore, proxy pricing could create an artificial opt-in/opt-out situation for the NSPM states which may not reflect the actual options available at the time the Company makes a resource decision. A resource may be prudent even if it is more expensive than the least-cost option but could still be subject to proxy pricing. As more and more resources become subject to proxy pricing, rates become less reflective of the underlying cost of service and could be more reflective of the artificial outcome resulting from a proxy pricing regime.

Unlike proxy pricing, pseudo separation is the use and implementation of cost allocation tools on a generator-specific level for the purpose of allocating all of the costs and benefits of a particular resource to the jurisdictions that support that resource.

This option is essentially a ratemaking/accounting solution which enables the Company to create a "virtual" separation of the system resources. Under this approach, the Company would maintain separate load and resource tables for South Dakota and the remainder of the NSP System. The capacity, energy, costs, revenues, and other benefits of these separate systems would be directly assigned to each respective jurisdiction through ratemaking mechanisms. Pseudo separation would result in separate generation portfolios while still maintaining the corporate structure and financial integrity of NSPM.

We recognize that pseudo separation is a new concept and considerable work needs to be done prior to adoption. For example, pseudo separation will be most effective if it is consistent and compatible with state resource planning requirements. In Minnesota, approval of the Company's resource plan is required prior to initiating the request for proposal process and reaching a decision on a possible resource addition. However, in North Dakota, the Company submits our resource plan for informational purposes only; approval of a resource acquisition does not take place until after we have entered into a power purchase agreement. Consequently, we are in discussions with North Dakota Commission staff about developing a process to avoid future conflicts. We think discussion of pseudo separation in South Dakota also has merit.

CONCLUSION

Xcel Energy respectfully requests that the Commission approve the Company's proxy pricing proposal. We believe this proposal is reasonable and prudent in that it addresses the issues raised by the Commission, adheres to the principles of proxy pricing by recognizing the energy and capacity attributes of the resources in question, benefits South Dakota ratepayers, and maintains NSP's integrated system.

Dated: January 29, 2018

Northern States Power Company