

DIRECT TESTIMONY AND SCHEDULES  
RICHARD D. STARKWEATHER

Before the North Dakota Public Service Commission  
State of North Dakota

In the Matter of Northern States Power Company,  
a Minnesota corporation d/b/a Xcel Energy  
Jurisdictional Cost Allocation Matters

Case Nos. PU-12-813, PU-13-706, PU-13-707, PU-13-708,  
PU-13-742, PU-13-743, PU-13-194, PU-13-195  
Exhibit \_\_ (RDS-1)

**RTF Implementation Structures**

July 15, 2017

## TABLE OF CONTENTS

	<b>Page</b>
I. INTRODUCTION AND QUALIFICATIONS.....	1
II. OVERVIEW AND BACKGROUND .....	5
III. PROPOSED RESOURCE TREATMENT FRAMEWORK .....	9
IV. STRUCTURES TO SUPPORT THE RTF .....	15
A. Regulatory Alignment.....	15
B. Proxy Pricing.....	18
C. Pseudo Separation.....	22
D. Legal Separation.....	29
V. ESTIMATED COSTS OF LEGAL SEPARATION.....	36
A. Transaction Costs .....	38
B. Financing Costs.....	40
VI. CONCLUSION .....	43

### Schedules

Resume of Richard D. Starkweather

Schedule 1

1           **I.       INTRODUCTION AND QUALIFICATIONS**

2  
3    Q.    PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

4    A.    My name is Richard D. Starkweather. My business address is 2626  
5        Glenwood Avenue, Suite 480, Raleigh, North Carolina, 27608.

6  
7    Q.    BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?

8    A.    I am a Partner with ScottMadden, Inc. (ScottMadden) and a leader in the  
9        firm’s regulatory practice.

10  
11   Q.   PLEASE BRIEFLY OUTLINE YOUR RESPONSIBILITIES AS A PARTNER.

12   A.    As a Partner with ScottMadden, I provide direction for all work conducted  
13        by ScottMadden consultants, and I am accountable for the overall quality of  
14        analyses and deliverables developed on behalf of clients such as Xcel Energy,  
15        Inc.

16  
17   Q.    PLEASE DESCRIBE SCOTTMADDEN’S CONSULTING PRACTICE AND THE  
18        SERVICES IT PROVIDES.

19   A.    Founded in 1983, ScottMadden is a management consulting firm with four  
20        primary practice areas: Energy, Clean Tech & Sustainability, Corporate &  
21        Shared Services, and Grid Transformation. Since 1983, we have been energy  
22        consultants, and have served more than 400 clients, including 20 of the top  
23        20 energy utilities. We have performed more than 3,000 projects across  
24        every energy utility business unit and every function.

1 Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND.

2 A. I graduated from Northwestern University with a Bachelor of Science degree  
3 in Mechanical Engineering in 1978, and then earned my Master of Business  
4 Administration degree from the University of Chicago Graduate School of  
5 Business in 1980.

6

7 Q. PLEASE SUMMARIZE YOUR PROFESSIONAL EXPERIENCE.

8 A. I began my career with Exxon Chemical Americas in 1980 as a Forecast  
9 Coordinator for the Bayway Chemical Plant in Linden, New Jersey. My  
10 responsibilities there included the coordination of the annual operating  
11 budget for all of the departments at the plant. I began my consulting career  
12 in 1982, and other than three years in the managed healthcare industry and  
13 three years working for Edison International, I have been a management  
14 consultant for my entire professional career. I started working for Touche  
15 Ross & Co. in 1982, which then became Deloitte & Touche after the merger  
16 with Deloitte, Haskins & Sells in 1989, and joined ScottMadden in 1999.

17

18 Since the early 1990s, I have specialized in the public utility industry and  
19 have completed numerous consulting engagements for electric and gas  
20 utilities. My areas of expertise include organizational and operations  
21 improvement, strategic and business planning, budgeting and forecasting,  
22 and regulatory compliance and rate case support. I have also provided  
23 consulting support for several utility mergers, including the estimation of  
24 integration costs as well as potential operational and organizational synergies.  
25 Additional details regarding my educational background and professional  
26 experience can be found in my resume which is included as Exhibit\_\_\_\_  
27 (RDS-1), Schedule 1.

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Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A. I am testifying on behalf of Northern States Power Company, a Minnesota corporation (NSPM, or the Company), a wholly-owned electric and gas utility subsidiary of Xcel Energy Inc. Xcel Energy Inc. is a registered holding company that owns several electric and natural gas utility operating companies, a regulated natural gas pipeline company, and three transmission-only operating companies.<sup>1</sup>

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE ANY REGULATORY AUTHORITIES?

A. Yes. I testified before the Public Utility Commission of Texas in Docket No. 43695, and filed testimony in Docket Nos. 45524, 40824, and 42004, on behalf of Southwestern Public Service Company, regarding benchmarking analyses of utility capital and operation and maintenance costs completed by ScottMadden. I also filed testimony at the New Mexico Public Regulation Commission in Case No. 10-00086-UT, on behalf of Public Service Company of New Mexico, regarding its capital and O&M budgeting processes.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. I am testifying in support of Xcel Energy’s Application for Consideration of a Resource Treatment Framework (the RTF Application) filed on December

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<sup>1</sup> Xcel Energy is the parent company of four wholly-owned electric utility operating companies: Northern States Power Company, a Minnesota corporation; Northern States Power Company, a Wisconsin corporation; Public Service Company of Colorado, a Colorado corporation; and Southwestern Public Service Company, a New Mexico corporation. Xcel Energy’s natural gas transmission pipeline company is WestGas InterState, Inc. Through a subsidiary, Xcel Energy Transmission Holding Company, LLC, Xcel Energy also owns three transmission-only operating companies, Xcel Energy Southwest Transmission Company, LLC; Xcel Energy Transmission Development Company, LLC; and Xcel Energy West Transmission Company, LLC, all of which are either currently regulated by the Federal Energy Regulatory Commission (FERC) or expected to be regulated by the FERC. Xcel Energy Services Inc. is the service company subsidiary of Xcel Energy Inc. and provides consolidated corporate services to many of the Xcel Energy Inc. subsidiaries.

1 31, 2016 with the North Dakota Public Service Commission (Commission)  
2 and the Minnesota Public Utilities Commission (MPUC). The RTF  
3 Application addresses the process by which the Company will plan for and  
4 assign generation resources to the various jurisdictions served by the  
5 Company in the future. My Direct Testimony provides a detailed  
6 explanation of the Resource Treatment Framework (RTF) and discusses the  
7 different implementation structures considered by the Company to support  
8 the RTF. This includes the advantages and disadvantages and the benefits  
9 and costs of implementation of each structure. I also discuss many of the  
10 assumptions that support the Company's representative analysis of the  
11 revenue requirements impact of the structural alternatives. Finally, my  
12 Direct Testimony supports the rationale underlying the Company's choice  
13 for Legal Separation and discusses the many operational and organizational  
14 matters that must be addressed to support implementation of this option.

15  
16 Q. PLEASE PROVIDE AN OVERVIEW OF THE REMAINDER OF YOUR TESTIMONY.

17 A. My testimony is organized as follows:

- 18 • Section II provides a brief overview of the RTF Application, including a  
19 high-level discussion of the four alternatives for the future structure of  
20 the NSP System<sup>2</sup> that the Company focused on in developing the RTF,  
21 to provide context for the rest of my testimony.
- 22 • Section III provides a more detailed explanation of the RTF.
- 23 • Section IV provides information about each of the four structural  
24 alternatives, including a description of the alternative, its pros and cons,

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<sup>2</sup> The NSP System is comprised of the generation and transmission assets of NSPM, which serves customers in Minnesota, North Dakota, and South Dakota, and the generation and transmission assets of its sister operating company, Northern States Company, a Wisconsin corporation (NSPW), which serves customers in Wisconsin and Michigan. Although these two separate companies own separate assets and serve customers in different states, Xcel Energy plans for and operates the generation and transmission resources of both companies on an integrated basis.

1 related implementation considerations and issues, and estimated  
2 implementation costs.

- 3 • Section V provides updated estimates of some of the costs of  
4 implementation for the Legal Separation option.
- 5 • Section VI concludes my testimony.

## 7 II. OVERVIEW AND BACKGROUND

8  
9 Q. WHAT IS THE PURPOSE OF THE COMPANY'S RTF APPLICATION?

10 A. The Company is considering a more separate future between its North  
11 Dakota operations and the remainder of the integrated NSP System, to solve  
12 for past, existing, and likely future disagreements between the NSP System  
13 states over the future direction of the NSP System.

14  
15 Q. WHAT IS YOUR UNDERSTANDING OF THE INTEGRATED NATURE OF THE NSP  
16 SYSTEM REFERENCED ABOVE?

17 A. Xcel Energy plans for and operates the generation and transmission  
18 resources of both NSPM and NSPW on an integrated basis across a five-  
19 state area to derive economies of scale and resource and load diversity. As  
20 further described in the Company's June 2016 Compliance Filing, provided  
21 as Schedule 3 to the Direct Testimony of Company Witness Mr. Aakash  
22 Chandarana:

23  
24 *Economies of scale are generally sought to efficiently manage and economically*  
25 *develop and dispatch generation and utilize transmission systems to meet the needs*  
26 *of customers in the most cost-effective manner possible. By aggregating load and*  
27 *sharing resources across a larger geographical area, utilities are able to build larger*  
28 *and more diverse generating facilities capable of efficiently meeting the energy needs*

1                    *of customers, while also providing resource diversity and scale to manage plant*  
2                    *outages and fuel price volatility.*  
3

4                    The integrated NSP System supports customers by providing opportunities  
5                    to leverage economies of scale, access diverse and numerous generation  
6                    resources, and take advantage of load diversity. The Company assets needed  
7                    to provide service to North Dakota customers are part of a larger,  
8                    interconnected network of assets owned by the Company and NSPW.  
9

10                  Q.    IN WHAT WAYS DOES THE COMPANY'S INTEGRATED SYSTEM BENEFIT  
11                  CUSTOMERS ACROSS THE FIVE-STATE SERVICE AREA?

12                  A.    Operating the system as an integrated whole delivers a number of benefits,  
13                  by allowing the Company to:

- 14                    • Own and operate large baseload plants to capture economies of scale  
15                    within its five-state region rather than satisfying the load requirements of  
16                    its individual states on a one-off basis; and
- 17                    • Utilize a diverse mix of generation types and sources, including baseload,  
18                    intermediate, and peaking facilities, PPAs, and energy exchanges, to  
19                    control costs under a variety of conditions.  
20

21                  Q.    HOW ARE THE COSTS OF THIS INTEGRATED SYSTEM CURRENTLY ASSIGNED  
22                  TO CUSTOMERS IN EACH STATE?

23                  A.    As described earlier, the NSP System is supported by two separate corporate  
24                  entities that each serve customers in more than one state. To that end,  
25                  NSPM and NSPW have mechanisms in place to appropriately share and  
26                  assign cost responsibilities to the customers of each of these states for  
27                  constructing, operating, and maintaining the integrated NSP System. This is  
28                  done both on an inter-corporate basis (i.e., between NSPM and NSPW), and

1 on an inter-jurisdictional basis among the states served by each operating  
2 company.

3  
4 The allocation of total NSP System costs between NSPM and NSPW is  
5 governed by the Interchange Agreement.<sup>3</sup> The share of NSP System costs  
6 allocated to NSPM pursuant to the Interchange Agreement is then allocated  
7 to NSPM's three state jurisdictions—Minnesota, North Dakota, and South  
8 Dakota. Similarly, the share of NSP System costs allocated to NSPW is then  
9 allocated to NSPW's two state jurisdictions—Wisconsin and Michigan. The  
10 specific mechanisms for assigning costs between the states is described in  
11 more detail by Company Witness Karen Everson.

12  
13 Q. PLEASE SUMMARIZE THE COMPANY'S PROPOSALS IN THE RTF APPLICATION.

14 A. The RTF Application presented a "Framework" in which a Legacy System<sup>4</sup>  
15 would first be established by resolving all open issues associated with past  
16 generation resources that were fully supported in Minnesota but challenged  
17 in North Dakota<sup>5</sup> (the Disputed Resources) and likely near-term future  
18 disagreements, such as unrecovered depreciation for the Sherco Plant. After  
19 resolving these issues for existing resources and likely near-term future  
20 disagreements, the need for future generation resources would be  
21 determined separately. Specifically, when a resource need arises in North  
22 Dakota, that need will be met by a resource sized for, dedicated to serve

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<sup>3</sup> This agreement is formally titled "Restated Agreement to Coordinate Planning and Operations and Interchange Power and Energy between Northern State Power Company (Minnesota) and Northern States Power Company (Wisconsin)" and is commonly referred to as the Interchange Agreement (IA). The IA is a FERC jurisdictional federal tariff.

<sup>4</sup> The Legacy System includes all of the generating resources of the NSP System after all of the costs and benefits of past and anticipated future disagreements are allocated.

<sup>5</sup> These resources include: (1) certain community-based economic development and smaller solar resources; (2) all biomass PPAs currently serving the NSP System; (3) the Company's PPAs for its 187 MW solar portfolio; and (4) the Company's PPA for the capacity and energy of the Mankato Energy Center Expansion (MEC II) project developed under Minn. Stat. § 216B.1691, subd. 2f.

1 only, and fully recovered in North Dakota. Conversely, when a resource  
2 acquisition is contemplated for the remainder of the NSP System, those  
3 resources will be sized for, dedicated to serve only, and fully recovered in the  
4 remainder of the NSP System. I discuss the proposed RTF in more detail  
5 below.

6  
7 The Company also identified a number of approaches or structures by which  
8 this separation framework could be implemented in the RTF Application.

9  
10 Q. WHAT STRUCTURES TO SUPPORT THE RTF DID THE COMPANY CONSIDER?

11 A. The Company analyzed four separate structures to support the  
12 implementation of the proposed RTF:

- 13 1) Regulatory Alignment, which essentially maintains the integrated  
14 system as it exists today, but would seek ways for all states to assess  
15 resource decisions and reach a consensus on the relative costs and  
16 benefits to the NSP System of that resource;
- 17 2) Proxy Pricing, which would set a proxy price in any jurisdiction that  
18 rejects a particular resource addition – for whatever reason – so as to  
19 reflect energy supply costs more consistent with other least-cost  
20 options;
- 21 3) Pseudo Separation, which would utilize ratemaking and accounting  
22 methods to allocate the capacity, energy, and other costs and revenues  
23 of generating resources to create separate “pseudo” systems, with one  
24 serving North Dakota and the other serving the remainder of the NSP  
25 System; and
- 26 4) Legal Separation, which would result in the Company establishing a  
27 completely new operating Company to serve North Dakota.

1 Each of these alternatives is described in more detail in the next section of  
2 my testimony.

3  
4 **III. PROPOSED RESOURCE TREATMENT FRAMEWORK**

5  
6 Q. WHAT IS THE COMPANY'S PROPOSED RESOURCE TREATMENT FRAMEWORK?

7 A. As provided in the Company's RTF Application, provided as Schedule 2 to  
8 Company Witness Mr. Aakash Chandarana's Direct Testimony, the  
9 Company proposed a Resource Treatment Framework that consists of the  
10 following five items:

- 11 1. All currently anticipated and past resource selection and other  
12 disagreements will be permanently addressed and the Legacy System  
13 established.
- 14 2. All NSPM states will continue to be served by the Legacy System and all  
15 customers will enjoy the benefits and bear the burdens of the Legacy  
16 System.
- 17 3. With respect to future new resource additions, the Company will be able  
18 to assess and propose resources for North Dakota and the remainder of  
19 the NSP System separately.
  - 20 a. When a resource need arises in North Dakota, that need will be  
21 met by a resource sized for, dedicated to serve only, and fully  
22 recovered in North Dakota.
  - 23 b. When a resource need arises in, or new resources are otherwise  
24 planned for, the remainder of the NSP System, those resources  
25 will be sized for, dedicated to serve only, and fully recovered in  
26 the remainder of the NSP System. Consequently, the North

1                   Dakota jurisdiction will not obtain the benefits or pay the costs  
2                   associated with new NSP System resource additions.

3                   c. Xcel Energy may propose particular future resources to be  
4                   utilized concurrently by North Dakota and the remainder of  
5                   the NSP System should circumstances warrant, and will  
6                   propose cost-sharing arrangements at that time.

7                   4. Over time, the generation portfolio serving North Dakota and the  
8                   remainder of the NSP System will materially separate as units of the NSP  
9                   System retire or expire.

10                  5. South Dakota may elect to join North Dakota under this framework or  
11                  remain part of the NSP System consistent with its own outlooks.

12  
13                  Q.    WITH RESPECT TO THE FIRST ITEM, WHAT ARE THE CURRENTLY ANTICIPATED  
14                  AND PAST RESOURCE DISAGREEMENTS THAT WILL NEED TO BE ADDRESSED  
15                  IN THIS PROCEEDING?

16                  A.    The Company is proposing that the past disagreements that it believes  
17                  should be addressed in this proceeding are primarily resources that were,  
18                  over the past decade, supported in Minnesota and questioned in North  
19                  Dakota. These resources are specifically identified in the RTF Application in  
20                  Schedule 3, but generally include biomass power purchase agreements  
21                  (PPAs); smaller solar resources, larger-scale solar PPAs; community-based  
22                  energy development (CBED) resources; wind PPAs; and the Mankato  
23                  Energy Center Expansion (MEC II) project PPA.

24  
25                  Additional items may come before the Commission that could be implicated  
26                  in resolving past and new future disagreements prior to the implementation

1 of the RTF in approximately 2020. I am currently aware of four other issues  
2 that should also be addressed in this proceeding:

- 3
- 4 (1) The appropriate allocations for the Company's proposed 1,550 MW  
5 Wind Portfolio filed in Case No. PU-17-120;
- 6 (2) The Company's need to recover the portion of Sherco Units 1 and 2 that  
7 will not be fully depreciated on North Dakota books by the time of their  
8 retirement; in contrast to all other states in the NSP System;
- 9 (3) The final disposition of the Company's PPA for the expansion of the  
10 combined-cycle Mankato Energy Center (MEC II), the Advance  
11 Determination of Prudence (ADP) for which the Commission dismissed  
12 without prejudice on Case No. PU-15-096; and
- 13 (4) How to address the Company's proposed biomass optimization  
14 transactions filed in Case Nos. PU-17-270 and PU-17-271.
- 15

16 Q. IS THE COMPANY'S PROPOSED RESOLUTION TO PAST AND NEAR FUTURE  
17 DISAGREEMENTS REASONABLE?

18 A. Yes. The Company's proposed reallocation of resources is consistent with  
19 the Commission's resolution, or likely resolution, of these issues but also  
20 recognizes that this resolution will materially impede the ability of the NSP  
21 System to remain integrated. Therefore, the Company's proposal allocates  
22 to the remainder of the system newer resources that can only be  
23 implemented due to the size and scope of the integrated NSP System. In my  
24 judgment, this proposed resolution appropriately balances the equities  
25 between all of the NSPM jurisdictions and the Company.

26

1 Q. WHAT IS THE LEGACY SYSTEM MENTIONED IN THE FIRST AND SECOND  
2 ITEM?

3 A. The Legacy System includes all of the generating resources of the NSP  
4 System after past and anticipated future disagreements have been resolved.  
5

6 Q. WHY DOES THE SECOND ITEM OF THE RTF PROPOSE THAT ALL STATES WILL  
7 CONTINUE TO BE SERVED BY THE LEGACY SYSTEM?

8 A. The vast majority of the NSP System has garnered consensus from the  
9 NSPM states for generations. The Legacy System would be comprised of  
10 resources that customers have been enjoying (and paying for) since they  
11 were placed in service. Therefore, a key component of the RTF is to  
12 preserve the Legacy System for its customers.  
13

14 Q. DO YOU BELIEVE THE COMPANY'S PROPOSAL REGARDING CONTINUED  
15 SERVICE FROM THE LEGACY SYSTEM IS REASONABLE?

16 A. Yes. Any reasonable outcome should recognize that customers in all the  
17 jurisdictions served by the Company have benefitted from the size, scope  
18 and diversity of the NSP System. Continued service from the Legacy System  
19 balances the equities and impacts of implementing the Company's vision for  
20 a more separate future.  
21

22 First, by allowing all states of the NSP System to continue to be served by  
23 the resources that have served them for years, the effects of separation on all  
24 customers will be tempered by mitigating the immediate impact of separating  
25 the North Dakota customers from the remainder of the NSP System.  
26 Second, continued service from the Legacy System provides stability to  
27 customers while an independent North Dakota system is established and the

1 Company begins the transformation of the NSP System as described by Mr.  
2 Chandarana; Mr. Martin's resource planning analysis further underscores this  
3 benefit. Third, continued service from the Legacy System ensures that the  
4 Company can recover its full cost of service from all of its customers.

5  
6 Q. THE THIRD ITEM IN THE COMPANY'S PROPOSED FRAMEWORK ADDRESSES  
7 FUTURE NEW RESOURCE ADDITIONS. PLEASE EXPLAIN THIS PROVISION.

8 A. Generally, this provision stands for the proposition that once the  
9 appropriate structures are in place, the Company will plan for and serve its  
10 North Dakota customers separately from the customers making up the  
11 remainder of the NSP System. As I noted above, the Company is also  
12 proposing that the Legacy System be the core generation portfolio serving all  
13 states upon implementation of the RTF. This Legacy System will also create  
14 a baseline for the forward-looking resource planning that will begin in early  
15 2019.

16  
17 Q. HOW DOES THE COMPANY PROPOSE TO ADDRESS FUTURE RESOURCE NEEDS  
18 IN NORTH DAKOTA AND THE REMAINDER OF THE NSP SYSTEM?

19 A. As Company Witness P.J. Martin discusses in more detail, the Company will  
20 plan for the North Dakota jurisdiction as if it were a separate system from  
21 the remainder of the NSP System. This will provide flexibility to more  
22 effectively satisfy the priorities of North Dakota regulators, allow for more  
23 independent resource selection, and provide an opportunity for the  
24 Company to recover its full cost of service. The Company will continue to  
25 plan for and acquire resources for the remainder of the NSP System  
26 consistent with the resource planning and resource acquisition processes in  
27 use today.

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Q. WILL THE TYPES OF RESOURCES SERVING NORTH DAKOTA BE DIFFERENT THAN THOSE SERVING THE REMAINDER OF THE NSP SYSTEM?

A. Possibly, yes. The North Dakota jurisdiction is much smaller than the balance of the NSP System, so future North-Dakota-specific resources may very well be different. I note that the Company expects to develop a stand-alone North Dakota system over time and that the Legacy System will continue to provide nearly all of the North Dakota customer resource needs in the near to likely mid-term.

Q. IS IT POSSIBLE THAT CIRCUMSTANCES COULD ARISE IN THE FUTURE WHERE A RESOURCE WILL BE UTILIZED TO SERVE BOTH NORTH DAKOTA AND THE REMAINDER OF THE NSP SYSTEM?

A. Yes. As noted in the RTF Application, if circumstances warrant, the Company may propose that certain resources be used to serve both North Dakota and the remainder of the NSP System. It is my understanding that the Company views this much like separate utilities partnering to develop a large generating station.

Q. PLEASE EXPLAIN THE FOURTH ITEM OF THE RTF.

A. The fourth item of the RTF recognizes that while the Legacy System will be the core of the generation portfolio serving the entire NSP System, at some point in the future, separate systems will be serving North Dakota and the remainder of the NSP System.

Q. THE FIFTH ITEM IN THE PROPOSED RTF ADDRESSES THE CHOICES AVAILABLE TO SOUTH DAKOTA AS THE NSP SYSTEM MOVES TOWARD

1 SEPARATION. WHY IS THE COMPANY ADDRESSING SOUTH DAKOTA AS PART  
2 OF ITS PROPOSED RTF?

- 3 A. The Company included South Dakota in the proposed RTF simply in  
4 recognition of that fact that South Dakota may want to join North Dakota in  
5 separating from the NSP System. The South Dakota Public Utilities  
6 Commission (SDPUC) is currently reviewing several historic generation  
7 resources in SDPUC Docket No. EL16-037.

8  
9 **IV. STRUCTURES TO SUPPORT THE RTF**

10  
11 Q. WHAT ARE THE STRUCTURES THE COMPANY HAS CONSIDERED  
12 IMPLEMENTING TO SUPPORT THE RTF?

- 13 A. The Company has considered four options to support the RTF: Regulatory  
14 Alignment, Proxy Pricing, Pseudo Separation and Legal Separation. I  
15 describe each, in turn, below.

16  
17 **A. Regulatory Alignment**

18  
19 Q. PLEASE DESCRIBE THE REGULATORY ALIGNMENT OPTION CONSIDERED BY  
20 THE COMPANY.

- 21 A. The Regulatory Alignment option maintains the current fully-integrated  
22 delivery system by assuming that general consensus can be achieved among  
23 all of the NSP States as to the direction and types of resources that should  
24 make up the NSP System today and in the future and whether any  
25 modifications to the current cost recovery methodologies need to be  
26 implemented. In essence, the Regulatory Alignment structure provides a

1 vehicle through which the Company can retain the integrated nature of the  
2 NSP System in the event that the Company and the NSP System's different  
3 jurisdictions can reach consensus on resource evaluations that take into  
4 account the integrated nature of the NSP System.

5  
6 Q. WHAT ARE THE BENEFITS OF THE REGULATORY ALIGNMENT OPTION?

7 A. The Regulatory Alignment option will continue to provide the benefits of  
8 the integrated NSP System for all of the Company's current customers,  
9 including those in North Dakota. This option would not require any  
10 structural or accounting changes. But, because it relies on consensus among  
11 all of the NSP System jurisdictions as it pertains to resource selection and  
12 cost recovery, it will require changes to how the Company manages the  
13 integrated NSP System and how the NSP System states assess resource  
14 additions, taking into account the benefits and burdens of retaining  
15 integration.

16  
17 Q. DOESN'T THIS OPTION JUST PRESERVE THE CURRENT STATUS QUO?

18 A. No. As described by Company Witness Aakash Chandarana, the Company  
19 cannot continue to plan, construct, and manage the NSP System in an  
20 integrated way under the current status quo, so something must change. The  
21 Commission and the Company must reach agreement on a viable path  
22 forward so that the Company can effectively plan and manage its resources.

23  
24 It is my understanding that the Company is providing the Regulatory  
25 Alignment structure as an option should the Commission determine that it is  
26 in North Dakota customers' best interests to remain part of the integrated  
27 NSP System and pay its full share of total system costs. I believe this could

1 require a change in the manner in which the Company, the Commission, and  
2 the MPUC each evaluate potential new resources. The results of the various  
3 ADP proceedings in North Dakota over the past few years suggest to me  
4 that ongoing consensus around either regulatory reforms or resource  
5 acquisitions will be a material challenge given the differing policy objectives  
6 and different regulatory and statutory schemes of the states that NSPM  
7 serves.

8  
9 Q. DO YOU BELIEVE THAT SEEKING REGULATORY ALIGNMENT IS  
10 REASONABLE?

11 A. Yes. I have reviewed the various resource disagreements that underlie the  
12 Company's proposed RTF and have determined that they provide very little  
13 of the System's capacity and energy. This leads me to believe that the issues  
14 that led to the Company's RTF are likely solvable. Further, as Mr.  
15 Chandarana and Mr. Martin discuss in their Direct Testimonies, the NSP  
16 System is changing and the system that exists today will look very different  
17 in the next few decades. Regulatory Alignment provides an avenue by which  
18 integration could potentially be retained to the benefit of all of the NSPM  
19 states as this transformation takes place.

20  
21 Q. HOW WOULD THE DISPUTED RESOURCES AND OTHER RESOURCE ISSUES BE  
22 ADDRESSED IN THE REGULATORY ALIGNMENT STRUCTURE?

23 A. Because the Regulatory Alignment structure assumes continued and full  
24 integration into the future, I would assume that this structure would be best  
25 supported by addressing the disputed resources consistent with the existing  
26 concepts of integration.

27

1 Q. HAS THE COMPANY QUANTIFIED THE POTENTIAL COST IMPACTS OF  
2 PURSUING THIS OPTION?

3 A. As noted, the Regulatory Alignment structure would retain integration and  
4 allocate all costs consistent with integrated ratemaking methodologies.  
5 Therefore, the economic evaluation of the Regulatory Alignment structure  
6 would, in essence, be a “baseline” revenue requirements projection of the  
7 costs of service for each state on an “all in” basis, including base rates, fuel  
8 costs, and rider revenues.

9

10 As described by Company Witness Charles Burdick, for the purposes of  
11 establishing this baseline, it was assumed that the NSP System (1) remains  
12 fully integrated with all resources serving all customers; (2) includes a  
13 resource expansion plan similar to that presented in the most recent  
14 Integrated Resource Plan approved by the MPUC; and (3) includes typical  
15 ratemaking adjustments in each jurisdiction. In other words, it reflects the  
16 Company’s anticipated revenue requirements without any ratemaking  
17 adjustments to either address the Disputed Resources or implement any new  
18 RTF structures.

19 **B. Proxy Pricing**

20 Q. PLEASE DESCRIBE THE PROXY PRICING STRUCTURE.

21 A. The Proxy Pricing option supports the concept that different states value  
22 different types of resources differently and is based on the rationale that all  
23 states in the NSP System accept that resources provide, at a minimum,  
24 energy and capacity value to the NSP System and that the benefits of energy  
25 and capacity should be paid for by each jurisdiction in the System consistent  
26 with that value.

27

1 Q. HOW WOULD COSTS BE ALLOCATED WITH RESPECT TO CERTAIN RESOURCES  
2 UNDER A PROXY PRICING CONCEPT?

3 A. Under the proposed Proxy Pricing structure, all jurisdictions would pay for  
4 the energy and capacity supplied by consensus-approved resources.  
5 However, states that do not support a particular resource due to, for  
6 example, its high cost relative to other options would instead pay a proxy  
7 price for the equivalent capacity and energy of the lower cost alternative.  
8 The unrecovered difference between the proxy price and the actual price of  
9 the resource (either positive or negative) would then be credited to or  
10 recovered from the jurisdiction(s) that did support that particular resource.

11

12 Q. CAN YOU PROVIDE AN EXAMPLE?

13 A. Yes. This concept is consistent with Xcel Energy's recent experience  
14 addressing the different renewable energy mandates between its Texas and  
15 New Mexico jurisdictions. Specifically, the New Mexico Renewable  
16 Portfolio Standard required the acquisition of five solar PPAs. To retain the  
17 integration of the Texas/New Mexico system, Southwestern Public Service  
18 Company proposed, and the New Mexico Public Regulation Commission  
19 approved, a proxy pricing model that allowed: (1) Texas to pay its allocated  
20 share of the costs of the PPAs up to the system avoided energy costs, which  
21 meant Texas retail customers were indifferent as to the acquisition of the  
22 PPAs; and (2) New Mexico to pay the remainder of the PPA costs to keep  
23 Southwestern Public Service Company whole.

24

25

26

1 Q. HAS THE COMPANY QUANTIFIED THE POTENTIAL COST IMPACT OF PURSUING  
2 THIS OPTION TO IMPLEMENT THE RTF?

3 A. Not formally. However, the Company does not expect to incur any material  
4 incremental costs to implement this option.  
5

6 Q. DOES THE COMPANY SUPPORT A PROXY PRICING FRAMEWORK IN THIS  
7 PROCEEDING?

8 A. No, the Company no longer believes that the Proxy Pricing option is  
9 workable.  
10

11 Q. PLEASE EXPLAIN.

12 A. The Company does not believe that there is an equitable way to implement a  
13 Proxy Pricing structure. While this concept could resolve resource  
14 disagreements related to Minnesota's renewable mandates, a wider net would  
15 need to be cast to tackle the various other resource-related issues in each  
16 jurisdiction. Disagreement on the size and type of a resource and when that  
17 resource should be placed in-service go beyond solving for a single state's  
18 renewable energy mandate. Moreover, the challenge with implementing  
19 proxy pricing in North Dakota in the past counsels against wholesale  
20 reliance on this alternative now. Following the settlement of the 2013 test  
21 year North Dakota rate case, Commission Advocacy Staff and the Company  
22 were unable to reach an agreement on how to employ proxy pricing for  
23 future disputed resources. I understand that this was driven, in part, by the  
24 inability to agree on how to address resource acquisitions that were not yet  
25 considered "needed" by North Dakota. The Company believes the same  
26 issue exists today and would impede its ability to successfully implement the  
27 Proxy Pricing option.

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Q. ARE THERE OTHER CONCERNS ABOUT THIS APPROACH?

A. Yes. Proxy Pricing in effect creates an artificial baseline against which resource decisions will be made. Because the marketplace is dynamic and prices are constantly changing, any previously agreed-to proxy pricing may not reflect the then actual market pricing available to the Company. Consequently, if all resources are potentially subject to proxy pricing, this could create an artificial opt-in (or opt-out) situation for the NSP System states which may not reflect the actual options available to the Company at the time a resource decision is made – which is the timing applicable to the determination of the prudence of a particular resource.

Q. DO YOU AGREE THAT THIS IMPLEMENTATION OPTION SHOULD BE REMOVED FROM CONSIDERATION?

A. Yes. In addition to the challenges I mention above, successful implementation of this approach requires ongoing and long-term agreement between Minnesota, North Dakota and South Dakota on the approaches used to develop the proxies for both capacity and energy, and under what circumstances these approaches could or would be updated. Any future pricing volatility between individual jurisdictions, and significant variances that may occur applying different valuation protocols, further complicate continued agreement. By definition, proxy pricing requires that both “sides of the equation” add up so that the Company can fully recover its costs. One jurisdiction cannot unilaterally decide to only pay a certain amount for a given resource if the other jurisdictions served by that resource do not also agree to cover the remaining costs. As already experienced by the Company, the difficulties in reaching consensus on a pricing methodology for each

1 resource, and then continuing to maintain this consensus over time, advises  
2 against this approach. Further, the potentially non-binding nature of proxy  
3 pricing decisions make it extremely difficult for the Company to have  
4 sufficient certainty around which to plan its system. For all of these reasons,  
5 this option should be rejected.

6  
7 **C. Pseudo Separation**

8  
9 Q. PLEASE DESCRIBE THE PSEUDO SEPARATION STRUCTURE PROPOSED BY THE  
10 COMPANY.

11 A. This option is best described as a ratemaking/accounting solution which  
12 enables the Company to create a “virtual” separation of the NSP System  
13 while not requiring any structural or operational changes. In short, the  
14 Company would maintain separate load and resource tables for North  
15 Dakota, on the one hand, and the remainder of the NSP System, on the  
16 other. It would then gradually develop separate systems for its North  
17 Dakota customers and the remainder of the NSP System. The capacity,  
18 energy, costs, revenues, and other benefits of these separate systems would  
19 be directly assigned either to North Dakota or the remainder of the NSP  
20 System through ratemaking mechanisms. The concept is called “Pseudo  
21 Separation” because it would result in separate generation portfolios for  
22 North Dakota versus the rest of the NSP System while still maintaining the  
23 current corporate structure of NSPM.

24  
25 Q. PLEASE ELABORATE.

26 A. Under Pseudo Separation, the Company’s generation portfolio would be  
27 accounted for on a resource-specific and a jurisdictional basis rather than on

1 a system-wide and then allocated cost basis, as it is today. The energy and  
2 capacity, as well as the costs, revenues, and other benefits of a specific  
3 resource would be assigned to each jurisdiction that supports that resource.  
4 In this way, Pseudo Separation helps resolve resource disputes by ensuring  
5 that the capacity and energy, costs, revenues and other benefits, such as  
6 environmental credits, of a particular resource are assigned to either North  
7 Dakota or the remainder of the NSP System.

8  
9 Q. ARE THERE ANY ADVANTAGES OF THE PSEUDO SEPARATION STRUCTURE?

10 A. There are some. By fully assigning individual generation resources to North  
11 Dakota and the remainder of the NSP System through ratemaking  
12 mechanisms, the Company will be able to better plan for the differing views  
13 of need and resource selection that currently challenge the NSP System.  
14 Further, because costs associated with a specific resource will be directly  
15 assigned to either North Dakota or the remainder of the NSP System, this  
16 will help ensure that the reasonable costs associated with a given resource  
17 are fully recovered by the Company. However, the key advantage is that  
18 Pseudo Separation maintains the current corporate structure of NSPM and  
19 thus negates the need for a separate North Dakota operating company, as  
20 well as the associated implementation costs.

21  
22 Q. WHAT CHALLENGES DOES THE PSEUDO SEPARATION OPTION PRESENT?

23 A. The primary challenge is obtaining and retaining consensus around the  
24 accounting and record-keeping processes necessary to enable a “virtual”  
25 separation for the long-term. Implementation of Pseudo Separation would  
26 require the Company to continuously ensure that costs and revenues are  
27 correctly assigned, while also ensuring that common System costs continue

1 to be appropriately allocated. This would not only require an ongoing  
2 review of whether costs are being correctly allocated to specific states, but,  
3 equally as important, it would require the states served by NSPM to  
4 continuously agree on the procedures used to allocate costs.

5  
6 Although the Company will be able to leverage existing cost and benefit  
7 allocation concepts and methodologies to develop allocation procedures for  
8 each resource, this could prove increasingly complex. Company Witness  
9 Karen Everson describes these allocation concepts and methodologies in her  
10 Direct Testimony. It will require judgment to determine how to equitably  
11 allocate some costs. In light of the need to exercise judgment, it will also  
12 require that all of the NSPM states continually coordinate and continually  
13 reach consensus. As different market rules, resource planning requirements,  
14 state laws, and other energy policy influences are implemented, new  
15 allocations may similarly need to be updated in all of the NSPM jurisdictions.  
16 The inability to resolve stakeholder differences during this regulatory process  
17 since 2007 suggest that development of appropriate “pseudo” accounting  
18 procedures presents a significant challenge.

19  
20 Q. IN YOUR OPINION, IS ACHIEVING CONSENSUS ON “PSEUDO” ACCOUNTING  
21 PROCEDURES THE MOST SIGNIFICANT CHALLENGE TO ADOPTING THIS  
22 OPTION?

23 A. Yes, in my view, obtaining and retaining this consensus is likely the biggest  
24 challenge. An additional challenge will be the development of new  
25 accounting and allocation structures at the resource-specific level.  
26 Depending on the number of generation resources to be separately allocated,  
27 this alternative may become more burdensome than beneficial.

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Q. HAS THE COMPANY QUANTIFIED THE POTENTIAL COST IMPACT OF PURSUING THE PSEUDO SEPARATION OPTION?

A. Yes. In the RTF Application, the Company provided a high-level estimate of \$1 million of additional costs to implement this option on a revenue requirements basis. However, the Company has since revised this analysis consistent with the request of Commission Staff and the Minnesota Department of Commerce’s requests for more refined cost information. Based on current assumptions, which are subject to change in the future, the Company expects to incur approximately \$600,000 a year in recurring expenses to implement the Pseudo Separation option. These costs are for additional accounting personnel to manage the additional allocation and accounting processes and to segregate fuel, purchased power, and other costs to the specific jurisdictions.

The Company might also need to invest in its current information technology (IT) infrastructure in order to support the more complex accounting and allocation processes.

Q. IF SELECTED, WHEN DO YOU ANTICIPATE THE COMPANY WOULD BE ABLE TO IMPLEMENT A PSEUDO SEPARATION STRUCTURE?

A. The Company should be able to implement a Pseudo Separation option within two years of final approval. This would allow time to develop appropriate cost and benefit allocation methodologies for all generation resources on a unit-specific basis, “simulate” the potential jurisdictional impacts through the MISO settlement processes, and then allow time to adjust and fine tune the allocation factors as needed before implementation.

1 If approved, the Company would implement this option in a rate case or  
2 other comprehensive regulatory proceeding regarding cost allocations.

3  
4 Q. IN YOUR OPINION, IS PSEUDO SEPARATION A GOOD OPTION TO SUPPORT  
5 THE IMPLEMENTATION OF THE RTF FOR NORTH DAKOTA?

6 A. Perhaps. Although implementation of this option is less costly than Legal  
7 Separation from a “start-up” cost standpoint, it does nothing to mitigate the  
8 ongoing regulatory complexity and the additional associated regulatory costs  
9 that will be incurred on an ongoing basis—for both the Company and other  
10 interested parties. Successful implementation of this option will require  
11 ongoing agreement among the states served by NSPM regarding allocations.  
12 Clearly the Company has benefited in the past from a long-standing  
13 agreement between Minnesota, North Dakota, and South Dakota on the  
14 appropriate resource allocation factors (e.g., the Sum of 12 Monthly  
15 Coincident Peaks, or 12 CP, method). The more recent challenges to this  
16 approach in North Dakota suggest, however, that this may not be possible in  
17 the future. Further, any potential adjustments to these factors that may be  
18 required in the future to reflect changes to the NSP System and related  
19 market structures will simply add to this regulatory burden.

20  
21 Q. WHY DO YOU BELIEVE IT MAY BE DIFFICULT TO RETAIN REGULATORY  
22 CONSENSUS ON COST ALLOCATION ISSUES REQUIRED FOR SUCCESSFUL  
23 IMPLEMENTATION OF THE PSEUDO SEPARATION STRUCTURE?

24 A. The establishment of PacifiCorp, through the merger of Pacific Power  
25 (serving Oregon, California, and Washington) and Rocky Mountain Power  
26 (serving Idaho, Utah, and Wyoming), and the cost allocation issues that  
27 combination raised is instructive to this question.

1  
2 Today, approximately 47% of PacifiCorp's customers are in Utah, 31% in  
3 Oregon, 8% in Wyoming, 7% in Washington, 4% in Idaho, and the  
4 remaining 2% of customers are in California. Like NSPM (and NSPW),  
5 PacifiCorp's customer base is heavily skewed towards one (or two) states,  
6 with much smaller customer bases in nearby states. After the merger that  
7 created PacifiCorp, the company sought to provide service to all of the states  
8 on an integrated basis to obtain the same types of benefits that are provided  
9 to NSPM by the NSP System. However, the cost structures and makeup of  
10 the PacifiCorp system (hydroelectric power for Pacific Power and coal  
11 baseload plants for Rocky Mountain Power) made it particularly challenging  
12 to equalize cost structures so that integration could occur.

13  
14 To that end, in 2002, PacifiCorp filed applications in each of its six  
15 jurisdictions to create a process to consider issues related to its status as a  
16 multi-jurisdictional utility. PacifiCorp had three fundamental objectives: (1)  
17 to establish inter-jurisdictional cost allocation mechanisms that would permit  
18 it to continue to plan and operate its generation and transmission system on  
19 an integrated basis; (2) to establish uniform inter-jurisdictional cost allocation  
20 methods among its six jurisdictions that would provide it with a reasonable  
21 opportunity to earn a return on future investments in generation and  
22 transmission facilities; and (3) to preserve the ability of each of its  
23 jurisdictions to implement individual state energy policies in a manner that  
24 does not unreasonably burden customers in other jurisdictions.<sup>6</sup>  
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<sup>6</sup> Decision Memorandum, PacifiCorp Comments in Support of Joint Motion for Acceptance of Settlement, pg. 2, Case No. PAC-E-02-3 (PacifiCorp dba Utah Power & Light Company), (December 17, 2004)

1 The resulting Inter-Jurisdictional Allocation Protocol was agreed to by  
2 interested stakeholders in June 2004, and subsequently approved only by the  
3 commissions in Idaho, Oregon, Utah, and Wyoming. (PacifiCorp's inter-  
4 jurisdictional allocations are considered in the course of the general rate case  
5 cycles in California, and prior approval is not required. The Washington  
6 Utilities and Transportation Commission has adopted a different allocation  
7 methodology for PacifiCorp's Washington rate proceedings.) Said  
8 differently, PacifiCorp was unable to garner full consensus on cost allocation  
9 from all of the affected jurisdictions. PacifiCorp tried again in 2010, and  
10 again in 2017, and was still unable to garner full consensus on its cost  
11 allocation protocols. It is my understanding that PacifiCorp is likely to  
12 continue to seek ways to find agreement between all of the states it serves  
13 and its stakeholders to find a way to fully meet its system integration  
14 objectives.

15  
16 Q. WHAT CAN THE COMPANY LEARN FROM PACIFICORP'S EXPERIENCES IN  
17 THESE PROCEEDINGS?

18 A. The primary takeaway is a recognition that an ongoing commitment is  
19 necessary to successfully implement the Pseudo Separation option. More  
20 specifically, even after reaching initial agreement among the Minnesota,  
21 North Dakota and South Dakota Commissions regarding the treatment of  
22 generation resources and the allocation of associated costs and benefits, the  
23 Company and its stakeholders (including the Commission) should expect the  
24 Company will need to commit significant resources to maintain this  
25 agreement over time given the evolving nature of policy, business  
26 conditions, and broader macroeconomic factors. A secondary takeaway is  
27 that the continuous work of refining and adjusting the accounting structures

1 that underpin the Pseudo Separation option creates a level of uncertainty for  
2 the Company as it plans its system. Further, with this option the underlying  
3 reasons for the existing interjurisdictional disagreements are not addressed  
4 but merely shifted from questions of resource selection to questions of cost  
5 allocation.

6  
7 **D. Legal Separation**

8  
9 Q. PLEASE DESCRIBE THE LEGAL SEPARATION STRUCTURE RECOMMENDED BY  
10 THE COMPANY.

11 A. Under the Legal Separation structure, Xcel Energy Inc. would serve its  
12 customers in North Dakota through a separate operating company  
13 (Northern States Power Company – Dakotas or NSPD) that would continue  
14 to be part of the Xcel Energy Inc. corporate family. NSPD would be a  
15 regulated entity in North Dakota with its own corporate structure and North  
16 Dakota-based rate base, operating expenses, and fuel costs. This is in  
17 contrast to the allocated portion of the NSPM rate base, operating expenses,  
18 and fuel costs that currently form the basis of rates for North Dakota  
19 customers.

20  
21 Once formed, this separate operating company would provide a platform  
22 from which the Company can address the resource needs of North Dakota  
23 and the remainder of the NSP System on a truly separate basis. The key  
24 advantages of Legal Separation are certainty and flexibility by creating  
25 distinct entities with distinct needs and the capacity to take on separate legal  
26 liabilities and separate corporate ownership of assets. This structure  
27 permanently removes the need for agreement between North Dakota and

1 the remainder of the NSP System regarding the reasonableness and  
2 prudence of not only resource selection, but also other costs (such as  
3 depreciation and taxes) that may lead to incompatible ratemaking and cost  
4 recovery outcomes across the existing NSPM states.

5  
6 Q. DOES THE LEGAL SEPARATION STRUCTURE OFFER OTHER BENEFITS?

7 A. Yes. Legal Separation creates greater opportunities for the Company to  
8 more fully participate in resource investments in North Dakota, such as  
9 development of natural gas generation, without requiring the agreement of  
10 the other NSPM states. By legally separating, the new operating company  
11 would own its own assets, have its own contractual relationships with third-  
12 parties, and therefore have its own corporate existence separate from NSPM  
13 and the regulatory requirements or decisions of other states.

14  
15 Q. ARE YOU AWARE OF OTHER SITUATIONS WHERE A UTILITY OPERATING  
16 COMPANY LEGALLY SEPARATED INTO TWO ENTITIES FOR SIMILAR REASONS?

17 A. Yes. Prior to 2007, Entergy Gulf States, Inc. (EGS) served retail and  
18 wholesale electric customers in Texas and Louisiana as a vertically-integrated  
19 utility. However, due to changes in state-specific regulatory requirements,  
20 EGS was split into two separate utilities – Entergy Gulf States Louisiana,  
21 L.L.C. (EGS-LA) and Entergy Texas, Inc. (EGS-TX) in 2007.

22  
23 Q. WHY DID ENTERGY CORPORATION PURSUE THE SEPARATION OF ENTERGY  
24 GULF STATES INTO TWO SEPARATE UTILITIES?

25 A. The separation of EGS into two separate utilities was the result of changing  
26 regulatory policies in Texas that adversely impacted EGS's ability to serve  
27 customers in the state under a vertically-integrated structure. Originally,

1 both Texas and Louisiana maintained regulated electricity markets, allowing  
2 EGS to operate as a single, vertically-integrated entity that could serve the  
3 two states and also facilitate integrated long-term resource planning.  
4 However, when Texas moved to a deregulated state, the structure of EGS in  
5 Texas needed to change to accommodate the new Texas requirements.

6  
7 To accommodate this interjurisdictional incompatibility, EGS was split into  
8 EGS Texas and EGS Louisiana. To my knowledge, this may be the best  
9 example of a utility successfully addressing structural challenges to integrated  
10 multi-state service to its various jurisdictions.

11  
12 Q. WHAT ARE THE CHALLENGES ASSOCIATED WITH IMPLEMENTATION OF  
13 LEGAL SEPARATION?

14 A. Establishing a new operating company will require significant up-front  
15 effort, regulatory approvals, and cost. The first step will be to determine the  
16 size, scope, and structure of the new operating company. For example, the  
17 Company will need to establish what states will be served by NSPD. A  
18 second step is to identify which assets will be owned by each operating  
19 company after separation. This determination requires an evaluation of the  
20 current generation, transmission, distribution, and general plant assets.

21  
22 Additionally, the Company must make decisions as to how the new  
23 operating company will be managed. For example, how many employees  
24 will it have and what services will it take from its affiliates within Xcel  
25 Energy. Service agreements that direct assign specific costs and allocate  
26 common costs, including, for example, how support would be provided to

1 Dilworth and East Grand Forks customers in Minnesota from service  
2 centers in North Dakota, would also need to be established.

3 In addition, the near-term supply options and mid-term plans for meeting  
4 the generation and transmission needs of the new operating company must  
5 also be determined. This includes ensuring that any liabilities incurred for  
6 past and ongoing use of the NSP System will accrue to the new operating  
7 company, as well as determining how to structure a supply agreement with  
8 the NSP System. Continued service from the Legacy System is a key  
9 component of the proposed RTF, both to preserve the value of the system  
10 for NSPM customers and to help ensure that the Company can fully recover  
11 existing investments in the system.

12  
13 Q. DOES THE COMPANY HAVE ANY INITIAL THOUGHTS AS TO THE NATURE AND  
14 STRUCTURE OF NSPD?

15 A. Yes. Although the specific scope and nature of the proposed new legal  
16 entity will be the subject of this proceeding and is subject to approval by the  
17 Commission, the Company has made some initial judgments to support the  
18 discussions and inform the analysis of moving forward with Legal  
19 Separation. Each is discussed further in my testimony below.

20  
21 Q. WHAT COULD THE PROPOSED NSPD OPERATING COMPANY LOOK LIKE  
22 FROM A SIZE AND SCOPE STANDPOINT?

23 A. The Company is proposing that the existing distribution and general plant  
24 assets located in North Dakota, i.e., the service centers located in the state,  
25 are to be owned and operated by NSPD. Stated differently, NSPD is  
26 envisioned to be an electric-only, distribution-only, operating company.  
27 Generation, transmission, and gas operations would remain with NSPM and

1 continue as they are today. For the purposes of the analysis, it was assumed  
2 that any NSPM employees currently based in North Dakota would become  
3 NSPD employees. The new NSPD will serve approximately 94,000  
4 customers across the state of North Dakota, Mr. Burdick calculates the new  
5 rate base for NSPD using our current assumptions in his Direct Testimony.

6  
7 Q. WHY DOES THE COMPANY CURRENTLY ENVISION NSPD AS A DISTRIBUTION-  
8 ONLY UTILITY?

9 A. The Company began its analysis of the nature of NSPD by first assuming  
10 that all assets currently in North Dakota could potentially make up the rate  
11 base for NSPD. However, given the resources in North Dakota are all wind  
12 resources and given the small size of NSPD (even with generation assets),  
13 the entity would be unlikely to have sufficient revenues and therefore  
14 sufficient tax liabilities to effectively use the federal Production Tax Credits.  
15 Consequently, the Company determined that it would be infeasible for  
16 North-Dakota-based generation to be owned by NSPD.

17  
18 As Company witness Mr. Stephen Beuning discusses at length in his Direct  
19 Testimony, transmission service in North Dakota is immensely complex  
20 with many historical arrangements supporting the Company's service to its  
21 North Dakota customers. Given this complexity and the likely cost impacts  
22 associated with transferring transmission assets, the Company believes that  
23 the best course is for the Company's transmission assets located in North  
24 Dakota to remain with NSPM. Mr. Beuning also discusses how much of the  
25 transmission service in North Dakota is provided under existing  
26 "Grandfathered Agreement." Because the Company currently envisions

1 NSPD owning no transmission assets, we assume that NSPM would remain  
2 the signatory to those contracts which simplifies the ability to create NSPD.

3  
4 Accordingly, the Company is proposing that the North Dakota operating  
5 company take the form of a distribution-only utility.

6  
7 Q. HOW WOULD NSPD SECURE EXTERNAL FUNDING FOR OPERATIONS AND  
8 FOR ANY CAPITAL INVESTMENTS NEEDED TO IMPROVE EXISTING  
9 INFRASTRUCTURE AND SUPPORT FUTURE GROWTH?

10 A. All of the Xcel Energy Inc. operating companies secure external funding  
11 through secured debt incurred under first mortgage bonds. For  
12 conservatism, the Company assumes that NSPD would also obtain funding  
13 in that way although other options are available should secured debt be  
14 problematic to obtain. While other options may be available, secured  
15 funding best separates the Company's North Dakota operations from the  
16 remainder of the NSP System and does not implicate the credit of the other  
17 operating companies or the Xcel Energy Inc. holding company.

18  
19 Q. WHAT WOULD BE THE RELATIONSHIP BETWEEN NSPD AND THE XCEL  
20 ENERGY INC. HOLDING COMPANY?

21 A. While none of the details have been finally decided, the Company is  
22 currently assuming that NSPD would be treated like any other operating  
23 company within the Xcel Energy Inc. holding company system. For  
24 example, NSPD would obtain shared corporate services from Xcel Energy  
25 Services Inc.; it would be assigned common costs consistent with the  
26 existing Cost Assignment and Allocation Manual; and its leadership would  
27 report up through the Xcel Energy Inc. management structure.

1  
2 As a spinoff from an existing operating company, I would also expect that  
3 NSPD and NSPM (and potentially NSPW) would also enter into a services  
4 agreement whereby NSPM employees can support NSPD operations and  
5 NSPD employees can support NSPM operations. This type of arrangement  
6 is common throughout the industry and within Xcel Energy. For example,  
7 this type of services agreement would allow NSPD employees based in  
8 Fargo to support vegetation management operations in Moorhead.

9  
10 I would also expect that NSPD would enter into contracts with the NSP  
11 System (either NSPM or NSPW) to obtain service from the Legacy System.  
12 The terms of that contract would need to be developed. Longer term, with  
13 NSPD more fully established and potentially with generation assets of its  
14 own, it could potentially join in the Interchange Agreement with NSPM and  
15 NSPW if that makes sense for all NSP System customers.

16  
17 Q. DO YOU AGREE THAT LEGAL SEPARATION IS THE BEST IMPLEMENTATION  
18 OPTION FOR THE RTF?

19 A. Yes. The Legal Separation structure will provide all stakeholders with more  
20 certainty and flexibility into the future. It is also consistent with the  
21 outcome undertaken by Entergy to address interjurisdictional misalignment.

22  
23 I also believe that Legal Separation is a feasible solution for North Dakota.  
24 Participation in Regional Transmission Organizations (RTOs) no longer  
25 requires that a service territory the size of NSPM's North Dakota load needs  
26 to be part of a large, integrated system to receive economic service. Rather,  
27 these changes create options other than central station integrated utility

1 systems by which utilities can provide safe and reliable service to their  
2 customers.

3  
4 **V. ESTIMATED COSTS OF LEGAL SEPARATION**

5  
6 Q. HAS THE COMPANY ESTIMATED THE POTENTIAL COST IMPACT OF PURSUING  
7 THE LEGAL SEPARATION OPTION?

8 A. Yes. The Company developed an initial estimate of the potential cost impact  
9 of legal separation in the RTF Application. However, this preliminary  
10 estimate was only developed to provide an order of magnitude assessment  
11 for context. An order of magnitude analysis was performed because it was  
12 the Company's hope that further conversations with stakeholders could help  
13 refine the RTF proposal and then a more specific analysis could be  
14 undertaken. Said differently, the Company did not want to prejudge an  
15 outcome in its RTF application and therefore chose not to make specific  
16 assumptions regarding the size, scope, and structure of the new operating  
17 company. Since the RTF Application was filed, feedback that the Company  
18 has received from its stakeholders universally requested that the Company  
19 refine this analysis. Therefore, additional analyses have been completed that  
20 make certain assumptions regarding NSPD, which in turn have changed the  
21 estimated costs of implementation.

22  
23 Q. HOW DO THE POTENTIAL IMPLEMENTATION COSTS OF THE LEGAL  
24 SEPARATION OPTION COMPARE TO THE OTHER RTF OPTIONS?

25 A. The Company has identified several areas of incremental costs that could be  
26 incurred implementing the various RTF structures. These include, in no  
27 particular order:

- 1           1. Transaction costs for the legal, accounting, and consulting advisory  
2           services to support the activities required for initial regulatory  
3           approvals and to create NSPD;
- 4           2. Financing costs to initially establish and then support ongoing  
5           standalone short-term and long-term financing for NSPD operations  
6           and investments;
- 7           3. Additional corporate governance and oversight costs, such as an  
8           operating company president;
- 9           4. Additional Administrative and General expense such as office rent,  
10          additional outside accounting fees, etc.;
- 11          5. Service company costs and allocations as NSPD would now be a  
12          standalone entity and would likely enter into its own administrative  
13          services agreement with Xcel Energy Services, Inc.;
- 14          6. Additional accounting costs to support the new company and the  
15          additional accounting and reporting requirements;
- 16          7. Additional information technology costs to set up the new entity in  
17          the general ledger, fixed asset system, etc.; and
- 18          8. Transmission costs due to the anticipated shift in how transmission  
19          services will be provided on a stand-alone basis to NSPD customers.

20  
21          These costs can be grouped into five major cost categories – transaction  
22          costs, financing costs, oversight and A&G expense, service company  
23          allocations and transmission costs. The costs impact the various RTF  
24          options in different ways as shown in the table below:  
25  
26  
27

Cost Type	Regulatory Alignment	Proxy Pricing	Pseudo Separation	Legal Separation
Transaction costs				X
Financing costs				X
Oversight and A&G expense			X	X
Service company allocations			X	X
Transmission costs				X

Q. WHICH OF THESE COST CATEGORIES WILL YOU DISCUSS IN YOUR TESTIMONY?

A. I will provide information supporting the Company's cost estimates for two of the categories: transaction costs and financing costs. Company witness Ms. Karen L. Everson will address service company allocations, and oversight and A&G expense in her testimony. Company witness Mr. Stephen J. Beuning discusses transmission cost impacts in his testimony.

**A. Transaction Costs**

Q. PLEASE EXPLAIN THE TRANSACTION COSTS ASSOCIATED WITH THE CREATION OF A SEPARATE NORTH DAKOTA UTILITY.

A. There will be a wide array of one-time legal, regulatory, accounting, and banking costs incurred by the Company in order to establish NSPD. Legal work, for example, would include establishing the governance documents for the new business entity, completing real estate and transactional work to transfer title to assets, re-negotiating and drafting numerous agreements, and analyzing regulatory issues at the state and federal level. Additionally, there are many accounting procedures that would need to be established for

1 NSPD along with implementation of an information technology platform  
2 that would allow NSPD to function as a standalone operating company.

3  
4 Q. WHAT IS THE CURRENT ESTIMATE FOR TRANSACTION AND SET-UP COSTS TO  
5 ESTABLISH A SEPARATE NORTH DAKOTA ENTITY?

6 A. In the RTF Application, the Company estimated one-time transaction costs  
7 of “several million dollars” and utilized a value of \$10 million for the initial  
8 high-level analysis. Based upon additional work to date, the Company  
9 continues to believe that transaction and start-up costs will be several million  
10 dollars. However, to ensure the analysis remains conservative, the Company  
11 utilized a value of \$15 million for transaction and start-up costs in the  
12 updated analysis. This value is based on the need for the following services  
13 and processes:

- 14
- 15 • Legal, consulting, and, potential outside accounting support to secure  
16 regulatory approvals and to address potential affiliate interest issues;
- 17 • Legal support to assign or modify current contracts on behalf of NSPD  
18 (for example, transmission agreements, PPAs, etc.);
- 19 • Investment banking, legal and potential consulting support for the  
20 formation of NSPD;
- 21 • Indenture and title work to assign assets to NSPD; and
- 22 • One-time costs to establish short-term and long-term financing  
23 instruments for NSPD, including bond indenture costs, costs to establish  
24 a credit rating and credit facility, and commercial paper issuance.
- 25

1 Q. HOW WOULD THESE COSTS BE ALLOCATED?

2 A. Because creating a new operating company is outside of normal operations,  
3 the Company believes it would be reasonable to allocate these transaction  
4 costs equally between NSPD and NSPM. Further, the Company is  
5 proposing that these costs be amortized over a five-year period to mitigate  
6 the single-year impact of these one-time costs on customers. Mr. Burdick  
7 calculates the revenue requirement impact of this proposal.

8

9 **B. Financing Costs**

10

11 Q. PLEASE DISCUSS THE ANTICIPATED ONGOING FINANCING COSTS RELATED  
12 TO THE LEGAL SEPARATION STRUCTURE.

13 A. Based on the current lending marketplace, the Company anticipates that the  
14 new NSPD entity would likely incur a higher cost of long-term debt than it  
15 is allocated today. This is due to the smaller asset base and revenues of a  
16 separate North Dakota entity as compared to NSPM. In light of this  
17 reduced size and diversity, it is anticipated that lenders may require a greater  
18 return to compensate for the greater risk. It is possible, however, that  
19 instead of having its own financial capability, NSPD could be funded  
20 through an intra-company borrowing/funding mechanism from Xcel  
21 Energy. For purposes of this estimate, it was assumed that NSPD would be  
22 utilizing stand-alone financing. We have also assumed that the amount of  
23 debt NSPD would need would be approximately \$75 million based on the  
24 assumed asset base and typical debt to equity ratios.

25

26 Q. WHAT FACTORS COULD AFFECT THE ACTUAL INCREMENTAL COST OF  
27 FINANCING NSPD AS A SEPARATE ENTITY?

1 A. The cost of short- or long-term debt is based on an entity's credit rating,  
2 which encompasses the various risks of being an operating or holding  
3 company, as well as other factors such as market conditions and investor  
4 interest and risk tolerance at the time of the issuance. An unsecured bond of  
5 the same credit rating will generally carry a higher interest rate than a first  
6 mortgage bond. It is uncertain if NSPD will issue its own long-term debt  
7 and if it will be in the form of first mortgage bonds or unsecured notes.  
8 NSPD will have a small asset base as compared to NSPM, it will most likely  
9 issue bonds with a size under \$300 million, which is the current size  
10 requirement to be listed on the Barclays Bond Index. Bonds listed on the  
11 index are typically more liquid and therefore may price favorably relative to  
12 those bonds that are not listed. If NSPD has its own credit facility and  
13 commercial paper program, the rate on the commercial paper may be higher  
14 than the other Xcel Energy entities due to the size of the program and the  
15 need to create investor demand.

16

17 Q. WHAT LEVEL OF INCREMENTAL FINANCING COSTS DO YOU EXPECT?

18 A. If NSPD establishes its own indenture and short-term financing, the  
19 ongoing financing costs and the costs of maintaining separate credit facilities  
20 are expected to be approximately \$400,000 per year and include annual  
21 rating agency fees, credit facility commitments, and payments for agent and  
22 trustee surveillance associated with outstanding bonds. In addition, based  
23 on current market conditions, the Company has estimated that the NSPD  
24 entity's 2020 cost of long-term debt could be approximately 6.0 percent,  
25 resulting in additional interest expense of approximately \$1.0 million  
26 annually, over and above NSPM's approximately 4.8 percent embedded cost  
27 of debt that North Dakota is currently allocated.

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Q. HOW DID THE COMPANY ARRIVE AT THIS ESTIMATE?

A. NSPM uses SNL Global Insight Inc. as its source for interest rate forecasts. The 2020 forecast 30-year U.S. Treasury Bond yield is 4.57 percent. When pricing a bond, a credit spread is added to the treasury yield to compensate the investor for the additional risk of the company. NSPM’s credit spread on a 30-year bond has been about 100 basis points (“bps”). For this example, the Company assumed 105.5 bps to result in a forecasted coupon for NSPM of 5.625 percent in 2020. Because of the uncertainties whether North Dakota would initially issue first mortgage bonds or unsecured debt, and because of the small liquid size of the bond, an additional 37.5 bps over the cost of NSPM’s bond coupon in 2020 was added resulting in a forecasted coupon of 6.0 percent for North Dakota.

Q. HOW DOES THIS COST ESTIMATE TRANSLATE TO REVENUE REQUIREMENT IMPACTS?

A. Mr. Burdick calculates the incremental costs of financing. Because this would be the incremental cost of financing NSPD separately, these costs would be borne by North Dakota customers only.

Q. HOW CERTAIN ARE THE TRANSACTION AND FINANCING COST ESTIMATES YOU PROVIDE IN YOUR TESTIMONY?

A. As described earlier in my testimony, there are still many significant unresolved questions about NSPD. Until those issues are resolved and a Legacy System is established, the costs of Legal Separation will remain difficult to estimate with precision. For example, actual financing costs could be more or less and are dependent on if North Dakota establishes its

1 own indenture to issue long-term debt, and its own credit facility and  
2 commercial paper program for short-term liquidity requirements.

3  
4 **VI. CONCLUSION**

5 Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?

6 A. Yes, it does.

*Resume of:*  
**Richard D. Starkweather**  
**Partner**

### *Summary*

Rick Starkweather has been a management consultant for more than 25 years and leads ScottMadden's regulatory practice. His areas of expertise include strategic and business planning, budgeting and forecasting, regulatory compliance and rate case support, and organizational and operations improvement. Prior to joining ScottMadden, Rick was a consultant with Deloitte Consulting. He also has experience in the healthcare and chemical industries and helped lead the start-up of two companies. Rick received a B.S. in mechanical engineering from Northwestern University and an M.B.A. from the University of Chicago Graduate School of Business. He is also a Certified Measurement and Verification Professional (CMVP) and Certified Energy Auditor (CEA) through the Association of Energy Engineers.

### *Areas of Specialization*

- Regulatory strategy and rate case support
- Strategic and business planning
- Process improvement
- Benchmarking
- Program design/implementation
- Organizational design and staffing

### *Recent Articles and Speeches*

- "Regulatory and Legislative Changes Affecting Rate-Case Strategies." Natural Gas & Electricity Journal. February 2017
- "New and Emerging Issues Affecting Rate Cases". EEI-AGA Accounting Committee Fall Conference. November 2016
- "Trends in Rate Cases: How to Improve Cost Recovery." AGA State Affairs Fall Committee Meeting. October 2016
- "Rate Case Preparation and Management." EEI/AGA Advanced Public Utility Accounting Course. August 2016

### *Representative Assignments*

- Directed a project for a southeastern utility to improve the speed and accuracy of the rate making process by identifying improvements to the development of revenues and billing determinants for rate filings, by enhancing information reporting and analytics, and automating the process through potential technology solutions
- Conducted a review of a utility's transmission cost recovery, mercury emissions reduction, environmental, and conservation improvement rate riders. Scope of review included the processes for budgeting and forecasting cash flows for eligible projects and the tracking of projected cash flows for each project through the company's budgeting and fixed asset accounting systems, and the revenue requirements calculations supporting the riders
- Developed statistical sampling methodologies to test gas main extension and new service capital projects for a midwestern utility. Defined the population of projects, identified sample projects, compiled necessary documentation to assess tariff compliance, and developed rate base adjustments to address uncollected contributions in aid of construction based on sample results
- Developed an audit plan and project management protocols for a midwestern utility to guide the development of all regulatory filings in various jurisdictions. Scope included development of detailed process maps for each rate filing process, identification of data input, consistency, and reliability risks, and appropriate preventive and detective audit controls

*Resume of:*  
**Richard D. Starkweather**  
**Partner**

*Representative Assignments (Cont'd)*

- Completed a leading practices assessment of the financial forecasting process for a southwestern electric utility. Scope included an evaluation of activity cycle times, potential bottlenecks, and process handoffs. Identified opportunities to improve overall timeliness and accuracy, and enhance existing quality assurance steps
- Conducted an assessment of the capital budgeting and reporting processes of a combination gas/electric utility that was migrating to a future test year in several jurisdictions. Developed recommendations and process improvement initiatives to improve accuracy of in-service dates and overall forecast accuracy, resulting in better rate case assumptions, improved budget and forecast data, and more accurate accounting data
- Conducted a detailed analysis of current operating and capital costs trends for the fossil fleet of a large southeastern utility. Identified areas for improvement to meet top quartile performance goals
- Completed a detailed distribution benchmarking study for a Mid-Atlantic electric utility to support the definition of annual performance goals and budgeting targets
- Performed an analysis of A&G cost reduction opportunities for a federal power authority. The analysis disaggregated A&G costs by FERC function and cost type where appropriate and identified key cost drivers by function and type. Identified business unit and FERC account cost categories with greatest potential for cost reduction and then recommended initiatives and specific opportunities to decrease costs in these areas
- Developed a comprehensive benchmarking analysis for a southwestern electric utility. Recommended appropriate operational and financial metrics for each functional area
- Conducted a retail pricing, O&M, and capital additions benchmarking analysis for a southwestern electric utility, utilizing national and local jurisdiction peer groups. Results were incorporated into direct testimony to support the utility's electric rate case filing

*Professional History*

- SCOTTMADDEN, INC., Raleigh, North Carolina  
Partner (2004–Present)  
Director (1999–2004)
- DELOITTE CONSULTING, Los Angeles, California  
Senior Manager (1997–1999)
- EDISON EV, Los Angeles, California  
(A Subsidiary of EDISON INTERNATIONAL)  
Senior Manager/Director, Finance and Administration (1996–1997)
- EDISON INTERNATIONAL (formerly SCEcorp), Rosemead, California  
Strategic Projects Manager, Corporate Development (1994–1995)
- DELOITTE & TOUCHE, Dallas, Texas  
Senior Manager (1990–1994)  
Manager (1989–1990)
- HEALTH ECONOMICS CORPORATION, Dallas, Texas  
(A Subsidiary of HALLIBURTON COMPANY)  
Vice President (1986–1989)
- TOUCHE ROSS & CO., Detroit, Michigan  
Senior Consultant (1985–1986)  
Associate Consultant (1982–1985)
- EXXON CHEMICAL AMERICAS, Linden, New Jersey  
Plant Analyst (1982–1982)  
Forecast Coordinator (1980–1982)

**STATE OF NORTH DAKOTA  
BEFORE THE  
NORTH DAKOTA PUBLIC SERVICE COMMISSION**

Northern States Power Company  
2013 Electric Rate Increase Application **Case No. PU-12-813**

Northern States Power Company  
Advanced Determination of Prudence –  
Courtenay Wind Application **Case No. PU-13-706**

Northern States Power Company  
Advanced Determination of Prudence –  
Odell Wind Application **Case No. PU-13-707**

Northern States Power Company  
Advanced Determination of Prudence –  
Pleasant Valley Application **Case No. PU-13-708**

Northern States Power Company  
Advanced Determination of Prudence –  
Border Winds Application **Case No. PU-13-742**

Northern States Power Company  
150 MW Border Winds Project – Rolette  
County, ND Public Convenience & Necessity **Case No. PU-13-743**

Northern States Power Company  
Advanced Determination of Prudence –  
NG Generators Application **Case No. PU-13-194**

Northern States Power Company  
Red River Valley NG Unites 1&2 – Hankinson,  
ND Public Convenience & Necessity **Case No. PU-13-195**

