

**PUBLIC DOCUMENT
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DIRECT TESTIMONY AND SCHEDULES
GREG P. CHAMBERLAIN

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

NORTHERN STATES POWER COMPANY
ADVANCE PRUDENCE – BIOMASS PPAS
APPLICATION

CASE No. PU-17-_____

NORTHERN STATES POWER COMPANY
DEFERRED ACCOUNTING – BIOMASS PPAS
APPLICATION

CASE No. PU-17-_____

Transaction Testimony

Exhibit__ (GPC-1)

June 30, 2017

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Schedule 1

I. INTRODUCTION AND QUALIFICATIONS

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Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Greg P. Chamberlain and my business address is Xcel Energy, 401 Nicollet Mall, Minneapolis, MN 55401.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Northern States Power Company, a Minnesota corporation (Xcel Energy or NSP or the Company). NSP is an operating company subsidiary of Xcel Energy Inc. My current position with the Company is Regional Vice President.

Q. PLEASE DESCRIBE YOUR QUALIFICATIONS AND EXPERIENCE.

A. I received a Bachelor of Science degree in Chemical Engineering from Purdue University in 1986 and a Master of Business Administration from the University of Minnesota – Carlson School of Management in 1996.

I have been employed in the engineering, asset management, and marketing areas in the energy sector since 2000. My statement of qualifications is provided as Exhibit ___(GPC-1), Schedule 1.

I have been employed by NSP and its affiliates within Xcel Energy Inc. since 2000. During my career, I have held positions of increasing responsibility in areas of power generation and transmission asset management. My duties have included the areas of purchasing assets, negotiating and renegotiating major contracts, and a variety of activities relating to power supply, including duties relating to the implementation of the Company's power purchase

1 agreements (PPAs) with a number of vendors, including those PPAs the
2 Company entered into to satisfy the Biomass Mandate found in Minn. Stat. §
3 216B.2424.

4
5 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

6 A. The purpose of my testimony is to summarize and describe three
7 transactions for which the Company is seeking an Advance Determination
8 of Prudence (ADP). Each proposed transaction seeks to restructure an
9 existing Biomass PPA in a way that benefits our customers.

10
11 The three transactions that I describe are: (1) Benson Power (Fibrominn)
12 PPA Termination and Acquisition for Subsequent Shutdown; (2) Pine Bend
13 Biogas PPA Early Termination; and (3) Hennepin Energy Recovery Center
14 (HERC) PPA Extension and Restructuring (collectively, the Proposed
15 Transactions). My testimony describes each transaction and supports the
16 conclusion that the North Dakota Public Service Commission (Commission)
17 should grant an ADP for the Proposed Transactions.

18
19 Q. PLEASE PROVIDE A SUMMARY OF THE THREE TRANSACTIONS DESCRIBED IN
20 YOUR TESTIMONY.

21 A. My testimony covers the following topics:

22
23 *Benson Power (Fibrominn) PPA Termination and Acquisition for Subsequent*
24 *Shutdown:* Our proposal is to terminate the PPA with Benson Power, acquire
25 the 55 MW power plant (Benson facility), and subsequently close it in
26 exchange for payment of approximately \$95 million to Benson Power. As
27 part of the proposed transaction, the Company will incur approximately

1 Q. WILL YOU ALSO DISCUSS THE CUSTOMER SAVINGS ASSOCIATED WITH THE
2 TRANSACTIONS YOU DESCRIBE?

3 A. No. Company witness Mr. Martin provides that testimony. My testimony is
4 confined to describing the transactions.

5

6 **A. Benson Power (Fibrominn) PPA**

7

8 Q. WHO ARE THE PARTIES TO THE BENSON POWER PPA?

9 A. Xcel Energy and Benson Power, LLC (as successor in interest to Fibrominn
10 LLC) are parties to a Biomass PPA dated as of August 31, 2000, and
11 amended as of June 7, 2004, and February 16, 2011, as assigned and
12 modified by the Consent and Agreement dated as of August 20, 2015, by
13 and between Benson Power and NSP (the Benson PPA) for the sale and
14 purchase of energy and capacity from the 55 MW electric generating facility
15 fueled by poultry litter and other biomass fuels located in Benson,
16 Minnesota.

17

18 Q. PLEASE DESCRIBE THE BENSON FACILITY.

19 A. The Benson facility, located in Benson, Minnesota, is a 55 MW electric
20 generating facility fueled by poultry litter and other biomass fuels. Benson
21 Power, LLC, a Delaware limited liability company, owns the Benson facility.
22 The Benson facility was previously owned by Fibrominn LLC, and the land
23 it occupies was previously owned by PowerMinn 9090, LLC. All workers at
24 the facility are employed by the NAES corporation which is an independent
25 services company with deep experience in operations and maintenance of
26 power plants throughout the United States.

27

1 When it was originally built, the Benson facility was the first power plant in
2 the country designed to burn poultry litter as a source of fuel. The fuel stock
3 currently consists of a mix of poultry litter and wood.

4
5 Q. WHAT ARE NSP'S BASIC OBLIGATIONS UNDER THE BENSON PPA?

6 A. The Benson PPA term runs from September 11, 2007 to September 10,
7 2028. During the term, NSP pays Benson Power on a \$/MWh basis for all
8 of the energy and capacity from the Benson facility.¹

9
10 Q. WHAT IS THE OVERALL COST OF THE BENSON PPA TO NSP AND ITS
11 CUSTOMERS?

12 A. The Benson PPA estimated contract price of *[TRADE SECRET*
13 *BEGINS* *TRADE SECRET ENDS]* (2018) consist of
14 energy payments (with annual escalation), plus fuel transportation costs in
15 excess of a baseline amount, property taxes, and any shortfall in sales of ash
16 for fertilizer. This results in a levelized cost to customers of approximately
17 *[TRADE SECRET BEGINS* *TRADE SECRET ENDS]*
18 over the remaining PPA term.

19
20 Q. WHY IS THE COMPANY SEEKING TO TERMINATE THE PPA AND BUY THE
21 BENSON FACILITY FOR SUBSEQUENT SHUTDOWN?

22 A. The Company determined that it was more cost-effective for customers to
23 pay Benson Power to terminate the Benson PPA, buy the Benson facility,
24 and shut it down than it would be to complete the Benson PPA term.

25

¹ In the second amendment to the PPA dated February 16, 2011, the accredited capacity was increased from 50 to 55 MW, and as a result, NSP received ownership of all of the Renewable Energy Credits (RECs).

1 Q. PLEASE DESCRIBE THE TRANSACTION INVOLVING THE TERMINATION OF THE
2 BENSON PPA AND THE PURCHASE AND SUBSEQUENT SHUTDOWN OF THE
3 BENSON FACILITY.

4 A. The Company proposes to terminate the Benson PPA, acquire the Benson
5 facility, and subsequently close it once we have approval from the
6 Midcontinent Independent System Operator (MISO), which we anticipate to
7 take six months.

8
9 Q. WHAT DOES THE COMPANY HAVE TO PAY BENSON POWER AS A PART OF
10 THIS PROPOSED TRANSACTION?

11 A. The contract contemplates that the Company will pay Benson Power
12 approximately \$95 million in exchange for the early termination of the PPA
13 and purchase of the Benson facility.

14
15 Q. PLEASE OUTLINE THE OTHER KEY TERMS OF THE TRANSACTION.

16 A. The Asset Purchase and Sale Agreement between Benson Power and NSP
17 includes the following key terms:

18 • The transaction will close on the third day after satisfaction or waiver of
19 all the conditions to closing (which includes regulatory approvals), or as
20 parties agree.

21 • At closing, NSP will place \$12 million of the \$95 million contract price
22 into escrow to be held by an escrow agent for two years as security for
23 warranties and covenants.

24 • Certain costs related to the termination of the contract for the sale of ash
25 to North American Fertilizer (NAF) may be deducted from the
26 transaction price payable to the owners of Benson Power and paid
27 directly to NAF. NSP will credit Benson Power for the value of the ash
28 inventory as of the closing date to the extent it reduces the amount of
29 costs payable to NAF.

30 • Prior to closing, Benson Power can only enter into contracts cancellable

1 on 60 days' notice.

- 2 • Jenny-O poultry litter supply contract (in renegotiation at the time of the
3 execution of the agreement), a key contract for Benson Power, contains a
4 180 day termination notice provision with take or pay terms with
5 payments estimated to be approximately \$1.1 – \$1.7 million, depending
6 on the length of notice provided.
- 7 • If closing has not occurred by March 31, 2018, either party may
8 terminate.

9

10 Q. WHY IS THE COMPANY PURCHASING THE BENSON FACILITY RATHER THAN
11 JUST PAYING TO TERMINATE THE PPA?

12 A. The reason this transaction contemplates ownership transition is because the
13 Benson facility was actually being prepared for a sale at the time we began
14 exploring our options to reduce the costs associated with this PPA. In 2014,
15 the Benson facility entered receivership. When the Benson facility exited the
16 receivership process in August of 2015, the prior debt holders who had
17 financed the Benson facility became the new owners. The Benson
18 transaction is structured as an asset sale rather than a PPA termination
19 because, when we entered into discussions with the sellers, it was clear that
20 they wanted to sell the facility outright and had already taken steps in that
21 direction. Because our analysis demonstrated that an asset purchase would
22 yield significant savings for our customers, we continued with
23 negotiations—which were ultimately successful.

24

25 Q. WHAT DOES THE COMPANY RECEIVE IN EXCHANGE FOR ITS PURCHASE?

26 A. The proposed acquisition includes all the assets used in connection with the
27 ownership and operation of the Benson facility. Specifically, this includes all
28 buildings, machinery, equipment (including a Foster Stoker Boiler and a Fuji
29 Steam Turbine), personal property, computer hardware, tools, work

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1 equipment, supplies, inventory, other tangible assets used at the Benson
2 facility, all fuel inventory, all spare parts inventory, all of the acquired
3 contracts, all permits, and all business information (including company
4 books, customer lists, records, files etc.).

5
6 Q. ARE THERE OTHER DIRECT COSTS ASSOCIATED WITH THE TRANSACTION?

7 A. Yes. In addition to the consideration paid to Benson Power, the Company
8 has assumed approximately \$1.5 million in contract termination fees, \$1.5
9 million in legal, miscellaneous fees and insurance, \$1 million in fuel costs, \$5
10 million in transportation costs, \$3 thousand in ash disposal costs, \$4.9
11 million in operating contracts, materials and supplies, and \$3.5 million in
12 property taxes. These costs are in addition to the \$95 million paid to Benson
13 Power and, as Company witness Mr. Martin describes further, were included
14 in the costs modeled by the Company in assessing whether the proposed
15 transaction benefitted our customers.

16
17 Q. ARE THERE INDIRECT COSTS OF THE TRANSACTION?

18 A. Yes. In recognition that the Benson facility is an important economic
19 presence in the City of Benson, recent legislation requires NSP to pay \$20
20 million (\$4 million in 2018, \$6.5 million in 2019 and 2020, and \$3 million in
21 2021) from the Renewable Development Fund (RDF) to the City of Benson
22 to assist with economic development efforts necessitated by the plant's
23 closure in its impact on the local economy. Mr. Martin's testimony covers
24 the treatment of this cost.

25

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1 Q. ARE THERE OTHER INDIRECT COSTS OF THIS TRANSACTION?

2 A. Yes. To facilitate the transaction, we have agreed to certain additional terms
3 with the City of Benson. These commitments include the following:

- 4 • NSP to provide a site specific public safety shut down plan.
- 5 • NSP to make two additional annual local property tax payments
6 following the removal of the facility, each based on the payments made in
7 the year prior to removal.
- 8 • NSP to reimburse the City of Benson any stranded investments related to
9 water, waste water, and electric distribution assets.
- 10 • NSP to make a payment, up to \$200,000, for a new water line and
11 relocation of controls for the NAF plant. The fertilizer plant—which
12 neighbors the Benson facility—currently obtains water from the plant.
- 13 • Upon closure of the plant, NSP to remove all above-ground
14 improvements to grade, remove all foundations to a depth of four feet
15 below grade, and remediate environmental contamination, if any, in
16 accordance with applicable law.
- 17 • NSP to provide the City of Benson the following written notices:
 - 18 ○ No later than 30 days prior to the shutdown of the facility, a
19 shutdown notice notifying Benson of the date the facility will be shut
20 down; and
 - 21 ○ No later than 30 days after completion of all removal activities at the
22 facility, a final removal notice notifying Benson of the completion of
23 removal.
- 24 • Upon closure of the plant, NSP to provide the City of Benson with an
25 option to purchase the site per the following terms:
 - 26 ○ Benson must exercise this option no later than six months following
27 NSP's shutdown notice;
 - 28 ○ Benson must close on the site no later than 30 days following the date
29 of the removal notice; and
 - 30 ○ The purchase price shall be equal to the appraised value of the
31 restored site (i.e., without the Benson plant facility) as determined by
32 an appraisal obtained by NSP.
- 33 • Upon closure of the facility, NSP to submit an Attachment Y to the

1 Midcontinent Independent System Operator (MISO).

2

3 Q. ARE THE COSTS OF THE CITY OF BENSON LETTER AGREEMENT INCLUDED AS
4 PART OF THE COST OF TERMINATION OF THE BENSON PPA AND PURCHASE
5 FOR SUBSEQUENT SHUTDOWN OF THE BENSON FACILITY?

6 A. Yes. The Company has included these costs and they are included in the
7 capital, O&M, and property tax costs associated with the termination. These
8 amounts are included in Mr. Martin's economic analysis which values the
9 costs and benefits of the overall transaction.

10

11 Q. ARE REGULATORY APPROVALS REQUIRED FOR THIS TRANSACTION?

12 A. The contract between Benson Power and the Company is subject to
13 approval by the Commission consistent with the precedent set in Case No.
14 PU-12-59. Additionally, the contract is also subject to approval by the
15 Minnesota Public Utilities Commission (MPUC). The Company will also be
16 filing for approval of the Benson Power transaction from the Federal Energy
17 Regulatory Commission (FERC) under Section 203 of the Federal Power
18 Act.

19

20 Q. ARE THERE ADDITIONAL STEPS THE COMPANY MUST TAKE TO SHUT DOWN
21 THE BENSON FACILITY?

22 A. Yes. Upon taking ownership of the Benson facility, the Company will file
23 Attachment Y (Notification of Generation Resource/SCU/Pseudo-tied Out
24 Generator Change of Status) with MISO regarding the proposed closure of
25 the Benson facility. MISO's process requires the owner of a Generation
26 Resource to submit an Attachment Y Notice at least twenty-six (26) weeks
27 prior to retiring the plant.

1
2 As part of its review process, MISO will consider whether the Benson
3 facility is a System Support Resource (SSR), a unit that is required to
4 maintain the reliability of the transmission system. MISO will also consider
5 how the closure of the Benson facility may impact its planning year—which
6 runs from June 1 through May 31. If we submit the Attachment Y
7 notification after December 1, we may be obligated to utilize the facility to
8 meet our planning reserve requirements or offer the facility into the planning
9 resource auction for the next planning year. Again, we understand that this
10 scenario is unlikely due to the excess of capacity in MISO’s Zone 1.
11

12 Q. WHAT ARE THE CUSTOMER SAVINGS THAT ARISE OUT OF THE PROPOSED
13 BENSON POWER TRANSACTION?

14 A: Results from our analysis show that purchasing and closing the Benson
15 facility results in a net customer savings of approximately \$345.6 million on a
16 net present value (NPV) basis.
17

18 **B. Pine Bend Biogas PPA Early Termination**
19

20 Q. WHAT IS THE NEXT TRANSACTION YOU ARE TESTIFYING ABOUT?

21 A. I testify about the Pine Bend PPA early termination. This proposed
22 transaction pertains to the early termination of a PPA the Company has for a
23 12 MW biogas facility that generates electricity by burning landfill gas
24 reclaimed from the former Pine Bend landfill (Pine Bend facility).
25

1 Q. WHAT IS PINE BEND?

2 A. Gas Recovery Systems (GRS) owns and operates the 12 MW Pine Bend
3 facility in Dakota County, Minnesota.

4

5 Q. PLEASE DESCRIBE THE PINE BEND PPA.

6 A. GRS entered into a PPA with the Company on September 20, 1994 for a
7 term of 30 years, ending no later than December 31, 2025. Pursuant to the
8 Pine Bend PPA, the Company agreed to purchase the output from the Pine
9 Bend facility. The Pine Bend PPA was executed as a contract under the
10 federal Public Utilities Regulatory Policies Act (PURPA). As a Qualifying
11 Facility under PURPA, the PPA included both capacity and energy payments
12 that were designed to be at or below the Company's levelized avoided costs
13 based on three reference units: a peaking unit in service before May 1, 1996,
14 an intermediate facility in service by 2001, and a base-load unit in service by
15 2005. Starting in May 2005, the energy prices have been based on actual
16 costs for Sherco 3.

17

18 In 2010, the Company amended the Pine Bend PPA to establish a simplified
19 "all in" structure to provide GRS a more reliable revenue stream, and help to
20 avoid the need to purchase more expensive replacement energy if the facility
21 was forced to shut down. The amendment was effective for the remaining
22 16 years of the PPA. Under the amendment, the purchase price for energy
23 was about \$2 million higher than the prior PPA payment structure,
24 depending on future capacity and energy costs linked to Sherco 3.
25 Amendment No. 2 had an NPV of about \$9 million less than the estimated
26 cost of replacement energy should the GRS project fail to maintain
27 operations.

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The Pine Bend PPA with GRS is scheduled to terminate on December 31, 2025. The current price of energy under the terms of the PPA is *[TRADE SECRET BEGINS* *TRADE SECRET ENDS]*. This price is to increase by 1.5 percent annually through the last year of the PPA in 2025 when the price is scheduled to be *[TRADE SECRET BEGINS* *TRADE SECRET ENDS]*.

Q. WHY IS NSP SEEKING TO TERMINATE THE PINE BEND PPA ?

A. To save ratepayers money.

The current price of energy under the terms of the PPA is *[TRADE SECRET BEGINS* *TRADE SECRET ENDS]*. This price was to increase by 1.5 percent annually through the last year of the PPA in 2025 when the price was scheduled to be *[TRADE SECRET BEGINS* *TRADE SECRET ENDS]*. The Company's assessment of market price for energy in that same time period is substantially less, in the \$23/MWh to \$34/MWh range during the same timeframe. Mr. Martin's Direct Testimony provides further analysis of the cost savings.

Q. WHAT IS THE FUNDAMENTAL TRANSACTION INVOLVING THE TERMINATION OF THE PINE BEND PPA?

A. Xcel Energy is proposing to terminate the Pine Bend PPA. Key terms of the Termination Agreement are as follows:

- The effective date of the termination agreement will be the first day of the month following all closing contingencies being met or waived.

- 1 • NSP will pay GRS monthly the difference between the current PPA price
2 and the average monthly locational marginal price at the NSP.NSP node
3 plus \$10/MWh. If the difference is negative, no payment will be made to
4 GRS by NSP that month.
- 5 • The Termination Agreement shall terminate the earlier of three years
6 from the effective date or when GRS has received \$1,050,000 through
7 monthly payments from NSP.

8

9 The Company estimates that at current market prices, the total \$1,050,000
10 consideration under this termination agreement will be made in
11 approximately two years.

12

13 Q. ARE THERE OTHER INDIRECT COSTS OF THE TRANSACTION?

14 A. No.

15

16 Q. WHAT ARE THE NET CUSTOMER SAVINGS THAT ARISE OUT OF THE EARLY
17 TERMINATION OF THIS PPA?

18 A. If the PPA is terminated, we expect our customers will see a NPV savings of
19 approximately \$5.2 million over the life of the PPA.

20

21 **C. HERC PPA Extension and Restructuring**

22

23 Q. PLEASE DESCRIBE THE EXISTING HERC PPA.

24 A. The Company has a PPA to purchase the electrical output from the HERC
25 waste-to-energy facility (HERC facility) in Minneapolis. The HERC facility
26 burns refuse-derived fuel which is derived from municipal solid waste
27 (garbage). The steam, in turn, is used to generate electricity which is sold to
28 NSP under the PPA.

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Q. PLEASE DESCRIBE THE BACKGROUND OF THE HERC PPA.

A. In 1985, HERC entered into an agreement with Hennepin County to design, construct, own, operate, and maintain a solid waste resource energy facility to process municipal solid waste to produce steam for heating and cooling and to generate electric power, subject to HERC negotiating and entering into an electric sales agreement with NSP. The HERC facility was proposed as a qualifying facility under PURPA.

The HERC PPA is for the output of 33.7 MW of capacity. The contract began in January of 1990 with a 28 year term that ends on December 31, 2017. That said, the HERC PPA includes a 7-year extension at Seller's option at "fair market value" and the parties are required to move into arbitration if they cannot agree on an extension price.

Q. HOW LONG HAS THE COMPANY BEEN WORKING TOWARD AN AMENDED PPA WITH HERC?

A. Formal negotiations began in January 2017 when HERC provided an initial extension offer to NSP.

Q. PLEASE SUMMARIZE THE PROPOSED MODIFICATIONS TO THE HERC PPA.

A. The proposed contract amendment extends the current PPA seven years (to December 31, 2024) consistent with HERC's extension rights under the current PPA. The pricing under the proposed amended PPA has been substantially simplified. Under the current PPA, NSP is obligated to make separate energy and capacity payments, and the formulae used to calculate the payments are complex.

1
2 Under the proposed amended PPA, pricing has been simplified to a single
3 \$/MWh payment for energy delivered, which is designed to compensate
4 HERC for both energy and capacity. The simplified “all in” energy pricing
5 structure benefits all parties including customers. It will provide assurance
6 to customers that they are paying a reasonable price for delivered energy.
7 Accordingly, if HERC is not delivering any energy to customers (due to
8 operational challenges, for example), customers will be held harmless—a
9 change from the existing framework.

10
11 The existing pricing for 2017 will be converted to an all-in \$/MWh price of
12 *[TRADE SECRET BEGINS* *TRADE SECRET ENDS]*
13 retroactive to January 1, 2017 (subject to applicable regulatory approvals).

14 The *[TRADE SECRET BEGINS* *TRADE SECRET*
15 *ENDS]* price is based on current expectations of what the average \$/MWh
16 price will amount to at the end of the year per the current price structure.
17 The current capacity payment of *[TRADE SECRET BEGINS:*
18 *TRADE SECRET ENDS]* per the existing pricing
19 structure allows HERC to get paid a significant amount of money (in excess
20 of *[TRADE SECRET BEGINS:* *TRADE SECRET ENDS]*
21 per year) regardless of actual MWh output at the facility. As a result, the
22 Company wanted to immediately convert to the \$/MWh structure to adopt a
23 “pay for performance” approach in which HERC only gets paid for
24 delivered energy.

25
26 Table 1 contains the pricing for the amended and extended HERC PPA
27 starting in 2018.

1
2

Table 1: HERC PPA Pricing

Year	Existing PPA Price	Proposed 7 Year Extension Pricing
	<i>[TRADE SECRET BEGINS]</i>	
2018		
2019		
2020		
2021		
2022		
2023		
2024		
	<i>TRADE SECRET ENDS]</i>	

3

- 4 Q. WHAT ARE THE SAVINGS THAT ARISE OUT OF THIS PROPOSED TRANSACTION?
5 A. Our analysis estimates that customers will save approximately \$26.6 million
6 NPV over the life of the PPA.

7

8

III. CONCLUSION

9

- 10 Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?
11 A. Yes, it does.

12

Northern States Power Company

**Greg P. Chamberlain
Regional Vice President
NSP**

Greg P. Chamberlain is the Regional Vice President for Northern States Power Company – Minnesota. He is responsible for power generation and transmission asset management, including the negotiation and renegotiation of major contracts and implementation of the Company's power purchase agreements.

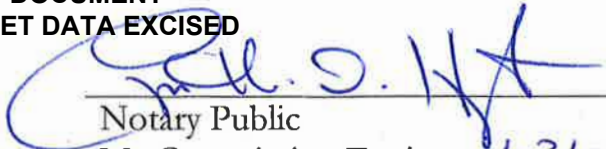
Chamberlain joined Xcel Energy in 2000 as Manager of Segment Marketing. Throughout his career with Xcel Energy, Chamberlain has held positions of increasing responsibility in the areas of power generation and transmission asset management. In September 2016 he was promoted to his current position.

Prior to joining Xcel Energy, Chamberlain was a Strategic Business Manager for Suez, an environmental services company. Before working for Suez, Chamberlain was a Market Manager for ECC International. And prior to ECC International, Chamberlain worked as an engineering, technical representative, and account manager for Hercules, Inc.

Chamberlain received his B.S. in chemical engineering from Purdue University and his Master of Business Administration degree from the University of Minnesota – Carlson School of Management.

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Notary Public
My Commission Expires: 1-31-2020