



2302 Great Northern Drive
P O Box 2747
Fargo, ND 58108-2747
(701) 241-8632
dave.sederquist@xcelenergy.com

January 5, 2016

---- Via Electronic Filing ----

Darrell Nitschke,
Executive Secretary
North Dakota Public Service Commission
State Capitol
600 East Boulevard
Bismarck, ND 58505-0480

**RE: Filing Pursuant to NDPSC Cogeneration and Small Power Production
Rules (Chapter 69-09-07)**

Dear Mr. Nitschke:

Enclosed is your copy of the Company's Cogeneration and Small Power Production compliance filing. A copy of the annual report of total energy produced by customers, as well as non-proprietary work papers, are attached for your information.

If you have any questions, please call me at 701-241-8632.

Sincerely,

/ s/

DAVE SEDERQUIST
SENIOR REGULATORY AND FINANCE CONSULTANT

cc: Amy S. Fredregill, Xcel Energy
John Chow, Xcel Energy

Enclosure



2302 Great Northern Drive
P O Box 2747
Fargo, ND 58108-2747
(701) 241-8632
dave.sederquist@xcelenergy.com

January 4, 2016

---- Via Electronic Filing ----

Darrell Nitschke
Executive Secretary
North Dakota Public Service Commission
State Capitol
600 East Boulevard
Bismarck, ND 58505-0480

RE: Filing Pursuant to NDPSC Small Power Production and Cogeneration Rules (Chapter 69-09-07)

Dear Mr. Nitschke:

Pursuant to the above referenced Rules, NDPSC Order Case No. 9999, and NDCC section 49.05.06, Northern States Power Company, doing business as Xcel Energy and operating in North Dakota, submits for filing the original and seven copies of the rate sheets and avoided costs for the Standard Contract Offer and Guidelines proposed for 2016.

The Net Energy Billing Service is revised to reflect the 2016 avoided energy cost level and meter charges. This service is available to qualifying facilities with a capacity of 100 kW or less who can use the output from the qualifying facility to offset energy delivered by the Company.

The Purchase and Sales Billing Service and Time of Day Purchase Service are revised to reflect the 2016 avoided cost level and metering charges. The Purchase and Sales Billing Service is also available to qualifying facilities with capacity up to 100 kW.

The Company also submits the avoided costs for the Standard Contract Offer and Guidelines for filing. The provisions of the Standard Contract Offer and Guidelines have not changed from last year's filing.

Under separate cover, we are forwarding to the PSC Staff the work papers which support this filing. The updated tariffs were developed in accordance with NDPSC Small Power Production and Cogeneration Rules (Chapter 69-09-07).

These updates do not reflect any significant changes, though presently there is one customer on the Net Energy Billing Service. Pursuant to North Dakota PSC Small Power Production and Cogeneration Rules (Chapter 69-09-07-09, part 3, subpart 2) the Company will provide an annual report of total monthly energy produced by the customer. As was the case with last year's filing, Xcel Energy respectfully requests that – should PSC Staff have no particular concerns with the filed revisions – the Commission forego an informal hearing on this filing in the interests of time and resources.

The revised rate sheets and avoided cost level for Standard Contract Offer and Guidelines are filed to become effective February 3, 2016.

Xcel Energy notes that the statutory changes to the Public Utility Regulatory Policy Act of 1978 (PURPA) contained in the Energy Policy Act of 2005 (EPAct 2005¹), the Federal Energy Regulatory Commission adoption of a Small Generation Interconnection Procedure and standard form Small Generation Interconnection Agreement in FERC Order No. 2006;² and FERC Order No. 688 and 688-A governing the mandatory purchase obligation under EPAct 2005, may affect future development of QF's in North Dakota by either encouraging or discouraging cogeneration and small power production³. Since the latter Orders were issued within the last couple of years, their ultimate impact is not known at this time.

If you have any questions concerning this filing, feel free to contact me at 701-241-8632.

Sincerely,

/s/

DAVE SEDERQUIST
SENIOR REGULATORY AND FINANCE CONSULTANT

cc John Chow, Xcel Energy
Amy S. Fredregill, Xcel Energy

Enclosures

¹ Pub. L. No. 109-58, Sec. 1253, 119 Stat. 594 (2005).

² *Standardization of Small Generation Interconnection Agreements and Procedures*, Order No. 2006, 70 Fed. Reg. 34,189 (June 13, 2005); 111 FERC ¶ 61,220 (2005); *order on reh.*, Order No. 2006-A, 116 FERC ¶ 61, 046 (2006).

³ New PURPA Section 210(m) Regulations Applicable to Small Power Production and Cogeneration Facilities, Order No. 688, 71 FR 64342 (Nov. 1, 2006), FERC Stats. & Regs. ¶ 31,233 (2006)

Legislative

NORTH DAKOTA ELECTRIC RATE BOOK - NDPSO NO. 2

NET ENERGY BILLING SERVICE
RATE CODE D50

Section No. 9
~~7th~~^{8th} Revised Sheet No. 2

AVAILABILITY

Available to any Small Qualifying Facility (SQF) with a capacity of 100 kW or less who receives non-time of day retail electric service from Company and offsets energy delivered by Company.

RATE

Metering Charge per Month

Single Phase	\$3.25
Three Phase	\$5.50

Payment Schedule for Energy Delivered to Company

Energy Payment per kWh	3.3272 .574¢
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TERMS AND CONDITIONS OF SERVICE

1. Energy used by customer in excess of energy delivered by the small qualifying facility at the same site during the same billing period shall be billed in accordance with the appropriate non-time of day retail electric rate.

For demand metered General Service customers, the entire kW demand supplied by the Company at the same site during the same billing period shall be billed to the customer according to the appropriate General Service demand charge rate.
2. Interconnection charges will be assessed by the Company on an individual basis for all costs associated with addition to or modification of Company facilities to accommodate the small qualifying facility (SQF). The net interconnection charge is the responsibility of the SQF.
3. The voltage and phase of customer's generator must be consistent with existing service and approved by the Company.
4. The customer must maintain a power factor of the generator as close to unity as is consistent with NSP operating standards.

Date Filed:	01-02-15 01-04-16	By: Christopher B. Clark	Effective Date:	02-01-15
	President, and CEO of Northern States Power Company, a Minnesota corporation			
Case No.	PU- 15-01716-		Order Date:	01-21-15

NORTH DAKOTA ELECTRIC RATE BOOK - NDPSC NO. 2

PURCHASE AND SALE BILLING SERVICE
RATE CODE D51

Section No. 9
~~9th~~10th Revised Sheet No. 3

AVAILABILITY

Available to any Small Qualifying Facility of less than 100 kW who receives non-time of day retail electric service.

RATE

Metering Charge per Month

Single Phase	\$5.25
Three Phase	\$7.60

Payment Schedule for Energy Delivered to Company

	<u>Oct-May</u>	<u>Jun-Sep</u>
Energy Payment per kWh	3.26 <u>2.547</u> ¢	3.46 <u>2.628</u> ¢
Capacity Payment per kWh for Firm Power	0.289 <u>0.220</u> ¢	1.541 <u>1.418</u> ¢

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DETERMINATION OF FIRM POWER

The small qualifying facility will have supplied firm power if during the billing period an on peak capacity factor of at least 65 percent was achieved. The calculation of the on peak capacity factor will be as follows:

The average on peak period metered capacity delivered to the Company for the on peak period of the billing period divided by the greatest 15 minute metered capacity delivered for the on peak period of the same billing period expressed in percent and rounded to the nearest whole percent. If the percent calculated is 65 or greater, capacity payment will be made. If the percent calculated is less than 65, capacity payment will not be made.

TERMS AND CONDITIONS OF SERVICE

1. Electric service provided by Company to customer at the same site shall be billed in accordance with the appropriate non-time of day retail electric tariff.
2. Interconnection charges will be assessed by the Company on an individual basis for all costs associated with addition to or modification of Company facilities to accommodate the small qualifying facility (SQF). The net interconnection charge is the responsibility of the SQF.
3. The minimum contracted term of service is 12 months.

Date Filed:	01-02-15 <u>01-04-16</u>	By: Christopher B. Clark	Effective Date:	02-01-15
		President, and CEO of Northern States Power Company, a Minnesota corporation		
Case No.	PU- 15-017 <u>16</u> -		Order Date:	01-21-15

NORTH DAKOTA ELECTRIC RATE BOOK - NDPSC NO. 2

**TIME OF DAY PURCHASE SERVICE
 RATE CODE D52**

Section No. 9
~~9th~~^{10th} Revised Sheet No. 4

AVAILABILITY

Available to any Small Qualifying Facility (SQF).

RATE

Metering Charge per Month

Single Phase	\$5.25
Three Phase	\$7.60

Payment Schedule for Energy Delivered to Company

	<u>Oct-May</u>	<u>Jun-Sep</u>	
Energy Payment per On-Peak kWh	4.1343 ^{4.1343} .086¢	5.2263 ^{5.2263} .841¢	C
Energy Payment per Off-Peak kWh	2.7862 ^{2.7862} .253¢	2.4821 ^{2.4821} .967¢	C
Capacity Payment per On-Peak kWh for Firm Power	0.8350 ^{0.8350} .635¢	4.4164 ^{4.4164} .064¢	C

DETERMINATION OF FIRM POWER

The small qualifying facility will have supplied firm power if during the billing period an on-peak capacity factor of at least 65 percent was achieved. The calculation of the on-peak capacity factor will be as follows:

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3. The minimum contract term of service is 12 months.

Date Filed:	01-02-15 ⁰¹⁻⁰²⁻¹⁵ 01-04-16	By:	Christopher B. Clark	Effective Date:	02-01-15 ⁰²⁻⁰¹⁻¹⁵
			President, and CEO of Northern States Power Company, a Minnesota corporation		
Case No.	PU-15-01716- ^{PU-15-01716-}			Order Date:	01-21-15 ⁰¹⁻²¹⁻¹⁵

Non-Legislative

NORTH DAKOTA ELECTRIC RATE BOOK - NDPSC NO. 2

**NET ENERGY BILLING SERVICE
RATE CODE D50**

Section No. 9
8th Revised Sheet No. 2

AVAILABILITY

Available to any Small Qualifying Facility (SQF) with a capacity of 100 kW or less who receives non-time of day retail electric service from Company and offsets energy delivered by Company.

RATE

Metering Charge per Month

Single Phase	\$3.25
Three Phase	\$5.50

Payment Schedule for Energy Delivered to Company

Energy Payment per kWh	2.574¢
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C

TERMS AND CONDITIONS OF SERVICE

1. Energy used by customer in excess of energy delivered by the small qualifying facility at the same site during the same billing period shall be billed in accordance with the appropriate non-time of day retail electric rate.

For demand metered General Service customers, the entire kW demand supplied by the Company at the same site during the same billing period shall be billed to the customer according to the appropriate General Service demand charge rate.
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4. The customer must maintain a power factor of the generator as close to unity as is consistent with NSP operating standards.

Date Filed: 01-04-16

By: Christopher B. Clark

Effective Date:

President, Northern States Power Company, a Minnesota corporation

Case No. PU-16-

Order Date:

NORTH DAKOTA ELECTRIC RATE BOOK - NDPSC NO. 2

**PURCHASE AND SALE BILLING SERVICE
RATE CODE D51**

Section No. 9
10th Revised Sheet No. 3

AVAILABILITY

Available to any Small Qualifying Facility of less than 100 kW who receives non-time of day retail electric service.

RATE

Metering Charge per Month

Single Phase	\$5.25
Three Phase	\$7.60

Payment Schedule for Energy Delivered to Company

	<u>Oct-May</u>	<u>Jun-Sep</u>	
Energy Payment per kWh	2.547¢	2.628¢	C
Capacity Payment per kWh for Firm Power	0.220¢	1.418¢	C

DETERMINATION OF FIRM POWER

The small qualifying facility will have supplied firm power if during the billing period an on peak capacity factor of at least 65 percent was achieved. The calculation of the on peak capacity factor will be as follows:

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3. The minimum contracted term of service is 12 months.

Date Filed: 01-04-16

By: Christopher B. Clark

Effective Date:

President, Northern States Power Company, a Minnesota corporation

Case No. PU-16-

Order Date:

NORTH DAKOTA ELECTRIC RATE BOOK - NDPSO NO. 2

**TIME OF DAY PURCHASE SERVICE
RATE CODE D52**

Section No. 9
10th Revised Sheet No. 4

AVAILABILITY

Available to any Small Qualifying Facility (SQF).

RATE

Metering Charge per Month

Single Phase	\$5.25
Three Phase	\$7.60

Payment Schedule for Energy Delivered to Company

	<u>Oct-May</u>	<u>Jun-Sep</u>	
Energy Payment per On-Peak kWh	3.086¢	3.841¢	C
Energy Payment per Off-Peak kWh	2.253¢	1.967¢	C
Capacity Payment per On-Peak kWh for Firm Power	0.635¢	4.064¢	C

DETERMINATION OF FIRM POWER

The small qualifying facility will have supplied firm power if during the billing period an on-peak capacity factor of at least 65 percent was achieved. The calculation of the on-peak capacity factor will be as follows:

The average on-peak period metered capacity delivered to the Company for the on-peak period of the billing period divided by the greatest 15 minute metered capacity delivered for the on-peak period of the same billing period expressed in percent and rounded to the nearest whole percent. If the percent calculated is 65 or greater, capacity payment will be made. If the percent calculated is less than 65, capacity payment will not be made.

TERMS AND CONDITIONS OF SERVICE

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3. The minimum contract term of service is 12 months.

Date Filed: 01-04-16

By: Christopher B. Clark

Effective Date:

President, Northern States Power Company, a Minnesota corporation

Case No. PU-16-

Order Date:

Standard Contract Offer
by
Northern States Power Company

2016 Rate Sheet

Years	\$/kW-mth	Years	\$/MWh
<u>Contract Length</u>	<u>Levelized Capacity</u>	<u>Payment Period</u>	<u>Levelized Energy (1)</u>
1	0.00		
2	0.00		
3	0.00		
4	0.00		
5	1.35		
6	1.71	1	26.72
7	1.98	2	27.38
8	2.19	3	28.00
9	2.37	4	28.84
10	2.51	5	29.59
11	2.64	6	30.23
12	2.75	7	30.77
13	2.86	8	31.26
14	2.95	9	31.70
15	3.03	10	32.09
16	3.11	11	32.49
17	3.19	12	32.88
18	3.25	13	33.25
19	3.32	14	33.59
20	3.38	15	33.92
21	3.44	16	34.23
22	3.50	17	34.53
23	3.55	18	34.82
24	3.61	19	35.09
25	3.66	20	35.36
26	3.71		
27	3.75		
28	3.80		
29	3.84		
30	3.89		
31	3.93		
32	3.97		
33	4.01		
34	4.04		
35	4.08		

(1) Minimum contract length required for levelized energy payments is 6 years. Maximum length is 20 years. Examples: A 6 year contract could receive one year of levelized energy rates at 26.72 \$/MWh with the remaining 5 years used for payback account corrections. A 20 year contract could receive 15 years of levelized payment at 33.92 \$/MWh for each year with the remaining 5 years for payback account corrections.

Standard Contract Offer
by
Northern States Power Company

2017 Rate Sheet

Years	\$/kW-mth	Years	\$/MWh
<u>Contract Length</u>	<u>Levelized Capacity</u>	<u>Payment Period</u>	<u>Levelized Energy (1)</u>
1	0.00		
2	0.00		
3	0.00		
4	1.75		
5	2.13		
6	2.39	1	27.87
7	2.60	2	28.55
8	2.76	3	29.48
9	2.89	4	30.29
10	3.01	5	30.97
11	3.12	6	31.52
12	3.21	7	32.03
13	3.29	8	32.49
14	3.37	9	32.88
15	3.45	10	33.29
16	3.52	11	33.70
17	3.58	12	34.08
18	3.64	13	34.43
19	3.70	14	34.76
20	3.76	15	35.08
21	3.81	16	35.39
22	3.87	17	35.68
23	3.92	18	35.96
24	3.97	19	36.23
25	4.01	20	36.50
26	4.06		
27	4.11		
28	4.15		
29	4.19		
30	4.23		
31	4.27		
32	4.31		
33	4.35		
34	4.39		
35	4.43		

(1) Minimum contract length required for levelized energy payments is 6 years. Maximum length is 20 years. Examples: A 6 year contract could receive one year of levelized energy rates at 27.87 \$/MWh with the remaining 5 years used for payback account corrections. A 20 year contract could receive 15 years of levelized payment at 35.08 \$/MWh for each year with the remaining 5 years for payback account corrections.

Standard Contract Offer
by
Northern States Power Company

2018 Rate Sheet

Years	\$/kW-mth	Years	\$/MWh
<u>Contract Length</u>	<u>Levelized Capacity</u>	<u>Payment Period</u>	<u>Levelized Energy (1)</u>
1	0.00		
2	0.00		
3	2.41		
4	2.75		
5	2.97		
6	3.14	1	29.34
7	3.27	2	30.34
8	3.37	3	31.20
9	3.47	4	31.90
10	3.55	5	32.47
11	3.63	6	32.98
12	3.70	7	33.44
13	3.77	8	33.83
14	3.83	9	34.25
15	3.89	10	34.66
16	3.95	11	35.04
17	4.01	12	35.40
18	4.06	13	35.73
19	4.12	14	36.06
20	4.17	15	36.37
21	4.22	16	36.66
22	4.26	17	36.95
23	4.31	18	37.23
24	4.36	19	37.49
25	4.40	20	37.75
26	4.44		
27	4.49		
28	4.53		
29	4.57		
30	4.61		
31	4.65		
32	4.69		
33	4.72		
34	4.76		
35	4.79		

(1) Minimum contract length required for levelized energy payments is 6 years. Maximum length is 20 years. Examples: A 6 year contract could receive one year of levelized energy rates at 29.34 \$/MWh with the remaining 5 years used for payback account corrections. A 20 year contract could receive 15 years of levelized payment at 36.37 \$/MWh for each year with the remaining 5 years for payback account corrections.

Northern States Power Company

Electric Operations - State of North Dakota

Annual Report of Total Energy Produced By Customers

Bill	Days Bill Period Covered		Total Customer KWh Use	KWh Delivered By Company	KWh Generated By Customer	Excess KWh Sold To Company
	From	To				
2016 January *						-
2015 December	11/19/2015	12/22/2015	1,760	200	1,560	-
November	9/22/2015	10/21/2015	1,600	200	1,400	-
October	8/23/2015	9/28/2015	1,800	40	1,760	-
September	7/23/2015	8/28/2015	1,600	240	1,360	-
August	6/23/2015	7/23/2015	1,800	40	1,760	-
July	5/25/2015	6/23/2015	1,440	160	1,280	-
June	4/23/2015	5/25/2015	2,240	160	2,080	-
May	3/25/2015	4/23/2015	3,920	-	3,920	-
April	2/24/2015	3/25/2015	5,520	-	5,520	-
March	1/25/2015	2/24/2015	7,360	-	7,360	-
February	12/22/2014	1/25/2015	7,720	80	7,640	-
Total			36,760	1,120	35,640	-

* Not yet billed at time of report filing

**Northern States Power Company
Electric Utility - State of North Dakota
Derivation of Metering Costs**

STANDARD KWH METER	Single Phase		Three Phase	
(1) Installed Cost	\$98.92		\$280.18	
(2) L.A.R.R.	10.89%		10.89%	
(3) Levelized Cost (1)*(2)	\$10.77		\$30.51	
(4) Accounting Expenses \$/Cust/Yr	\$24.89		\$24.89	
(5) Total Annual (3)+(4)	\$35.67		\$55.41	
(6) Total Monthly (5)/12	\$2.97	\$3.25 Proposed	\$4.62	\$5.50 Proposed
		\$3.25 Last Year		\$5.50 Last Year

TOD KW/KWH METER	Single Phase		Three Phase	
(7) Installed Cost	\$273.69		\$321.26	
(8) Levelized Cost (7)*(2)	\$29.80		\$34.99	
(9) Total Annual (8)+(4)	\$54.70		\$59.88	
(10) Total Monthly	\$4.56	\$5.25 Proposed	\$4.99	\$7.60 Proposed
		\$5.25 Last Year		\$7.60 Last Year

Source:

(1)(7) Data provided by Xcel Energy Metering Dept.

(2) See pages 4-7.

(4) See pages 2 & 3.

Assumed accounting expenses for the second meter is 50%
(3406000+863000)/(77450+12459)*0.5

Test year ending December 31, 2013 Class Cost of Service Study

Escalation rate = 1.98 (2015) and 2.81(2016)

Northern States Power Company
Electric Utility - State of North Dakota
Test Year Ending 31 Dec 2013
Proposed Class Cost of Service Study Detail

		Operating & Maint (Pg 2 of 2)									
		1=2+3+10	2	3=4+5	4	5=6 to 9	6	7	8	9	10
	Alloc	MN	Res	C&I Tot	Sm Non-D	Demand	Second	Primary	Tr Transf	Trans	Lta
1	Distribution Expen										
2	Supervision & Eng'g	770	404	319	56	263	240	24	0	0	47
3	Load Dispatching	240	81	157	15	143	128	15	0	0	1
4	Substations	522	192	325	29	296	261	35	0	0	5
5	Overhead Lines	2,399	1,336	965	164	802	731	71	0	0	98
6	Underground Lines	1,266	916	340	106	235	226	9	0	0	29
7	Line Transformers	2	1	1	0	1	1	0	0	0	0
8	Meters	242	150	88	34	54	50	5	0	0	4
9	Customer Install'n	177	95	66	12	54	49	5	0	0	16
10	Street Lighting	328	0	0	0	0	0	0	0	0	328
11	Miscellaneous	571	305	214	40	175	169	15	0	0	52
12	Rents (Pole Attachm'ts)	226	126	91	15	76	69	7	0	0	9
13	Total Distribution	6,763	3,606	2,568	471	2,088	1,913	184	0	0	569
14	Customer Accounting	4,286	3,405	863	512	351	347	4	0	0	16
15	Sales, Econ Dvlp & Other	173	58	115	10	104	93	12	0	0	1
16	Admin & General	3,332	1,286	2,002	211	1,791	1,568	202	0	0	44
17	Salaries	3,004	1,098	1,878	182	1,695	1,497	188	0	0	28
18	Office Supplies	(1,507)	(551)	(942)	(92)	(850)	(751)	(99)	0	0	(14)
19	Admin Transfer Credit	917	354	551	58	493	437	56	0	0	12
20	Outside Services	726	284	435	45	390	347	43	0	0	7
21	Property Insurance	5,843	2,255	3,510	370	3,140	2,785	355	0	0	77
22	Pensions & Benefits	1,071	413	643	68	575	511	65	0	0	14
23	Injuries & Claims	105	40	63	7	57	51	6	0	0	1
24	Regulatory Exp	86	31	54	5	49	43	6	0	0	1
25	General Advertising	0	0	0	0	0	0	0	0	0	0
26	Contributions	(99)	(36)	(62)	(6)	(56)	(49)	(7)	0	0	(1)
27	Misc General Exp	1,316	481	823	80	743	656	87	0	0	12
28	Rents	26	10	18	2	16	14	2	0	0	0
29	Maint of General Plan	14,822	5,667	8,973	930	8,043	7,129	913	0	0	182
30	Total	320	189	126	25	102	90	11	0	0	4
31	Cust Service & Info	0	0	0	0	0	0	0	0	0	0
32	Cust Assist Exp - Non-CIP	137	81	54	11	44	39	5	0	0	2
33	CIP Total	457	271	180	35	145	129	16	0	0	6
34	Instructional Advertising										
35	Total	373	144	224	24	200	178	23	0	0	5
36	Amortizations										
37	Total O&M Expense	170,087	62,169	106,315	10,332	95,982	84,776	11,206	0	0	1,614

Northern States Power Company
Electric Utility - State of North Dakota
Test Year Ending 31 Dec 2013
Proposed Class Cost of Service Study Detail

EXTERNAL ALLOCATORS	1=2-3+10	2	3=4+5	4	5=6 to 9	6	7	8	9	10
Extern:	MIN	Res	C&I Tot	Sm Non-D	Demand	Second	Primary	Tr Transf	Trans	Lig
1 Customers - Ave Monthly	100.00%	84.39%	20.14%	9.60%	3.97%	3.94%	0.04%	0.00%	0.00%	2.03%
2 Cust Acctg Wtg Factor	100.00%	79.48%	36.36%	11.94%	8.20%	8.10%	1.88%	0.00%	0.00%	0.38%
3 Mo Cus Wtd By Mtr Invest	100.00%	61.95%	13.82%	13.93%	22.42%	20.54%	1.88%	0.00%	0.00%	1.69%
4 Sec & Pri Customers	100.00%	86.04%	5.31%	9.74%	4.07%	4.04%	0.04%	0.00%	0.00%	0.14%
5 C62Sec, w/o Lig & C/I Undergound	100.00%	94.65%	13.78%	3.75%	1.55%	1.55%	0.00%	0.00%	0.00%	0.00%
6 Secondary Customers	100.00%	86.07%	70.07%	9.75%	4.04%	4.04%	0.00%	0.00%	0.00%	0.14%
7 Summer Peak Resp KW	100.00%	29.93%	65.60%	5.96%	64.11%	57.27%	6.84%	0.00%	0.00%	0.00%
8 Transmission Demand %	100.00%	33.92%	59.49%	6.19%	59.40%	53.16%	6.25%	0.00%	0.00%	0.48%
9 Winter Peak Resp KW	100.00%	39.37%	50.32%	6.51%	52.98%	47.53%	5.44%	0.00%	0.00%	1.14%
10 Alternative Production Allocator	100.00%	29.34%	79.32%	6.52%	63.80%	57.26%	6.54%	0.00%	0.00%	0.34%
11 Sec, Pri & TT, Class Coin KW @ Substation	100.00%	36.78%	66.60%	4.93%	61.67%	54.27%	7.41%	0.00%	0.00%	0.96%
12 Sec & Pri, CI Coin KW (no Min Sys; adj Res W)	100.00%	32.55%	19.02%	2.84%	16.19%	16.19%	0.00%	0.00%	0.00%	0.85%
13 D62Sec, w/o Lig & C/I Undergound	100.00%	47.37%	51.96%	5.64%	46.32%	46.32%	0.00%	0.00%	0.00%	0.66%
14 Sec, Class Coin KW (w/o Min Sys KW)	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
15 Direct Assign Street Lighting	100.00%	34.55%	64.79%	5.74%	59.06%	51.84%	7.22%	0.00%	0.00%	0.63%
16 On + Off Sales MWH	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
17 Street Lighting (Dir Assign)	100.00%	38.56%	60.42%	6.33%	54.06%	48.52%	5.57%	0.00%	0.00%	1.02%
18 Present Rev										

APPLIED EXTERNAL DATA	1=2-3+10	2	3=4+5	4	5=6 to 9	6	7	8	9	10
Extern:	MIN	Res	C&I Tot	Sm Non-D	Demand	Second	Primary	Tr Transf	Trans	Lig
19 Customers - B Basis	89,565	77,063	12,374	8,726	3,648	3,614	33	0	0	1,865
20 Cust - Ave Monthly (C10-Area LI)	91,774	77,450	12,459	8,812	3,648	3,614	33	0	0	366
21 Mo Cus Wtd By Cus Acct	95,594	75,975	19,253	11,414	7,839	7,741	98	0	0	N/A
22 Cust Acctg Wtg Factor	7.35	0.98	6.37	1.30	5.07	2.14	2.93	0.00	0.00	1,522
23 Cust-Ave Mo (C11 w/ Dir Assign St Lig)	91,431	77,450	12,459	8,812	3,648	3,614	33	0	0	180,733
24 Mo Cus Wtd By Mtr Invest	10,725,904	6,645,497	3,899,673	1,494,491	2,405,182	2,203,155	202,027	0	0	119
25 Meter Invest / Cust Factor	7.032	86	6,828	170	6,658	610	6,049	0	0	128
26 Sec & Pri Customers	89,565	77,063	12,374	8,726	3,648	3,614	0	0	0	0
27 C62Sec, w/o Lig & C/I Undergound	81,382	4,319	1,265	3,054	1,265	1,265	0	0	0	0
28 Secondary Customers	89,531	77,063	12,340	8,726	3,614	3,614	24	0	0	128
29 Summer Peak Resp KW	485	148	347	29	317	283	33	0	0	0
30 Dmrd (D10S X Fact + D10W)/1000	10,000,000	3,392,295	6,559,551	619,281	5,940,269	5,315,505	624,764	0	0	48,154
31 Winter Peak Resp KW	428	169	255	28	227	203	23	0	0	5
32 Alternative Production Allocator	2,933,939	2,933,939	7,031,571	651,549	6,379,922	5,725,548	654,374	0	0	34,490
33 Sec, Pri & TT, Class Coin KW @ Substation	566,768	208,479	352,857	31,278	321,579	283,372	38,207	0	0	5,432
34 Sec & Pri, Class Coin KW (w/o Min Sys; reducec)	515,278	187,718	343,192	25,402	317,790	279,625	38,165	0	0	4,368
35 D62Sec, w/o Lig & C/I Undergound	778,581	630,468	148,113	22,087	126,026	126,026	0	0	0	0
36 Sec, Class Coin KW (w/o Min Sys KW)	10,000,000	4,737,112	5,196,472	564,431	4,632,041	4,632,041	0	0	0	66,416
37 Annual Billing KW	3,881,533	0	3,582	0	3,582	3,239	343	0	0	0
38 Summer Billing KW	1,257,547	0	1,258	0	1,258	1,129	128	0	0	0
39 Winter Billing KW	2,323,986	0	2,324	0	2,324	2,109	215	0	0	0
40 Non-Coinc Pk Second	1,058,016	630,468	423,181	63,105	360,075	360,075	0	0	0	4,368
41 kWh Sales @ Meter	2,270,721	784,751	1,466,635	125,788	1,340,847	1,172,103	168,745	0	0	19,336

REVENUE REQUIREMENTS

Cost of Capital	Before-Tax Weighted Cost	Ratio	After-Tax Weighted Cost
Equity	10.00%	52.56%	5.26%
Preferred	0.00%	0.00%	0.00%
L-T Debt	5.14%	44.95%	1.43%
S-T Debt	0.75%	2.48%	0.01%
	100.00%		6.70%

Carrying Charge Rate	Return Requirement
Return Requirement	4.75%
Depreciation Requirement	3.08%
Income Tax Requirement	2.01%
Total Capital Requirement	9.85%
O&M Requirement	0.00%
Property Tax	1.04%
Total LARR =	10.89%

(LARR) Levelized Annual Revenue Requirement

Time Period	Year	Capital Expend.	AFUDC	Total CWIP	Plant in Service BOY	Plant in Service EOY	Average Plant in Service	Average Accum. Deprec.	Average Net Plant in Service	Average Acc. Def. Income Taxes	Average Rate Base	Rate of Return (Equity)	Rate of Return (Debt)	Rate of Return (AFUDC)	Operating Expenses	Book Deprec. Expenses	Deferred Income Taxes	Salvage
0	2015	1,000	0	1,000	0	1,000	500	8	493	4	488	28	11	0	0.00	15	9	0
1	2016	0	0	0	1,000	1,000	1,000	30	970	17	953	50	22	0	0.00	30	16	0
2	2017	0	0	0	1,000	1,000	1,000	60	940	32	908	48	21	0	0.00	30	14	0
3	2018	0	0	0	1,000	1,000	1,000	90	910	45	865	46	20	0	0.00	30	12	0
4	2019	0	0	0	1,000	1,000	1,000	120	880	56	824	43	19	0	0.00	30	10	0
5	2020	0	0	0	1,000	1,000	1,000	150	850	65	785	41	18	0	0.00	30	9	0
6	2021	0	0	0	1,000	1,000	1,000	180	820	73	747	39	17	0	0.00	30	7	0
7	2022	0	0	0	1,000	1,000	1,000	210	790	80	710	37	17	0	0.00	30	6	0
8	2023	0	0	0	1,000	1,000	1,000	240	760	85	675	35	16	0	0.00	30	6	0
9	2024	0	0	0	1,000	1,000	1,000	270	730	91	639	34	15	0	0.00	30	6	0
10	2025	0	0	0	1,000	1,000	1,000	300	700	96	604	32	14	0	0.00	30	6	0
11	2026	0	0	0	1,000	1,000	1,000	330	670	102	568	30	13	0	0.00	30	6	0
12	2027	0	0	0	1,000	1,000	1,000	360	640	107	533	28	12	0	0.00	30	6	0
13	2028	0	0	0	1,000	1,000	1,000	390	610	113	497	26	12	0	0.00	30	6	0
14	2029	0	0	0	1,000	1,000	1,000	420	580	119	461	24	11	0	0.00	30	6	0
15	2030	0	0	0	1,000	1,000	1,000	450	550	124	426	22	10	0	0.00	30	6	0
16	2031	0	0	0	1,000	1,000	1,000	480	520	130	390	21	9	0	0.00	30	6	0
17	2032	0	0	0	1,000	1,000	1,000	510	490	135	355	19	8	0	0.00	30	6	0
18	2033	0	0	0	1,000	1,000	1,000	540	460	141	319	17	7	0	0.00	30	6	0
19	2034	0	0	0	1,000	1,000	1,000	570	430	146	284	15	6	0	0.00	30	(3)	0
20	2035	0	0	0	1,000	1,000	1,000	600	400	148	252	13	5	0	0.00	30	(11)	0
21	2036	0	0	0	1,000	1,000	1,000	630	370	140	230	12	5	0	0.00	30	(11)	0
22	2037	0	0	0	1,000	1,000	1,000	660	340	129	211	11	4	0	0.00	30	(11)	0
23	2038	0	0	0	1,000	1,000	1,000	690	310	118	192	10	4	0	0.00	30	(11)	0
24	2039	0	0	0	1,000	1,000	1,000	720	280	106	174	9	4	0	0.00	30	(11)	0
25	2040	0	0	0	1,000	1,000	1,000	750	250	95	155	8	4	0	0.00	30	(11)	0
26	2041	0	0	0	1,000	1,000	1,000	780	220	83	137	7	3	0	0.00	30	(11)	0
27	2042	0	0	0	1,000	1,000	1,000	810	190	72	118	6	3	0	0.00	30	(11)	0
28	2043	0	0	0	1,000	1,000	1,000	840	160	61	99	5	2	0	0.00	30	(11)	0
29	2044	1,000	0	1,000	1,000	1,000	870	870	130	49	81	4	2	0	0.00	885	44	0

Income Taxes	Property Taxes	Revenue Req.	PV Revenue Req.	PV of Book Deprac.	PV of Equity Return	PV of Debt Return	PV of AFUDC	PV of Operating Expenses	PV of Property Taxes	PV of Def. Taxes	PV of Income Taxes
7	0	68	68	15	26	11	0	0	0	0	7
15	11	144	135	28	47	21	0	0	10	15	14
15	11	139	122	26	42	19	0	0	9	12	13
16	11	134	110	25	37	17	0	0	9	10	13
16	11	130	100	23	33	15	0	0	8	8	13
17	11	125	91	22	30	13	0	0	8	6	12
17	11	121	82	20	27	12	0	0	7	5	11
17	11	117	74	19	24	11	0	0	7	4	11
16	11	113	68	18	21	9	0	0	6	3	10
15	11	110	61	17	19	8	0	0	5	3	8
14	11	106	55	16	17	7	0	0	5	3	7
13	11	102	50	15	15	6	0	0	5	3	6
12	11	98	45	14	13	5	0	0	5	3	5
10	11	94	41	13	11	4	0	0	4	2	4
9	11	90	36	12	10	4	0	0	4	2	3
8	11	87	33	11	8	4	0	0	4	2	2
7	11	83	29	11	7	3	0	0	4	2	2
6	11	79	26	10	6	3	0	0	3	2	1
5	11	75	23	9	5	2	0	0	3	2	1
4	11	71	21	9	4	2	0	0	3	2	1
11	11	68	19	8	4	2	0	0	3	(1)	3
19	11	65	17	8	3	1	0	0	3	(3)	5
18	11	63	15	7	3	1	0	0	3	(3)	4
18	11	61	14	7	2	1	0	0	2	(2)	4
17	11	59	13	6	2	1	0	0	2	(2)	3
16	11	57	11	6	2	1	0	0	2	(2)	3
16	11	55	10	6	1	1	0	0	2	(2)	3
15	11	53	9	5	1	0	0	0	2	(2)	2
15	11	51	8	5	1	0	0	0	2	(2)	2
14	11	49	8	5	1	0	0	0	2	(2)	2
396	305	2,668	1,393	394	421	187	0	0	133	76	182
Levelized Annual Revenue Requirement		109	31	31	33	15	0	0	10	6	14
As % of Original Cost		10.89%	3.08%	3.29%	1.46%	0.00%	0.00%	1.04%	0.58%	1.42%	10.89%

Salvage	Defered Taxes	EOY Accum. Defered Taxes	EOY Accum. Defered Taxes	Avg. Acc. Defered Taxes	Tax Depreciation Rates									
					Book Depreciation	Tax Depreciation	3-year	5-year	7-year	10-year	15-year	20-year		
0	9	0	9	4	1.67%	3.75%	33.33%	20.00%	14.29%	10.00%	5.00%	3.75%		
0	16	9	25	17	3.33%	7.22%	44.45%	32.00%	24.49%	18.00%	9.50%	7.22%		
0	14	25	39	32	3.33%	6.68%	14.81%	19.20%	17.49%	14.40%	8.55%	6.68%		
0	12	39	51	45	3.33%	6.18%	7.41%	11.52%	12.49%	11.52%	7.70%	6.18%		
0	10	51	61	56	3.33%	5.71%		11.52%	8.93%	9.22%	6.23%	5.71%		
0	9	61	70	65	3.33%	5.29%	5.76%		8.92%	7.37%	5.29%	5.29%		
0	7	70	77	73	3.33%	4.89%			8.93%	6.55%	4.89%	4.89%		
0	6	77	82	80	3.33%	4.52%			4.46%	6.55%	4.52%	4.52%		
0	6	82	88	85	3.33%	4.46%				6.55%	4.46%	4.46%		
0	6	88	94	91	3.33%	4.46%				6.55%	4.46%	4.46%		
0	6	94	99	96	3.33%	4.46%				6.55%	4.46%	4.46%		
0	6	99	105	102	3.33%	4.46%				6.55%	4.46%	4.46%		
0	6	105	110	107	3.33%	4.46%				6.55%	4.46%	4.46%		
0	6	110	116	113	3.33%	4.46%				6.55%	4.46%	4.46%		
0	6	116	121	119	3.33%	4.46%				6.55%	4.46%	4.46%		
0	6	121	127	124	3.33%	4.46%				6.55%	4.46%	4.46%		
0	6	127	132	130	3.33%	4.46%				6.55%	4.46%	4.46%		
0	6	132	138	135	3.33%	4.46%				6.55%	4.46%	4.46%		
0	6	138	143	141	3.33%	4.46%				6.55%	4.46%	4.46%		
0	6	143	149	146	3.33%	4.46%				6.55%	4.46%	4.46%		
0	6	149	149	148	3.33%	4.46%				6.55%	4.46%	4.46%		
0	(3)	149	146	148	3.33%	4.46%				6.55%	4.46%	4.46%		
0	(11)	146	135	140	3.33%	4.46%				6.55%	4.46%	4.46%		
0	(11)	135	123	129	3.33%	4.46%				6.55%	4.46%	4.46%		
0	(11)	123	112	118	3.33%	4.46%				6.55%	4.46%	4.46%		
0	(11)	112	101	106	3.33%	4.46%				6.55%	4.46%	4.46%		
0	(11)	101	89	95	3.33%	4.46%				6.55%	4.46%	4.46%		
0	(11)	89	78	83	3.33%	4.46%				6.55%	4.46%	4.46%		
0	(11)	78	66	72	3.33%	4.46%				6.55%	4.46%	4.46%		
0	(11)	66	55	61	3.33%	4.46%				6.55%	4.46%	4.46%		
0	(11)	55	44	49	3.33%	4.46%				6.55%	4.46%	4.46%		
0	44				96.33%	2.23%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%		

**Northern States Power Company
Electric Utility - State of North Dakota
Derivation of Energy Payments**

NET ENERGY BILLING SERVICE	Average Summer	Average Winter	Wtd Avg Annual
(1) Estimated System Average Incremental Energy Costs for 2016 (¢/kWh)	2.559	2.472	
(2) Energy Loss Factors	0.9737	0.9707	
(3) Estimated System Average Incremental Energy Costs Adjusted for Losses (1)/(2)	2.628	2.547	
		[1]	[2]
(4) Average Annual (Cents/kWh) ([1]*4/12) + ([2]*8/12)			2.574

PURCHASE AND SALE BILLING SERVICE	Average Summer	Average Winter
(1) Estimated System Average Incremental Energy Costs for 2016 (¢/kWh)	2.559	2.472
(2) Energy Loss Factors	0.9737	0.9707
(3) Estimated System Average Incremental Energy Costs Adjusted for Losses (1)/(2)	2.628	2.547

TIME OF DAY PURCHASE SERVICE	Summer On Peak	Summer Off Peak	Winter On Peak	Winter Off Peak
(1) Estimated System Average Incremental Energy Costs for 2016 (¢/kWh)	3.735	1.919	2.996	2.194
(2) Energy Loss Factors	0.9723	0.9756	0.9707	0.9739
(3) Estimated System Average Incremental Energy Costs Adjusted for Losses(1)/(2)	3.841	1.967	3.086	2.253

Sources:

Incremental Energy Cost Data provided by Xcel Energy's Energy Marketing.

Northern States Power Company
Electric Utility - State of North Dakota
Calculation of Net Annual Avoided Capacity Costs

[TRADE SECRET DATA BEGINS:

(1) Completed Cost of C.T. Unit (2016 \$)	/kW
(2) Inflation Net of Technical Progress	Years
(3) Average Service Life	
(4) Discount Rate (After Tax)	
Calculation of Marginal Capital Carry Charge Rate	
(5) Present Value of Revenue Requirements	/kW
(6) Annuity Factor Adjustment for Inflation **	
(7) Present Value of Revenue Requirements Adjusted for Inflation (5)*(6)	
(8) Marginal Capital Carrying Charge Rate (7)/(1)	
(9) First Year Revenue Requirement (1)*(8)	/kW (2016 \$)
(10) Present Value at 6.42% for 0 years	/kW
(11) Present Value of Average Annual Fuel Savings	/kW
(12) Annual Avoided Capacity Cost (10)-(11)	/kW
(13) Adjusted for 15% Reserve Margin (12)*1.15	/kW
(14) Plus \$2.92/kW Fixed O & M (2016 \$) (13)+2.92	/kW
(15) Adjusted for losses (14)/0.9674	/kW
(16) NET ANNUAL AVOIDED CAPACITY COST	/kW
[TRADE SECRET DATA ENDS]	
(17) Net Winter On-Peak Avoided Capacity Cost (TOD PURCHASE) (16)*0.2363*100/2023	0.00635 \$/kWh
(18) Net Summer On-Peak Avoided Capacity Cost (TOD PURCHASE) (16)*0.7637*100/1022	0.04064 \$/kWh
(19) Net Annual On-Peak Avoided Capacity Cost (16)*100/3045	0.01786 \$/kWh
(20) Net Winter Avoided Capacity Cost Averaged Over All Winter Hours (PURCHASE & SALE BILLING) (16)*0.2363*100/5832	0.00220 \$/kWh
(21) Net Summer Avoided Capacity Cost Averaged Over All Summer Hours (PURCHASE & SALE BILLING) (16)*0.7637*100/2928	0.01418 \$/kWh
(22) Net Annual Avoided Capacity Cost Average Over All Hours (16)*100/8760	0.00621 \$/kWh

Note: The weighting factors 0.7637 and 0.2363 are obtained from NSP's most recent Cost of Service Study. These ratios represent relative summer and winter season capacity costs on NSP's System.

** $AC = k*(r-j)*(1+j)^{(t-1)}*[1/(1-(1+j)^n/(1+r)^n)]$
 Where AC = Annual Charge in year t
 t = Year (=1)
 K = Total Present Value Cost of Original Investment
 r = Discount Rate (Overall Marginal Cost of Capital)
 j = Inflation Rate Net of Technology Progress
 n = Expected Service Life of Investment

Northern States Power Company
 System Peak Demands
 Summer/Winter Factors

Month	System MW	
	Full	Net
1	6,455	1,280
2	6,308	1,133
3	6,118	943
4	5,570	395
5	7,240	2,065
6	8,630	3,455
7	9,346	4,171
8	8,844	3,669
9	7,923	2,748
10	5,865	690
11	5,970	795
12	6,562	1,387
Annual Average Hourly Load	5,175	
Average of Monthly Peaks		
Year	7,069	1,894
Summer	8,686	3,511
Winter	<u>6,261</u>	<u>1,086</u>
Total	14,947	4,597
Summer:Winter Ratio	1.3873	3.2326
Summer Percent	58.11%	76.3741%
Winter Percent	<u>41.89%</u>	<u>23.6259%</u>
	100.00%	100.00%

Notes:

Full system ratio used to weight actual summer class peaks

Net system ratio used to split total peaking plant into summer and winter

Northern States Power Company
 Electric Utility - State of North Dakota
 Marginal Cost of Capital

<i>(Before Tax)</i>	Capitalization Ratio (%)	Cost (%)	Weighted (%)
LT- Debt	44.96%	5.14%	2.31%
ST- Debt	2.48%	0.75%	0.02%
Preferred Equity	0.00%	0.00%	0.00%
Common Equity	52.56%	10.00% *	5.26%
Weighted Average	100.00%		7.59%

<i>(After Tax)</i>	Capitalization Ratio (%)	Cost (%)	Weighted (%)
LT-Debt	44.96%	5.14%	1.43%
ST-Debt	2.48%	0.75%	0.01%
Preferred Equity	0.00%	0.00%	0.00%
Common Equity	52.56%	10.00% *	5.26%
Weighted Average	100.00%		6.70%

* Common Equity is Commission approved return in case no. PU-12-813

Source:
 Information provided by Xcel Energy Revenue Analysis

REVENUE REQUIREMENTS

Combustion Turbine Plant

North Dakota	
Income Tax Rate	37.95%
AFUDC Rate	8.02%
Beginning Year	2015
Year in Service	2015
Salvage/(Removal)%	0.00%
Escalation Factor	1.98%
Tax Life	20 years
Book Life	27.5 years
Property Tax Rate	1.05%

Cost of Capital	Cost	Ratio	Before-Tax Weighted Cost	After-Tax Weighted Cost
Equity	10.00%	52.56%	5.26%	5.26%
Preferred	0.00%	0.00%	0.00%	0.00%
L-T Debt	5.14%	44.95%	2.31%	1.43%
S-T Debt	0.75%	2.48%	0.02%	0.01%
		100.00%	7.59%	6.70%

Carrying Charge Rate	Rate
Return Requirement	4.77%
Depreciation Requirement	3.71%
Income Tax Requirement	2.02%
Total Capital Requirement	10.49%
O&M Requirement	0.00%
Property Tax	1.07%
Total LARR =	11.56%

(LARR) Levelized Annual Revenue Requirement

Time Period	Year	Capital Expend.	AFUDC	Total CWP	Plant in Service BOY	Plant in Service EOY	Average Plant in Service	Average Accum. Deprec.	Average Net Plant in Service	Average Acc. Def. Income Taxes	Average Rate Base	Rate of Return (Equity)	Rate of Return (Debt)	AFUDC	Operating Expenses	Book Deprec. Expense	Deferred Income Taxes	Salvage
0	2015	1,000		0	0	1,000	500	9	491	4	487	26	11	0	0.00	18	7	0
1	2016			0	1,000	1,000	1,000	36	964	14	950	50	22	0	0.00	36	14	0
2	2017			0	1,000	1,000	1,000	73	927	27	901	47	21	0	0.00	36	12	0
3	2018			0	1,000	1,000	1,000	109	891	37	854	45	20	0	0.00	36	10	0
4	2019			0	1,000	1,000	1,000	145	855	46	808	43	19	0	0.00	36	8	0
5	2020			0	1,000	1,000	1,000	182	818	53	765	40	18	0	0.00	36	6	0
6	2021			0	1,000	1,000	1,000	218	782	59	723	38	17	0	0.00	36	5	0
7	2022			0	1,000	1,000	1,000	255	745	63	683	36	16	0	0.00	36	3	0
8	2023			0	1,000	1,000	1,000	291	709	66	643	34	15	0	0.00	36	3	0
9	2024			0	1,000	1,000	1,000	327	673	69	604	32	14	0	0.00	36	3	0
10	2025			0	1,000	1,000	1,000	364	636	72	564	30	13	0	0.00	36	3	0
11	2026			0	1,000	1,000	1,000	400	600	75	525	29	12	0	0.00	36	3	0
12	2027			0	1,000	1,000	1,000	436	564	78	485	26	11	0	0.00	36	3	0
13	2028			0	1,000	1,000	1,000	473	527	82	446	23	10	0	0.00	36	3	0
14	2029			0	1,000	1,000	1,000	509	491	85	406	21	9	0	0.00	36	3	0
15	2030			0	1,000	1,000	1,000	545	455	88	367	19	9	0	0.00	36	3	0
16	2031			0	1,000	1,000	1,000	582	418	91	327	17	8	0	0.00	36	3	0
17	2032			0	1,000	1,000	1,000	618	382	94	288	15	7	0	0.00	36	3	0
18	2033			0	1,000	1,000	1,000	655	345	97	248	13	6	0	0.00	36	3	0
19	2034			0	1,000	1,000	1,000	691	309	100	209	11	5	0	0.00	36	(5)	0
20	2035			0	1,000	1,000	1,000	727	273	99	173	9	4	0	0.00	36	(14)	0
21	2036			0	1,000	1,000	1,000	764	236	90	147	8	3	0	0.00	36	(14)	0
22	2037			0	1,000	1,000	1,000	800	200	76	124	7	3	0	0.00	36	(14)	0
23	2038			0	1,000	1,000	1,000	836	164	62	102	5	2	0	0.00	36	(14)	0
24	2039			0	1,000	1,000	1,000	873	127	48	79	4	2	0	0.00	36	(14)	0
25	2040			0	1,000	1,000	1,000	909	91	35	56	3	1	0	0.00	36	(14)	0
26	2041			0	1,000	1,000	1,000	945	55	21	34	2	1	0	0.00	36	0	0
27	2042			0	1,000	1,000	1,000	964	36	14	23	1	1	0	0.00	0	0	0
28	2043			0	1,000	1,000	1,000	0	1,000	14	986	52	23	0	0.00	0	0	0
29	2044	1,000		0	1,000	1,000	1,000	0	1,000	14	986	52	23	0	0.00	964	14	0

Income Taxes	Property Taxes	Revenue Req.	PV Revenue Req.	PV of Book Deprac.	PV of Equity Return	PV of Debt Return	PV of AFUDC	PV of Operating Expenses	PV of Property Taxes	PV of Def. Taxes	PV of Income Taxes
8	0	71	71	18	26	11	0	0	0	0	8
17	11	149	140	34	47	21	0	0	9	13	16
17	11	144	127	32	42	18	0	0	10	10	15
18	11	139	115	30	37	16	0	0	9	8	15
18	11	134	104	28	33	15	0	0	8	6	14
18	11	130	94	26	29	13	0	0	8	5	13
19	11	125	85	25	26	11	0	0	7	3	13
19	11	121	77	23	23	10	0	0	7	2	12
18	11	116	69	22	20	9	0	0	6	2	10
16	11	112	63	20	18	8	0	0	6	2	9
15	11	108	56	19	16	7	0	0	5	2	8
14	11	104	51	18	14	6	0	0	5	2	7
12	11	99	46	17	12	5	0	0	5	1	6
11	11	95	41	16	10	4	0	0	5	1	5
10	11	91	37	15	9	4	0	0	4	1	4
9	11	86	33	14	7	3	0	0	4	1	3
7	11	82	29	13	6	3	0	0	4	1	3
6	11	78	26	12	5	2	0	0	3	1	2
5	11	74	23	11	4	2	0	0	3	1	2
4	11	69	20	11	3	1	0	0	3	1	1
11	11	66	18	10	2	1	0	0	3	(1)	3
19	11	63	16	9	2	1	0	0	3	(4)	5
18	11	60	14	9	2	1	0	0	3	(3)	4
17	11	58	13	8	1	1	0	0	2	(3)	4
16	11	55	12	8	1	0	0	0	2	(3)	3
15	11	53	10	7	1	0	0	0	2	(3)	3
1	11	51	9	7	0	0	0	0	2	0	0
1	11	49	8	6	0	0	0	0	2	0	0
32	11	47	7	5	0	0	0	0	2	0	0
32	11	44	6	4	0	0	0	0	2	0	0
436	305	2,780	1,435	460	410	182	0	0	133	51	200
Levelized Annual Revenue Requirement:											
As % of Original Cost: 11.56%											
116											
0.00%											
0.00%											
1.07%											
0.41%											
11.56%											

Salvage	BOY		EOY		Avg. Acc. Deferred Taxes	Accum. Deferred Taxes	Tax	MACRS Half Year						
	Deferred Taxes	Accum. Deferred Taxes	Accum. Deferred Taxes	Avg. Acc. Deferred Taxes				3-year	5-year	7-year	10-year	15-year	20-year	
0	0	0	0	0	0	0	1.82%	33.33%	20.00%	14.29%	10.00%	5.00%	3.75%	
0	14	7	21	14	14	7	3.64%	44.45%	32.00%	24.49%	18.00%	9.50%	7.22%	
0	12	21	32	27	27	21	3.64%	14.81%	19.20%	17.49%	14.40%	8.55%	6.68%	
0	10	32	42	37	37	32	3.64%	7.41%	11.52%	12.49%	11.52%	7.70%	6.18%	
0	8	42	50	46	46	42	3.64%	5.71%	8.93%	8.93%	9.22%	6.23%	5.71%	
0	6	50	56	53	53	50	3.64%	5.29%	5.76%	8.93%	7.37%	6.23%	5.29%	
0	5	56	61	59	59	56	3.64%	4.89%	4.46%	8.93%	6.55%	5.90%	4.89%	
0	3	61	64	63	63	61	3.64%	4.52%	4.46%	4.46%	6.55%	5.90%	4.52%	
0	3	64	67	66	66	64	3.64%	4.46%	4.46%	4.46%	6.55%	5.90%	4.46%	
0	3	67	71	69	69	67	3.64%	4.46%	4.46%	4.46%	6.55%	5.90%	4.46%	
0	3	71	74	72	72	71	3.64%	4.46%	4.46%	4.46%	6.55%	5.90%	4.46%	
0	3	74	77	75	75	74	3.64%	4.46%	4.46%	4.46%	6.55%	5.90%	4.46%	
0	3	77	80	78	78	77	3.64%	4.46%	4.46%	4.46%	6.55%	5.90%	4.46%	
0	3	80	83	82	82	80	3.64%	4.46%	4.46%	4.46%	6.55%	5.90%	4.46%	
0	3	83	86	85	85	83	3.64%	4.46%	4.46%	4.46%	6.55%	5.90%	4.46%	
0	3	86	89	88	88	86	3.64%	4.46%	4.46%	4.46%	6.55%	5.90%	4.46%	
0	3	89	93	91	91	89	3.64%	4.46%	4.46%	4.46%	6.55%	5.90%	4.46%	
0	3	93	96	94	94	93	3.64%	4.46%	4.46%	4.46%	6.55%	5.90%	4.46%	
0	3	96	99	97	97	96	3.64%	4.46%	4.46%	4.46%	6.55%	5.90%	4.46%	
0	3	99	102	100	100	99	3.64%	4.46%	4.46%	4.46%	6.55%	5.90%	4.46%	
0	(5)	102	97	99	99	102	3.64%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
0	(14)	97	83	90	90	97	3.64%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
0	(14)	83	69	76	76	83	3.64%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
0	(14)	69	55	62	62	69	3.64%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
0	(14)	55	41	48	48	55	3.64%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
0	(14)	41	28	35	35	41	3.64%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
0	(14)	28	14	21	21	28	3.64%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
0	0	14	14	14	14	14	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
0	0	14	14	14	14	14	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
0	0	14	14	14	14	14	96.36%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	

**Northern States Power Company
Electric Utility - State of North Dakota
Derivation of Seasonal Loss Factors**

50%

ENERGY LOSS FACTORS

(1) Summer On Peak	0.9446	0.9723
(2) Summer Off Peak	0.9511	0.9756
(3) Summer Average	0.9473	0.9737
(4) Winter On Peak	0.9414	0.9707
(5) Winter Off Peak	0.9477	0.9739
(6) Winter Average	0.9470	0.9735

DEMAND LOSS FACTOR

(7) Annual Average	0.9348	0.9674
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Source:
Information provided by Xcel Energy Load Research Dept.