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May 23, 2018

Darrell Nitschke, Executive Secretary
North Dakota Public Service Commission
State Capitol Building, Dept. 408
600 East Boulevard
Bismarck, ND 58505-0480

Re: 2017 REPORTS OF REGULATED EARNINGS FOR XCEL ENERGY'S
NORTH DAKOTA ELECTRIC AND NATURAL GAS OPERATIONS

Dear Mr. Nitschke:

Attached are electronic versions of Xcel Energy's Annual Reports of 2017 regulated earnings for our electric and natural gas operations in North Dakota. Also included for your reference are the 2017 Shareholder's Annual Report and a copy of Northern States Power Company–Minnesota's 2015 FERC Form 1. One original and two copies of each report will be sent by mail under this cover letter to the Commission.

North Dakota Electric Earnings

The Company's regulated electric earnings in 2017 resulted in a Return on Equity (ROE) of 10.52 percent. This reflects an increase in jurisdictional earnings compared to the 9.14 percent reported for 2016. The increase is due primarily to a lower allocation of energy production and transmission costs resulting from a lower contribution by North Dakota load to the company's system-wide monthly peaks.

Normalizing for less than favorable weather, electric ROE in 2017 increased to 10.91 percent, which exceeds the authorized level of 10.25 percent. Per provisions of the First Revised Negotiated Agreement approved in Case No. PU-12-813, the Company is obligated to refund 100 percent of the revenues contributing to the excess earnings, or \$2,983,461. The Company intends to work with Staff to develop and propose an efficient and timely refund plan in the coming weeks.

North Dakota Natural Gas Earnings

The Company's regulated natural gas earnings in 2017 resulted in an ROE of 8.13 percent. This reflects an increase in jurisdictional earnings compared to the 4.62

percent reported for 2016. The increase is due primarily to customer growth, increased natural gas usage, and lower O&M expenses. The Company's authorized ROE for natural gas is 10.75 percent, approved June 13, 2007 in Case No. PU-06-525.

Please contact me if you have any questions or comments.

Sincerely,



DAVID H. SEDERQUIST
SR. CONSULTANT, REGULATION/FINANCE

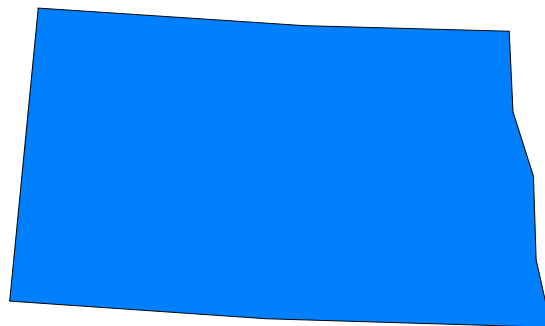
c: Patrick Fahn

Enclosures

ANNUAL REPORT
OF
NORTHERN STATES POWER COMPANY
(A MINNESOTA CORPORATION)
TO THE
NORTH DAKOTA PUBLIC SERVICE COMMISSION

FOR THE YEAR ENDING
DECEMBER 31, 2017

Electric Utility
North Dakota Jurisdiction



2017

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Northern States Power Company

Electric Utility - North Dakota

(Dollars In Thousands)

I. RETURN ON EQUITY (ROE)

<u>Actual Return on Equity (ROE)</u>	<u>2017</u>	<u>2016</u>
1 Operating Income from Electric Operations (E-2):	\$41,670	\$38,025
2 Average Regulated Rate Base (E-3):	\$539,153	\$540,927
3 Rate of Return on Rate Base (ROR) (line 1 / line 2):	7.73%	7.03%
4 Weighted Cost of Debt (E-4):	2.20%	2.22%
5 Weighted Cost of Preferred Stock (E-4):	0.00%	0.00%
6 % of Equity in Capital Structure (E-4):	52.54%	52.61%
7 Return on Equity (ROE):	10.52%	9.14%

<u>ROE, Normalized for Weather Impact on Sales</u>	<u>2017</u>	<u>2016</u>
8 Operating Income from Electric Operations:	\$41,670	\$38,025
9 Impact of weather on Mwh Sales:	(30,418)	(39,549)
10 Impact of weather on Electric Operating Income: ¹	(\$1,079)	(\$1,262)
11 Weather-Normalized Operating Income:	\$42,749	\$39,287
12 Average Regulated Rate Base:	\$538,778	\$540,489
13 Weather-Normal Rate of Return on Rate Base (ROR):	7.93%	7.27%
14 Weather-Normalized Return on Equity (ROE):	10.91%	9.60%

¹ The weather impact estimate reflects adjustments to both electric demand and sales

Northern States Power Company

Electric Utility - North Dakota

(Dollars In Thousands)

II. OPERATING INCOME

<u>Line</u>	<u>Item</u>	<u>2017</u> <u>Total NSP</u>	<u>2017</u> <u>N.D. Juris.</u>	<u>N. D. %</u>	<u>2016</u> <u>N.D. Juris.</u>	<u>Annual</u> <u>Change</u>
<u>Operating Revenues:</u>						
1	Residential	1,352,226	80,013	5.9%	78,298	2.2%
2	Small Comm. & Ind.	1,541,292	99,278	6.4%	98,996	0.3%
3	Large Comm. & Ind.	692,058	26,996	3.9%	26,257	2.8%
4	Public Street & Highway Ltg	25,662	1,625	6.3%	1,603	1.4%
5	Other Sales to Publ Auth	<u>9,688</u>	<u>1,356</u>	<u>14.0%</u>	<u>1,360</u>	<u>-0.3%</u>
	Total Retail	3,620,926	209,268	5.8%	206,514	1.3%
6	Interdepartmental	659	0	0.0%	0	*
7	Sales for Resale	80,528	5,462	6.8%	5,157	5.9%
8	Interchange Agreement	485,391	29,853	6.2%	29,717	0.5%
9	Other	<u>284,705</u>	<u>16,506</u>	<u>5.8%</u>	<u>16,320</u>	<u>1.1%</u>
10	Total Revenues:	4,472,209	261,089	5.8%	257,708	1.3%
<u>Operating Expenses:</u>						
11	Fuel & Purchased Energy	1,128,192	69,341	6.1%	68,499	1.2%
12	Production	721,685	43,450	6.0%	46,977	-7.5%
13	Transmission	366,682	21,833	6.0%	21,953	-0.5%
14	Distribution	110,677	6,201	5.6%	6,886	-10.0%
15	Customer Billing	55,415	3,319	6.0%	3,307	0.3%
16	Customer Service	106,677	321	0.3%	68	374.6%
17	Sales & Marketing	5	0	5.6%	0	214.1%
18	Admin. & General	246,550	16,077	6.5%	15,380	4.5%
19	Depreciation & Amortization	609,163	35,910	5.9%	33,004	8.8%
20	Property Taxes	196,555	10,117	5.1%	10,367	-2.4%
21	Payroll & Other Taxes	30,900	1,941	6.3%	1,875	3.5%
22	Income Taxes	0	0	*	0	*
23	Deferred Income Taxes & ITC	<u>199,255</u>	<u>10,909</u>	<u>5.5%</u>	<u>11,367</u>	<u>-4.0%</u>
24	Total Expenses:	3,771,756	219,419	5.8%	219,683	-0.1%
25	Regulated Operating Income	700,454	41,670	5.9%	38,025	9.6%

Northern States Power Company
Electric Utility - North Dakota

(Dollars In Thousands)

III. AVERAGE RATE BASE

<u>Line</u>	<u>Item</u>	<u>2017</u> <u>Total NSP</u>	<u>2017</u> <u>N.D. Juris.</u>	<u>N. D. %</u>	<u>2016</u> <u>N.D. Juris.</u>	<u>Annual</u> <u>Change</u>
1	Plant in Service	19,899,931	1,151,095	5.8%	1,135,600	1.4%
2	Accumulated Depreciation	<u>8,713,090</u>	<u>504,071</u>	<u>5.8%</u>	<u>490,686</u>	<u>2.7%</u>
3	Net Plant in Service	11,186,841	647,024	5.8%	644,914	0.3%
4	Plant Held for Future Use	0	0	*	0	*
5	Construct Work in Progress	50,440	3,054	6.1%	2,719	12.3%
6	Materials and Supplies	213,433	12,754	6.0%	12,870	-0.9%
7	Fuel Stocks	91,319	5,902	6.5%	5,771	2.3%
8	Prepayments & Other Rate Base	128,435	5,255	4.1%	5,865	-10.4%
9	Customer Deposits	(94,837)	(98)	0.1%	(146)	-32.8%
10	Cash Working Capital	0	0	*	0	*
11	Other Rate Base ¹	23,544	2,817	12.0%	1,125	150.4%
12	Accum. Deferred Taxes	<u>(2,482,091)</u>	<u>(137,555)</u>	<u>5.5%</u>	<u>(132,191)</u>	<u>4.1%</u>
13	Total Other Rate Base	<u>(2,069,757)</u>	<u>(107,871)</u>	<u>5.2%</u>	<u>(103,987)</u>	<u>3.7%</u>
14	Total Average Rate Base	9,117,084	539,153	5.9%	540,927	-0.3%

¹ Includes deferred assets and liabilities such as accrued vacations, post-retirement medical benefits (FASB 106), post-employment benefits (FASB 112), unfunded pension liability, environmental cleanup, severance accrual, etc.

Northern States Power Company

Electric Utility - North Dakota

(Dollars In Thousands)

IV. COST OF CAPITAL

2017 Actual

<u>Line</u>	<u>Item</u>	<u>Amount</u>	<u>% of Total</u>	<u>Cost</u>	<u>Weighted Cost</u>
1	Long-Term Debt	\$4,829,106	46.47%	4.70%	2.18%
2	Short-Term Debt	<u>\$103,333</u>	<u>0.99%</u>	<u>1.71%</u>	<u>0.02%</u>
3	Total Debt	\$4,932,439	47.46%	4.64%	2.20%
4	Preferred Stock	\$0	0.00%	0.00%	0.00%
5	Common Equity	<u>\$5,459,858</u>	<u>52.54%</u>	<u>10.52%</u>	5.53%
6	Total Equity	\$5,459,858	52.54%		
7	Total Capital	\$10,392,297	100.00%		7.73%

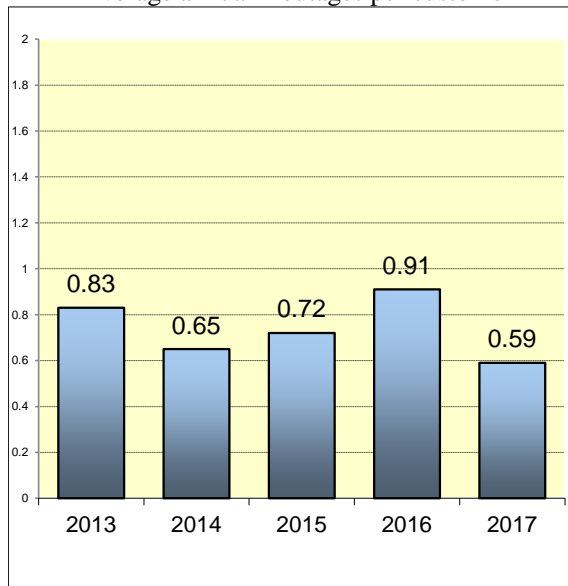
2017 Normalized

<u>Line</u>	<u>Item</u>	<u>Amount</u>	<u>% of Total</u>	<u>Cost</u>	<u>Weighted Cost</u>
8	Long-Term Debt	\$4,829,106	46.47%	4.70%	2.18%
9	Short-Term Debt	<u>\$103,333</u>	<u>0.99%</u>	<u>1.71%</u>	<u>0.02%</u>
10	Total Debt	4,932,439	47.46%	4.64%	2.20%
11	Preferred Stock	\$0	0.00%		0.00%
12	Common Equity	<u>\$5,459,858</u>	<u>52.54%</u>	<u>10.91%</u>	5.73%
13	Total Equity	\$5,459,858	52.54%		
14	Total Capital	\$10,392,297	100.00%		7.93%

**Northern States Power Company
Electric Utility - North Dakota
Outage Frequency and Duration Indices - 2017**

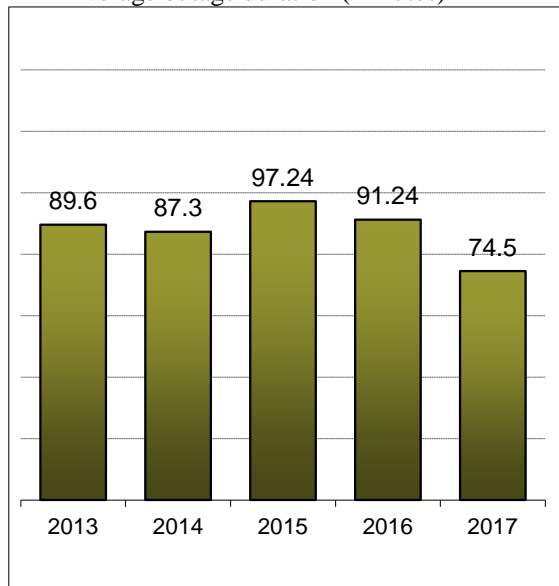
**System Avg Interruption Frequency Index
(SAIFI)**

Average annual # outages per customer



**Customer Avg Interruption Duration Index
(CAIDI)**

Average outage duration (minutes)



SAIFI (Interruption Frequency) - Largest Five Substations

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>5 Yr. Avg</u>
Cass County (Fgo)	0.90	0.36	0.42	0.56	0.42	0.53
Nordic (GF)	0.58	0.41	0.88	0.51	0.30	0.54
Souris (Mnt)	1.08	0.40	0.44	0.75	1.04	0.74
Red River (Fgo)	0.86	0.78	0.93	1.29	0.56	0.88
Gateway (GF)	0.54	1.74	0.62	1.60	0.36	0.97

CAIDI (Interruption Duration) - Largest Five Substations

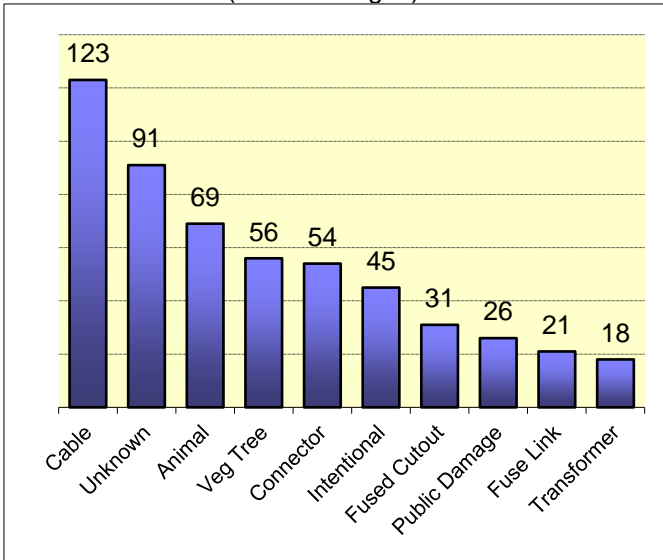
	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>5 Yr. Avg</u>
Gateway (GF)	100.3	54.9	75.1	71.5	79.7	76.3
Souris (Mnt)	72.4	80.5	166.3	67.1	52.9	87.8
Red River (Fgo)	88.7	88.7	75.8	98.2	91.9	88.7
Nordic (GF)	104.7	97.6	98.8	115.0	98.6	102.9
Cass County (Fgo)	109.3	158.7	104.7	120.9	72.2	113.2

Data reflects normalized outages lasting 5 minutes or longer. In 2017 two Major Event Days (June 13 and December 17) were excluded.

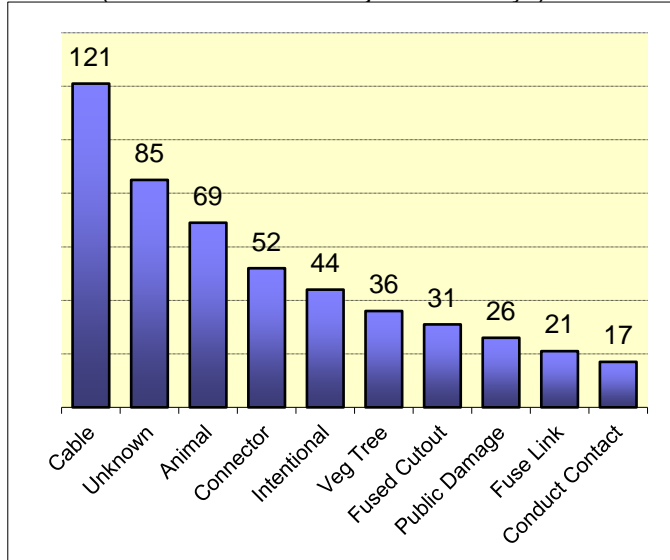
**Northern States Power Company
Electric Utility - North Dakota
Most Common Outage Causes - 2017**

Top 10 Outage Causes

(Actual outages)



(Normalized - excl. Major Event Days)

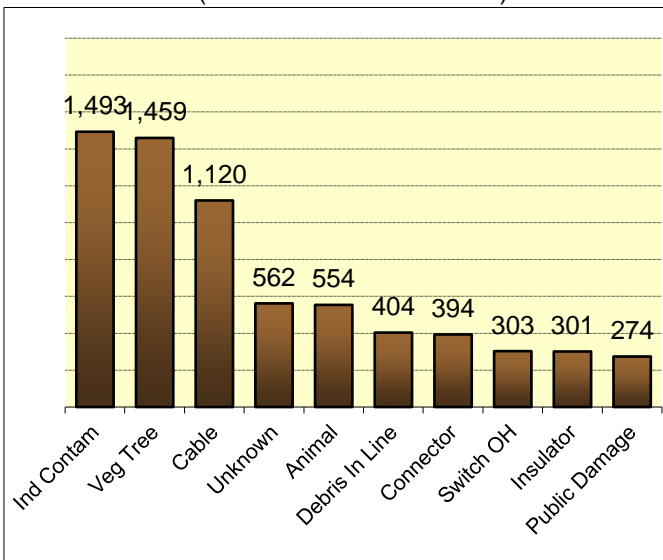


Total outage events: 647

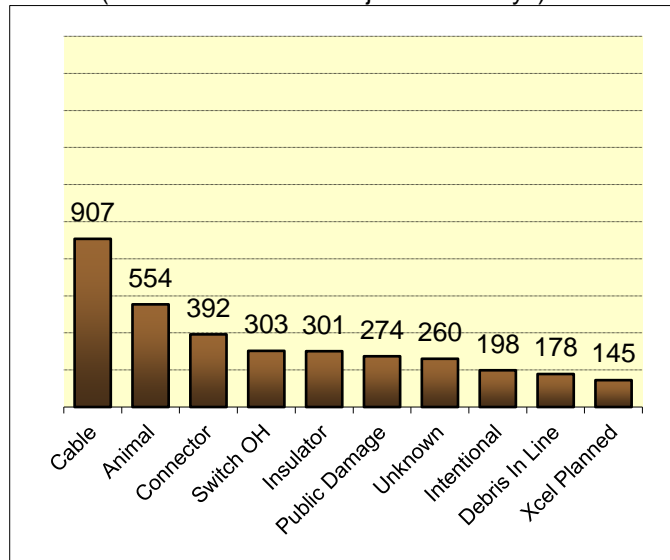
Top 10 Causes of Lengthy or Wide-spread Interruptions

(measured in customer-minutes without power - 000's)

(Actual customer-minutes)



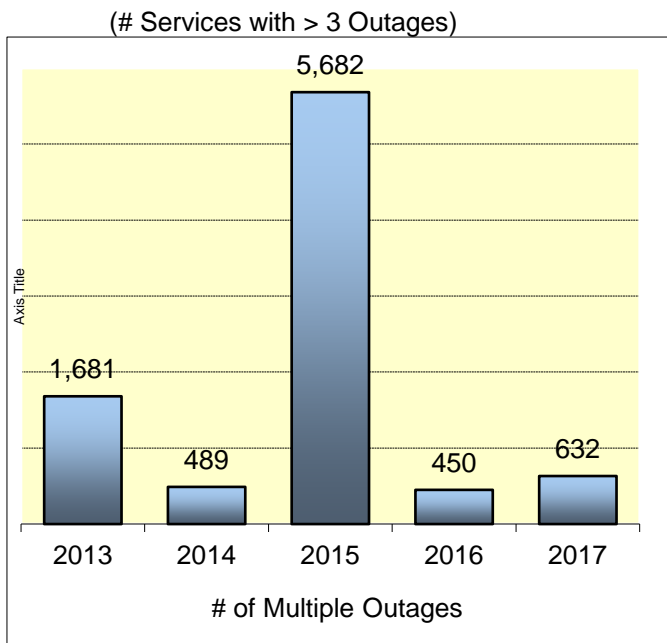
(Normalized - excl. Major Event Days)



Note: Date reflects outages lasting 5 minutes or longer.

**Northern States Power Company
Electric Utility - North Dakota
CEMI, Feeder Outages, and Underground Cable Failures - 2017**

Customers Experiencing Multiple Interruptions (CEMI)



Breakdown of 2016 CEMI Levels

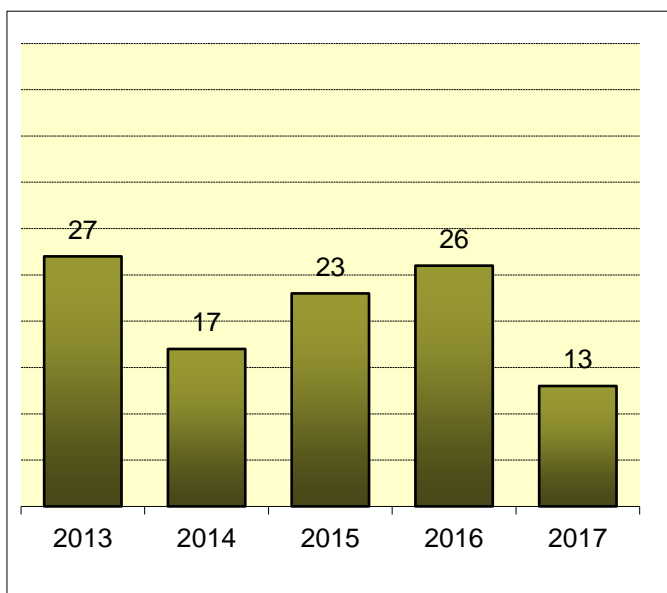
Outages Customers

4	267
5	288
6+	<u>77</u>
	632

CEMI Credits Issued

2013	\$84,050
2014	\$24,650
2015	\$284,100
2016	\$22,350
2017	\$31,600

Feeder-Level Outages



Underground Cable Failures

<u>Year</u>	<u>UG Cable Failures</u>
2013	159
2014	155
2015	147
2016	143
2017	123

(reflects primary, secondary cable failures)

Data reflects outages lasting 5 minutes or longer; Major Event Days (June 13 and Dec 17) and public damage events are excluded.

**Northern States Power Company
Electric Utility - North Dakota
Reliability Performance Plan Results**

A. SAIDI (System Average Interruption Duration Index)

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
1 Excellence Threshold (minutes):	57.0	57.0	57.0	57.0	57.0
2 Actual SAIDI Result (minutes):	74.3	57.1	69.7	83.0	43.7
3 Base Award:	\$0	\$0	\$0	\$0	\$250,000
4 Authorized Return on Equity:	9.75%	10.00%	10.00%	10.25%	10.25%
5 Actual Return on Equity:	10.08%	8.99%	8.15%	9.14%	10.52%
6 Revenue Deficiency:	\$0	\$3,910,149	\$8,121,692	\$5,047,170	\$0
7 Final SAIDI Award:	\$0	\$0	\$0	\$0	\$250,000

B. CEMI (Customers Experiencing Multiple Interruptions)

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
8 # Customers receiving credits:	1,681	489	5,682	450	632
9 Total CEMI Payout:	\$84,050	\$24,650	\$284,100	\$22,350	\$31,600

C. Reliability Satisfaction Survey

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016*</u>	<u>2017</u>
10 % Customers Rating "Positive" (6-10):	97%	98%	98%	95%	88%
11 % Customers Rating "Excellent" (8-10):	86%	88%	91%	82%	83%

* 2016 survey results are based on an extrapolation of XE Relationship scores using JDPower survey results, and are not directly comparable to past results. The Company stopped conducting its "relationship" surveys in 2015.

Xcel Energy
Electric Utility – State of North Dakota
2018 Reliability Plan Summary

Overhead System Upgrades – 2018 Budget: \$1,780,000

Xcel Energy’s electric overhead system capital budget includes replacing failed devices, installing upgrades so the “backbone system” can continue to serve new customers, and making improvements to enhance reliability. This budget funds maintenance of our Reliability Exception Monitoring System (“REMS”), a computer outage tracking and reporting system. The REMS prompts engineering reviews of our system by flagging devices that have tripped more than twice in a rolling 12 month period. Following such a review, corrective actions are identified and implemented where appropriate.

These funds also reflect efforts to expand automation, add lightning arresters, and mitigate pole fires as part of the 2016-18 reliability enhancement plan (see below).

Distribution pole testing is also performed on our ND system. Xcel Energy’s pole replacement plan includes an O&M expense for testing 1,600 wood distribution poles in North Dakota. The testing methodology conforms to an industry standard procedure. If a pole is identified as having strength characteristics below acceptable standards, the pole is scheduled for replacement or reinforcement.

Underground System Upgrades - \$3,232,000

In 2018, Xcel Energy is continuing its efforts to upgrade its underground cable system in North Dakota. About \$480,000 will be spent replacing cables that have failed but for which repairs are not a viable option.

Underground system upgrades also reflect the Company’s accelerated efforts to locate and remove all existing non-jacketed 500 MCM cable. This effort began as part of an initial 3 year (2012-2014) program committed to in a prior Settlement (Case No. PU-10-657). In a more recent rate Settlement (Case No. PU-12-813) the project timeline was extended. In 2016, the company outlined a 3-year reliability enhancement plan to complete the removal (see below).

2016-18 Reliability Enhancement Plan - \$5,300,000 (3 year total)

In 2018 the Company will complete implementation of its 2016-18 reliability enhancement commitment to the NDPSC. The plan includes: 1) Complete removal of known non-jacketed 500 MCM underground cable, 2) doubling the number of Intelliteam switches (to 50) in ND, 3) retrofitting a strategic set of poles with fiberglass cross-arms and taller, polymer insulators to harden the system and combat pole fires, and 4) strategically installing additional pole top and 3-phase lightning arrester sets on mainline feeders in Fargo, Grand Forks, and Minot.

Northern States Power Company

Electric Utility - North Dakota

I. SALES AND CUSTOMER DATA

Electric Utility (N. D. Jurisdiction)

<u>Line</u>	<u>Customers (@ Dec)</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
1	Residential	80,985	80,623	80,245	79,206	78,156
2	Small C & I	12,753	12,746	12,705	12,475	12,317
3	Large C & I	23	24	22	18	20
4	PSHL/OSPA	<u>391</u>	<u>375</u>	<u>351</u>	<u>342</u>	<u>330</u>
5	Total Retail	94,152	93,768	93,323	92,041	90,823
<u>Line</u>	<u>Mwh Sales</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
6	Residential	753,332	744,260	770,530	818,018	827,062
7	Small C & I	1,061,226	1,077,523	1,099,372	1,117,581	1,108,370
8	Large C & I	365,348	362,964	349,571	335,058	335,530
9	PSHL/OSPA	<u>27,578</u>	<u>27,992</u>	<u>28,450</u>	<u>29,944</u>	<u>30,582</u>
10	Total Retail	2,207,484	2,212,739	2,247,923	2,300,601	2,301,544
11	Ave. ¢/Kwh	9.43¢	9.28¢	9.59¢	9.08¢	8.86¢
12	Ave. Res. Mo. Usage (kwh)	775	769	800	861	882
13	Ave. Res. Monthly Bill	\$81.98	\$80.49	\$85.59	\$86.01	\$86.26

Northern States Power Company Electric Utility - North Dakota

II. AFFILIATED TRANSACTION SUMMARY

			North Dakota Jurisdiction Electric and Gas Totals (1)	
			Expense (2)	Revenue (3)
Affiliate Name	Services Rendered			
1	NSP Wisconsin	Electric and Gas Utility	10,684,143	30,733,713
2	Public Service of Colorado	Electric and Gas Utility	25,879	13,225
3	Southwestern Public Service	Electric Utility	7,116	6,691
4	Hayden Joint Venture	Electric Utility	-	-
5	Xcel Energy Services	Xcel Energy Inc. Service Company	101,209,097	62,232,647
6	Xcel Energy, Inc.	Engineering services	(16,500,924)	509
			95,425,312	92,986,785

Notes:

- (1) The amounts allocated to North Dakota electric and gas jurisdictions represent an estimate based on an overall allocation factor applied to the revenues and expenses for each affiliate. To derive the actual amounts by jurisdiction would require an allocation of each transaction by account number and would require significant analysis and expense to perform.
- (2) Expense to North Dakota electric and gas jurisdictions. Revenue to affiliate for services provided to NSP (MN)
- (3) Revenue to North Dakota electric and gas jurisdictions. Expense to the affiliate for services provided to the affiliate by NSP (MN).

Northern States Power Company Electric Utility - North Dakota

III. AFFILIATED TRANSACTION ALLOCATION DETAIL

	<u>Total Expense</u>	<u>Total Revenue</u>	<u>Elec %</u>	<u>Gas %</u>	<u>ND Elec % (Customers)</u>	<u>ND Gas % (Customers)</u>
NSP Wisconsin	\$ 588,837	\$ 8,704,284	92.4276%	7.5724%	6.4072%	10.9326%
PSCo	403,906	206,404	100.0000%	0.0000%	6.4072%	0.0000%
SPS	111,068	104,432	100.0000%	0.0000%	6.4072%	0.0000%
Hayden Joint Venture	0	0				
XES	1,499,420,384	921,981,349	92.4276%	7.5724%	6.4072%	10.9326%
XEI	(257,537,214)	7,951	100.0000%	0.0000%	6.4072%	0.0000%
	<u>\$ 1,242,986,981</u>	<u>\$ 931,004,420</u>				

Notes:

Allocation of Revenues & Expenses between NSP Minnesota and Affiliates

Common Allocation Method: Labor

	<u>Electric</u>	<u>Gas</u>		
Utility Labor Allocator	92.4276%	7.5724%	Load Dispatch	11.5032%
ND Jur. Customer Allocator	6.4072%	10.9326%	Design Day	12.0160%

Factor Formula: ((Util Elec)*ND Jur Ele)+((Util Gas)*ND Jur Gas) = 6.7499%

Affiliated Transactions between Minnesota and Wisconsin (Interchange Agreement)

	<u>Total Revenue</u>	<u>ND Alloc.</u>	<u>Total Expense</u>	<u>ND Alloc.</u>	<u>Alloc Method</u>	<u>ND Alloc %</u>
Fixed	\$237,479,540	\$14,140,007	\$48,769,506	\$2,903,834	Demand	5.9542%
Variable	\$187,264,280	\$12,102,141	\$18,006,880	\$1,163,713	Energy	6.4626%
Transmission	\$65,477,314	\$3,898,650	\$110,457,340	\$6,576,851	Demand	5.9542%
Electric Total	\$490,221,134	\$30,140,798	\$177,233,726	\$10,644,397		

Gas SCADA Agreement

	<u>Total Rev</u>	<u>ND Alloc.</u>	<u>Alloc Method</u>	<u>ND Alloc %</u>
SCADA	46,824	5,386	Load Dispatch	11.5032%