


Memorandum

To: Commissioners Randy Christmann, Julie Fedorchak and Brian Kroshus

From: Victor Schock - Public Utility Analyst 

Date: November 30, 2018

Re: Northern States Power Company, 2017 Natural Gas, Annual Report

Case No. PU-18-189

I recommend the commission close the above captioned case, which is the North Dakota annual report filing for 2017. I will include a motion to close the case on the December 19, 2018 agenda.

Northern States Power Company (NSP) provides natural gas service to approximately 56,608 customers in North Dakota. Staff has reviewed NSP's annual report filing for 2017. NSP's actual return on equity was 8.14% in 2017. The commission authorized a rate of return of 10.75% in the most recent rate case (PU-06-525). With that in mind, NSP under earned by about \$1.2M in 2017. When considering the impact of weather, NSP would have under earned by about \$1M, or earned an approximate 8.75% return on equity, had it been a 'normal' year.

Staff believes the under earning was caused by lower usage and increased infrastructure investments. The lower usage appears to be the result of a warmer winter. The average rate base for 2017 was \$54.9M, which is approximately \$11M higher than the rate base at the time of their last rate case in 2006.

Seeing that the under earning is relatively small and not causing a company stability problem, staff sees no reason to further investigate and recommends that the commission close the above captioned case. Attached are staff generated summaries of NSP ND natural gas earnings for the last ten years.

Attachment 1 – Return Calculation

Attachment 2 – Return on Equity Chart

Attachment 3 – Net Operating Income

C: Dave Sederquist, NSP

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Memorandum

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Public Service Commission

Victor Schock

Northern States Power Company
 Gas Utility - North Dakota
 Return Calculation
 (Dollars in Thousands)

Line	Return Deficiency	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1	Rate Base	\$43,945	\$45,474	\$42,186	\$41,301	\$41,871	\$40,626	\$43,432	\$48,341	\$50,287	\$52,816	\$54,993
2	Rate of Return Required	7.75%	8.70%	8.68%	8.58%	8.55%	8.28%	7.95%	7.92%	7.92%	7.87%	7.85%
3	Return Required	\$3,847	\$3,956	\$3,660	\$3,543	\$3,578	\$3,365	\$3,453	\$3,827	\$3,983	\$4,158	\$4,316
4	Return Earned	3,133	4,122	3,238	3,679	4,172	3,719	3,851	4,224	3,219	2,456	3,561
5	Return Deficiency/(Excess)	\$714	(\$166)	\$422	(\$136)	(\$594)	(\$354)	(\$398)	(\$397)	\$764	\$1,702	\$755
6	Tax Factor	1.6454	1.6454	1.6437	1.6437	1.6220	1.6220	1.6220	1.6115	1.6078	1.6041	1.5985
7	Rev. Deficiency/(Excess)	\$1,175	(\$273)	\$693	(\$224)	(\$963)	(\$574)	(\$645)	(\$639)	\$1,228	\$2,730	\$1,207
8	Impact of Weather	28	(200)	(126)	83	29	339	(251)	(186)	260	376	178
9	Norm. Deficiency/(Excess)	\$ 1,147	\$(73)	\$ 819	\$(307)	\$(992)	\$(913)	\$(394)	\$(453)	\$ 968	\$ 2,354	\$ 1,029

Return on Equity Calculation

10	Net Operating Income	\$ 3,133	\$ 4,122	\$ 3,238	\$ 3,679	\$ 4,172	\$ 3,719	\$ 3,851	\$ 4,224	\$ 3,219	\$ 2,456	\$ 3,561
11	Rate Base	43,945	45,474	42,186	41,301	41,871	40,626	43,432	48,341	50,287	52,816	54,993
12	Rate of Return on Rate Base	7.13%	9.06%	7.68%	8.91%	9.96%	9.15%	8.87%	8.74%	6.40%	4.65%	6.48%
13	Less: Cost of Debt	3.32%	3.24%	3.06%	2.99%	2.88%	2.61%	2.29%	2.23%	2.25%	2.22%	2.20%
14	Return Available for Common	3.81%	5.82%	4.62%	5.92%	7.08%	6.54%	6.58%	6.50%	4.15%	2.43%	4.27%
15	Common Equity Percentage	50.57%	50.77%	52.24%	52.00%	52.67%	52.78%	52.87%	52.87%	52.75%	52.61%	52.54%
16	Return on Equity (ROE)	7.54%	11.47%	8.84%	11.38%	13.44%	12.40%	12.49%	12.30%	7.87%	4.63%	8.14%

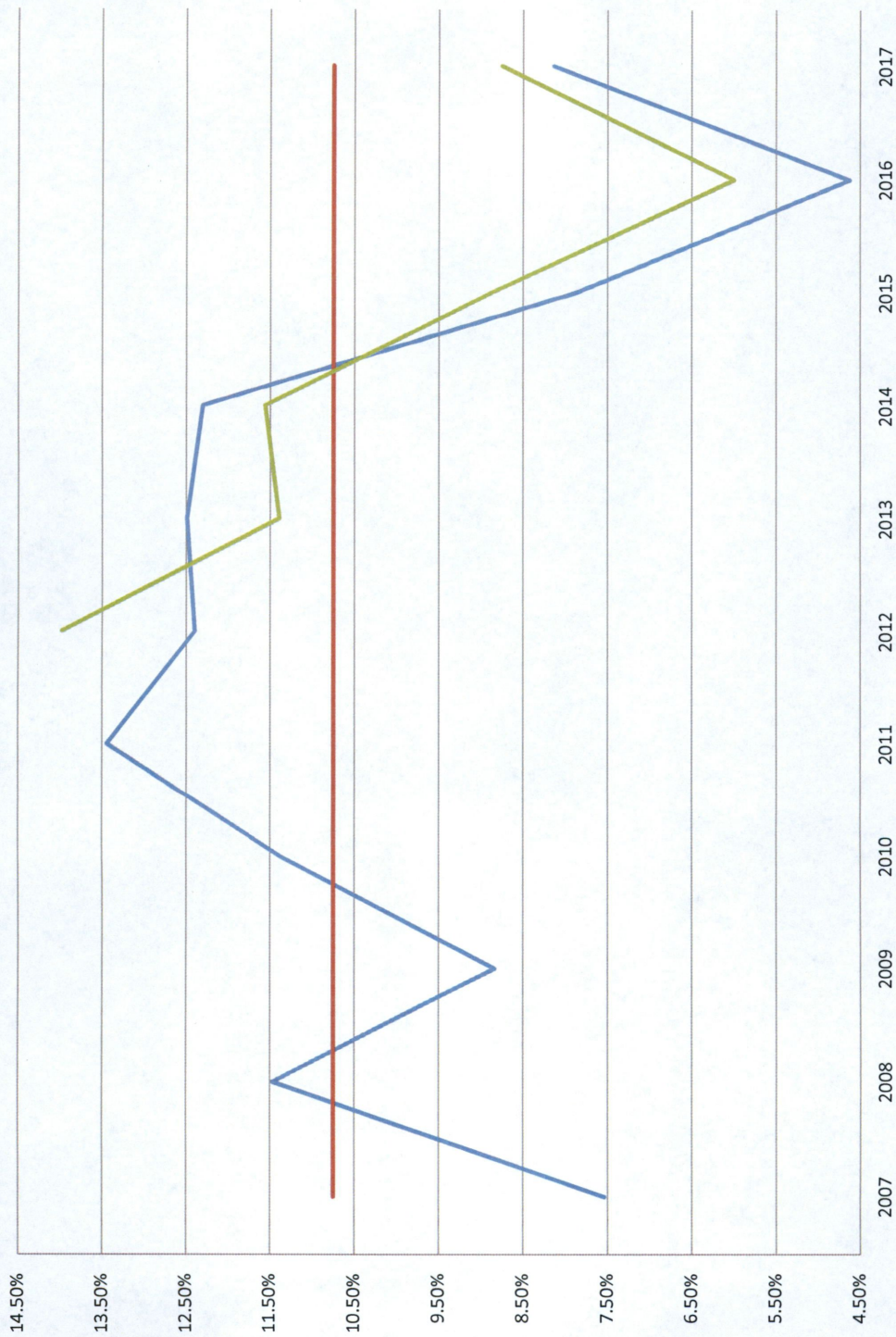
Weather Normalized ROE

17	Net Operating Income	\$ 3,133	\$ 4,122	\$ 3,238	\$ 3,679	\$ 4,172	\$ 3,719	\$ 3,851	\$ 4,224	\$ 3,219	\$ 2,456	\$ 3,561
18	Impact of Weather	28	(200)	(126)	83	29	339	(251)	(186)	260	376	178
19	Weather-Normalized NOI	\$3,161	\$3,922	\$3,112	\$3,762	\$4,201	\$4,058	\$3,600	\$4,038	\$3,479	\$2,832	\$3,739
20	Weather Adjusted ROE	7.66%	10.60%	8.26%	11.77%	13.57%	13.98%	11.39%	11.57%	8.85%	5.98%	8.75%

Reported Return on Equity
 Authorized Return on Equity
 Normalized Return on Equity

2007	7.54%	2008	11.47%	2009	8.84%	2010	11.38%	2011	13.44%	2012	12.40%	2013	12.49%	2014	12.30%	2015	7.87%	2016	4.63%	2017	8.14%
10.75%	10.75%	10.75%	10.75%	10.75%	10.75%	10.75%	10.75%	10.75%	10.75%	13.98%	10.75%	11.39%	10.75%	11.56%	10.75%	8.87%	10.75%	6.00%	10.75%	8.75%	

Return on Equity



Northern States Power Company
 Gas Utility - North Dakota
 Net Operating Income
 (Dollars In Thousands)

Removed cost of gas from calculations beginning in 2012

Line	Operating Revenues	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1	Residential	\$ 32,887	\$ 35,876	\$ 27,189	\$ 25,110	\$ 25,160	\$ 9,179	\$ 9,385	\$ 9,686	\$ 10,024	\$ 10,327	\$ 10,582
2	Firm C & I	37,842	42,760	32,043	27,965	28,549	6,691	7,951	8,464	7,986	7,824	8,561
3	Interruptible C & I	14,413	16,034	11,172	9,356	9,670	1,354	1,524	1,732	1,603	1,511	1,595
4	Transportation/Other	634	541	358	885	544	651	547	923	635	705	624
5	Total Revenues	\$ 85,776	\$ 95,211	\$ 70,762	\$ 63,316	\$ 63,923	\$ 17,876	\$ 19,407	\$ 20,805	\$ 20,248	\$ 20,367	\$ 21,362
6	Production	70,589	78,297	54,705	46,076	46,486	427	474	655	177	723	407
7	Gross Margins	\$ 15,187	\$ 16,914	\$ 16,057	\$ 17,240	\$ 17,437	\$ 17,449	\$ 18,933	\$ 20,150	\$ 20,071	\$ 19,644	\$ 20,955
8	Weather Normalized Margins	\$ 15,215	\$ 16,714	\$ 15,931	\$ 17,323	\$ 17,466	\$ 17,788	\$ 18,682	\$ 19,964	\$ 20,331	\$ 19,644	\$ 20,955
8	Transmission	69	82	121	177	147	176	229	228	444	321	348
9	Distribution	2,741	3,007	3,528	3,484	3,277	3,209	3,732	4,065	4,675	5,135	4,347
10	Customer Billing	1,779	1,795	1,715	1,610	1,624	1,512	1,493	1,543	1,527	1,162	1,140
11	Customer Service	312	283	234	255	261	234	262	271	270	133	161
12	Sales & Marketing	0	0	4	14	12	0	6	0	0	0	0
13	Admin. & General	1,996	1,854	1,898	1,948	1,910	2,022	2,135	2,216	2,334	2,483	2,772
14	Depreciation	2,890	3,022	3,141	3,317	3,428	3,503	3,589	4,312	4,982	5,404	5,383
15	Property Taxes	1,019	968	940	1,080	907	1,138	1,002	916	937	1,099	1,067
16	Franchise & Payroll Taxes	241	233	248	245	228	243	260	250	271	620	291
17	Inc. Taxes (Cur. & Def.)	1,007	1,548	990	1,431	1,471	1,693	2,374	2,125	1,412	831	1,885
18	Total Expenses	\$ 82,643	\$ 91,089	\$ 67,524	\$ 59,637	\$ 59,751	\$ 14,157	\$ 15,556	\$ 16,581	\$ 17,029	\$ 17,911	\$ 17,801
19	Net Operating Income	\$ 3,133	\$ 4,122	\$ 3,238	\$ 3,679	\$ 4,172	\$ 3,719	\$ 3,851	\$ 4,224	\$ 3,219	\$ 2,456	\$ 3,561
20	Income Tax Calculation	\$ 4,140	\$ 5,670	\$ 4,228	\$ 5,110	\$ 5,643	\$ 5,412	\$ 6,225	\$ 6,349	\$ 4,631	\$ 3,287	\$ 5,446
21	Net Inc before Inc. Taxes	\$ 43,945	\$ 45,474	\$ 42,186	\$ 41,301	\$ 41,871	\$ 40,626	\$ 43,432	\$ 48,341	\$ 50,287	\$ 52,816	\$ 54,993
22	Interest Deduction:	3,317%	3,242%	3,060%	2,988%	2,894%	2,609%	2,288%	2,234%	2,249%	2,216%	2,201%
23	Weighted Cost of Debt	\$ (1,458)	\$ (1,474)	\$ (1,291)	\$ (1,234)	\$ (1,207)	\$ (1,060)	\$ (994)	\$ (1,080)	\$ (1,131)	\$ (1,171)	\$ (1,210)
24	Interest Deduction	\$ (115)	\$ (249)	\$ (409)	\$ (222)	\$ (600)	\$ 63	\$ 1,025	\$ 331	\$ 235	\$ 82	\$ 751
25	Other Tax Adjustments	\$ 2,567	\$ 3,946	\$ 2,528	\$ 3,654	\$ 3,836	\$ 4,415	\$ 6,257	\$ 5,600	\$ 3,735	\$ 2,198	\$ 4,987
26	Taxable Income	\$ 39,225%	\$ 39,225%	\$ 39,160%	\$ 39,160%	\$ 38,348%	\$ 38,348%	\$ 37,945%	\$ 37,945%	\$ 37,802%	\$ 37,802%	\$ 37,802%
27	Combined Tax Rate	\$ 1,007	\$ 1,548	\$ 990	\$ 1,431	\$ 1,471	\$ 1,693	\$ 2,374	\$ 2,125	\$ 1,412	\$ 831	\$ 1,885
27	Income Tax Expense	\$ 4,140	\$ 5,670	\$ 4,228	\$ 5,110	\$ 5,643	\$ 5,412	\$ 6,225	\$ 6,349	\$ 4,631	\$ 3,287	\$ 5,446