

Memorandum

To: Commissioners Randy Christmann, Julie Fedorchak and Brian Kroshus

From: Victor Schock - Public Utility Analyst

VS

Date: May 22, 2017

Re: Northern States Power Company, 2016 Natural Gas, Annual Report

Case No. PU-17-185

I recommend the commission close the above captioned case, which is the North Dakota annual report filing for 2016. I will include a motion to close the case on the May 31, 2017 agenda.

Northern States Power Company (NSP) provides natural gas service to about 55,473 customers in North Dakota. Staff has reviewed NSP's annual report filing for 2016. NSP's actual return on equity was 4.63% in 2016. 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 \$2.3M in 2016. When considering the impact of weather, NSP would have under earned by about \$2M, or earned an approximate 6% 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 is partially due to an abnormally warm winter and partially to usage levels not raising as high as expected due to the slowdown in the Bakken. Total usage by Dekatherm in 2016 was lower than it has been since 2012 when NSP had 11% fewer natural gas customers, indicating that this reduced usage is likely due to more than a warm winter. The average rate base for 2016 was \$52.8M, which is approximately \$9M higher than the rate base at the time of their last rate case in 2006.

Due to the above factors and results, it is possible that NSP will file a rate case in the coming months. 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 – Net Operating Income

C: Dave Sederquist, NSP

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

Line	Return Deficiency	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1	Rate Base	\$43,882	\$43,945	\$45,474	\$42,186	\$41,301	\$41,871	\$40,626	\$43,432	\$48,341	\$50,287	\$52,816
2	Rate of Return Required	8.75%	8.75%	8.70%	8.68%	8.58%	8.02%	7.89%	7.56%	7.52%	7.52%	7.48%
3	Return Required	\$3,838	\$3,847	\$3,956	\$3,660	\$3,543	\$3,358	\$3,204	\$3,281	\$3,636	\$3,784	\$3,949
4	Return Earned	2,881	3,133	4,122	3,238	3,679	4,172	3,719	3,851	4,224	3,219	2,456
5	Return Deficiency/(Excess)	\$957	\$714	(\$166)	\$422	(\$136)	(\$814)	(\$514)	(\$570)	(\$588)	\$565	\$1,493
6	Tax Factor	1.6543	1.6454	1.6454	1.6437	1.6437	1.6220	1.6220	1.6220	1.6115	1.6078	1.6041
7	Rev. Deficiency/(Excess)	\$1,583	\$1,175	(\$273)	\$693	(\$224)	(\$1,321)	(\$634)	(\$924)	(\$948)	\$908	\$2,396
8	Impact of Weather	263	28	(200)	(126)	83	29	339	(251)	(186)	260	376
9	Norm. Deficiency/(Excess)	\$ 1,320	\$ 1,147	\$ (73)	\$ 819	\$ (307)	\$ (1,350)	\$ (1,173)	\$ (673)	\$ (762)	\$ 648	\$ 2,020

Return on Equity Calculation

10	Net Operating Income	\$ 2,881	\$ 3,133	\$ 4,122	\$ 3,238	\$ 3,679	\$ 4,172	\$ 3,719	\$ 3,851	\$ 4,224	\$ 3,219	\$ 2,456
11	Rate Base	43,882	43,945	45,474	42,186	41,301	41,871	40,626	43,432	48,341	50,287	52,816
12	Rate of Return on Rate Base	6.57%	7.13%	9.06%	7.68%	8.91%	9.96%	9.15%	8.87%	8.74%	6.40%	4.65%
13	Less: Cost of Debt	3.44%	3.32%	3.24%	3.06%	2.99%	2.88%	2.61%	2.29%	2.23%	2.25%	2.22%
14	Return Available for Common	3.13%	3.81%	5.82%	4.62%	5.92%	7.08%	6.54%	6.58%	6.50%	4.15%	2.43%
15	Common Equity Percentage	49.35%	50.57%	50.77%	52.24%	52.00%	52.67%	52.78%	52.67%	52.87%	52.75%	52.61%
16	Return on Equity (ROE)	6.33%	7.54%	11.47%	8.84%	11.38%	13.44%	12.40%	12.49%	12.30%	7.87%	4.63%

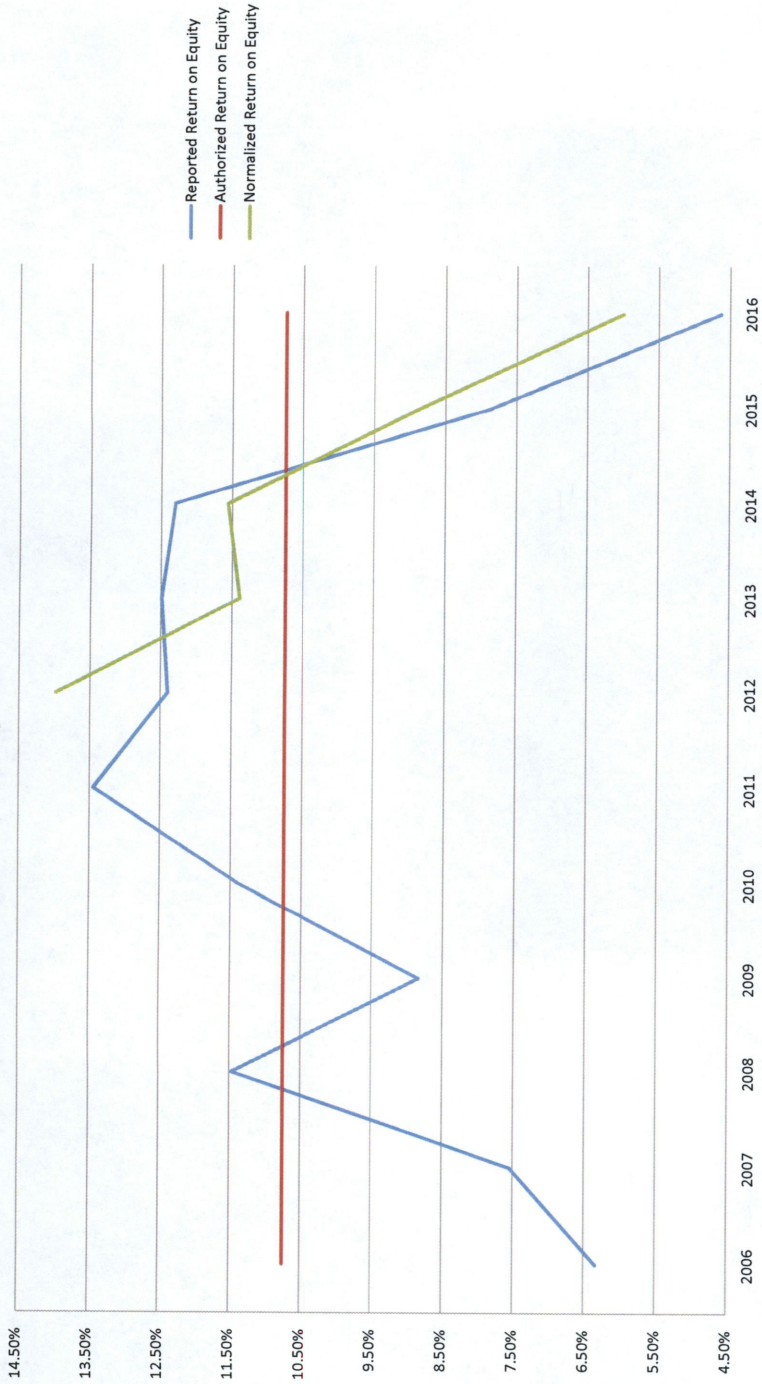
Weather Normalized ROE

17	Net Operating Income	\$ 2,881	\$ 3,133	\$ 4,122	\$ 3,238	\$ 3,679	\$ 4,172	\$ 3,719	\$ 3,851	\$ 4,224	\$ 3,219	\$ 2,456
18	Impact of Weather	263	28	(200)	(126)	83	29	339	(251)	(186)	260	376
19	Weather-Normalized NOI	\$3,144	\$3,161	\$3,922	\$3,112	\$3,762	\$4,201	\$4,058	\$3,600	\$4,038	\$3,479	\$2,832
20	Weather Adjusted ROE	7.55%	7.66%	10.60%	8.26%	11.77%	13.57%	13.98%	11.39%	11.57%	8.85%	5.98%

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

2006	6.33%	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%
10.75%	10.75%	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%	

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	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1	Residential	\$ 30,323	\$ 32,887	\$ 35,876	\$ 27,189	\$ 25,110	\$ 25,160	\$ 9,179	\$ 9,385	\$ 9,686	\$ 10,024	\$ 10,327
2	Firm C & I	33,965	37,842	42,760	32,043	27,965	28,549	6,691	7,951	8,464	7,986	7,824
3	Interruptible C & I	14,658	14,413	16,034	11,172	9,356	9,670	1,354	1,524	1,732	1,603	1,511
4	Transportation/Other	503	634	541	358	885	544	651	547	923	635	705
5	Total Revenues	\$ 79,449	\$ 85,776	\$ 95,211	\$ 70,762	\$ 63,316	\$ 63,923	\$ 17,876	\$ 19,407	\$ 20,805	\$ 20,248	\$ 20,367
Expenses												
6	Production	65,431	70,589	78,297	54,705	46,076	46,486	427	474	655	177	723
7	Gross Margins	\$ 14,018	\$ 15,187	\$ 16,914	\$ 16,057	\$ 17,240	\$ 17,437	\$ 17,449	\$ 18,933	\$ 20,150	\$ 20,071	\$ 19,644
8	Weather Normalized Margins	\$ 14,281	\$ 15,215	\$ 16,714	\$ 15,931	\$ 17,323	\$ 17,466	\$ 17,788	\$ 18,682	\$ 19,964	\$ 20,331	\$ 19,644
8	Transmission	109	69	82	121	177	147	176	229	228	444	321
9	Distribution	2,256	2,741	3,007	3,528	3,484	3,277	3,209	3,732	4,065	4,675	5,135
10	Customer Billing	1,709	1,779	1,795	1,715	1,610	1,624	1,512	1,493	1,543	1,527	1,162
11	Customer Service	227	312	283	234	255	261	234	262	271	270	133
12	Sales & Marketing	0	0	0	4	14	12	0	6	0	0	0
13	Admin. & General	1,804	1,996	1,854	1,898	1,948	1,910	2,022	2,135	2,216	2,334	2,483
14	Depreciation	2,787	2,890	3,022	3,141	3,317	3,428	3,503	3,589	4,312	4,982	5,404
15	Property Taxes	1,179	1,019	968	940	1,080	907	1,138	1,002	916	937	1,099
16	Franchise & Payroll Taxes	195	241	233	248	245	228	243	260	250	271	620
17	Inc. Taxes (Cur. & Def.)	871	1,007	1,548	990	1,431	1,471	1,693	2,374	2,125	1,412	831
18	Total Expenses	\$ 76,568	\$ 82,643	\$ 91,089	\$ 67,524	\$ 59,637	\$ 59,751	\$ 14,157	\$ 15,556	\$ 16,581	\$ 17,029	\$ 17,911
19	Net Operating Income	\$ 2,881	\$ 3,133	\$ 4,122	\$ 3,238	\$ 3,679	\$ 4,172	\$ 3,719	\$ 3,851	\$ 4,224	\$ 3,219	\$ 2,456
Income Tax Calculation												
20	Net Inc before Inc. Taxes	\$ 3,752	\$ 4,140	\$ 5,670	\$ 4,228	\$ 5,110	\$ 5,643	\$ 5,412	\$ 6,225	\$ 6,349	\$ 4,631	\$ 3,287
Interest Deduction:												
21	Rate Base	\$ 43,882	\$ 43,945	\$ 45,474	\$ 42,186	\$ 41,301	\$ 41,871	\$ 40,626	\$ 43,432	\$ 48,341	\$ 50,287	\$ 52,816
22	Weighted Cost of Debt	3.440%	3.317%	3.242%	3.060%	2.988%	2.884%	2.609%	2.288%	2.234%	2.249%	2.216%
23	Interest Deduction	\$ (1,510)	\$ (1,458)	\$ (1,474)	\$ (1,291)	\$ (1,234)	\$ (1,207)	\$ (1,060)	\$ (994)	\$ (1,080)	\$ (1,131)	\$ (1,171)
24	Other Tax Adjustments	\$ (40)	\$ (115)	\$ (249)	\$ (409)	\$ (222)	\$ (600)	\$ 63	\$ 959	\$ 272	\$ (2,480)	\$ (1,768)
25	Taxable Income	\$ 2,202	\$ 2,567	\$ 3,946	\$ 2,528	\$ 3,654	\$ 3,836	\$ 4,415	\$ 6,191	\$ 5,541	\$ 1,021	\$ 349
26	Combined Tax Rate	39.55%	39.225%	39.225%	39.160%	39.160%	38.348%	38.348%	38.348%	38.348%	138.348%	238.348%
27	Income Tax Expense	\$ 871	\$ 1,007	\$ 1,548	\$ 990	\$ 1,431	\$ 1,471	\$ 1,693	\$ 2,374	\$ 2,125	\$ 1,412	\$ 831