

Memorandum

To: Commissioners Christmann, Haugen-Hoffart and Kringstad

From: Leif Clark, Grid & Rate Engineer

Date: July 11, 2025

Re: Northern States Power Company, 2024 Electric, Annual Report, Case No. PU-25-176

In Case No. PU-20-441, the Commission authorized a return on equity (ROE) of 9.50% for NSP's ND electric rate case. Staff reviewed NSP's electric annual report for 2024. NSP reports a weather normalized ROE of 6.26% for 2024, which represents an under-earning of \$21.836 million.

NSP reported no Major Event Days.

The system average interruption frequency index (SAIFI, or the average number of interruptions per customer) was 0.6 interruptions per customer. The system average interruption duration index (SAIDI, or the average outage duration per customer) was 54.4 minutes per customer. The customer average interruption duration index (CAIDI, or the average restoration time) was 86.6 minutes.

Given the ongoing rate case filing allowing the Commission to review NSP's rates, staff recommends the Commission close the case.

Attachment 1 – Return Calculation

Attachment 2 – Return on Equity Chart

Attachment 3 – Net Operating Income

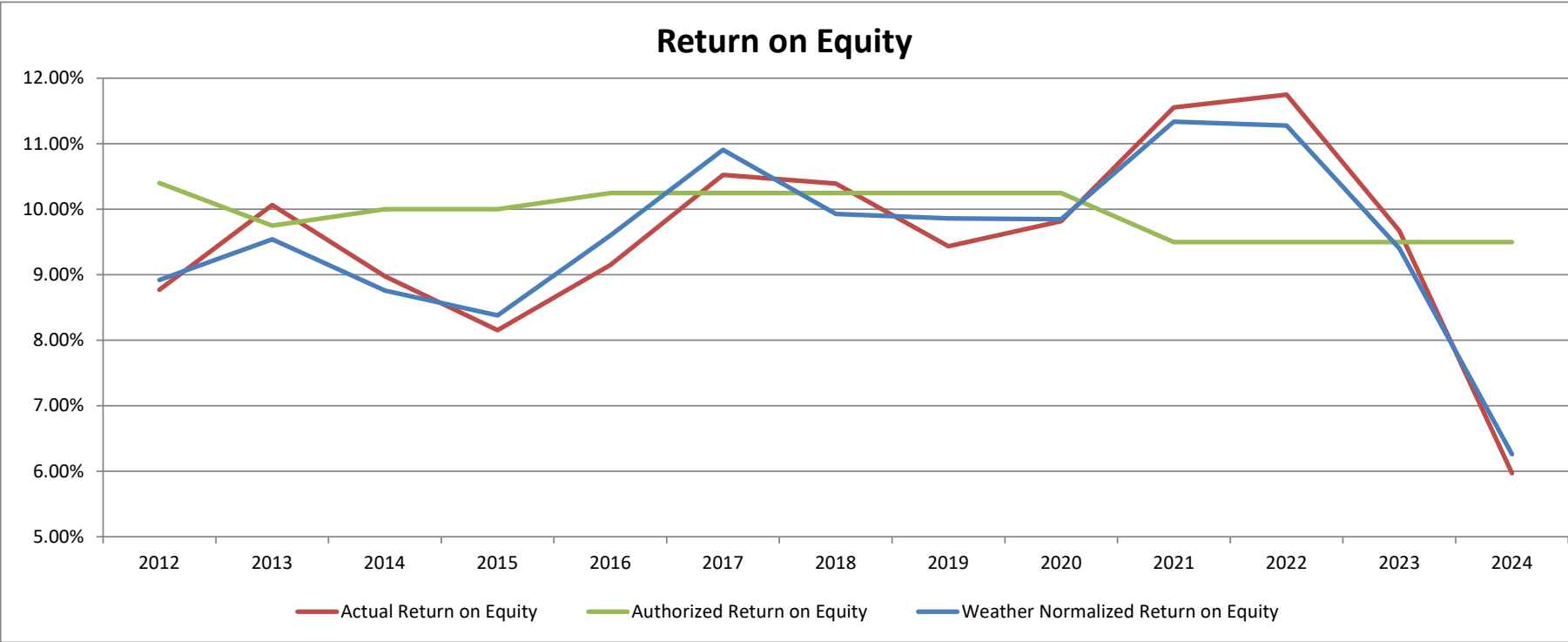
Attachment 4 – Reliability Indices

c: Alex Nesbit, NSP

Northern States Power Company
Electric Utility - North Dakota
Return on Equity & Revenue Deficiency Calculation
(Dollars in Thousands)

Attachment 1

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Return Deficiency (Excess)													
Rate Base	\$ 338,666	\$ 388,195	\$ 453,401	\$ 514,809	\$ 540,927	\$ 539,153	\$ 536,767	\$ 588,620	\$ 613,205	\$ 636,340	\$ 697,757	\$ 727,204	\$ 793,700
Rate of Return Allowed	8.10%	7.42%	7.52%	7.52%	7.61%	7.59%	7.56%	7.54%	7.45%	7.10%	7.12%	7.19%	7.25%
Return Allowed (Line 1 x Line2)	\$ 27,427	\$ 28,818	\$ 34,100	\$ 38,734	\$ 41,161	\$ 40,901	\$ 40,554	\$ 44,359	\$ 45,663	\$ 45,161	\$ 49,658	\$ 52,305	\$ 57,572
Return Earned (non-weather normalized)	24,536	29,471	31,670	33,713	38,025	41,670	40,942	41,771	44,225	51,213	56,995	52,015	41,821
Return Deficiency (Excess)	\$ 2,891	\$ (653)	\$ 2,430	\$ 5,021	\$ 3,136	\$ (769)	\$ (388)	\$ 2,587	\$ 1,438	\$ (6,052)	\$ (7,336)	\$ 290	\$ 15,751
Tax Factor	1.622	1.612	1.612	1.608	1.608	1.608	1.323	1.323	1.323	1.323	1.323	1.323	1.323
Revenue Deficiency (Excess) - non-weather normalized	\$ 4,689	\$ (1,052)	\$ 3,916	\$ 8,073	\$ 5,041	\$ (1,237)	\$ (513)	\$ 3,423	\$ 1,902	\$ (8,006)	\$ (9,705)	\$ 384	\$ 20,836
Return on Equity													
Operating Income from Operations	\$ 24,536	\$ 29,471	\$ 31,670	\$ 33,713	\$ 38,025	\$ 41,670	\$ 40,942	\$ 41,771	\$ 44,225	\$ 51,213	\$ 56,995	\$ 52,015	\$ 41,821
PBR Deficiency (Earnings)	\$ 24,536	\$ 29,471	\$ 31,670	\$ 33,713	\$ 38,025	\$ 41,670	\$ 40,942	\$ 41,771	\$ 44,225	\$ 51,213	\$ 56,995	\$ 52,015	\$ 41,821
Average Regulated Rate Base	338,666	388,195	453,401	514,809	540,927	539,153	536,767	588,620	613,205	636,340	697,757	727,204	793,700
Rate of Return on Rate Base (Line 1 / Line 2)	7.24%	7.59%	6.98%	6.55%	7.03%	7.73%	7.63%	7.10%	7.21%	8.05%	8.17%	7.15%	5.27%
Less: Weighted Cost of Debt	2.61%	2.29%	2.23%	2.25%	2.22%	2.20%	2.14%	2.10%	2.05%	1.95%	1.99%	2.07%	2.14%
Less: Weighted Cost of Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Return Remaining for Common Stock	4.63%	5.30%	4.75%	4.30%	4.81%	5.53%	5.49%	5.00%	5.16%	6.10%	6.18%	5.08%	3.13%
% of Equity in Capital Structure	52.78%	52.67%	52.87%	52.75%	52.61%	52.54%	52.83%	52.98%	52.62%	52.75%	52.62%	52.54%	52.48%
Actual Return on Equity	8.77%	10.07%	8.98%	8.15%	9.15%	10.52%	10.39%	9.44%	9.82%	11.56%	11.75%	9.67%	5.97%
Authorized Return on Equity	10.40%	9.75%	10.00%	10.00%	10.25%	10.25%	10.25%	10.25%	10.25%	9.50%	9.50%	9.50%	9.50%
Weather Normalized Earnings before Sharing													
Operating Income from Operations	\$24,536	\$29,471	\$31,670	\$33,713	\$38,025	\$41,670	\$40,942	\$41,771	\$44,225	\$51,213	\$56,995	\$52,015	\$41,821
Impact of Weather on Operating Income	142	143	144	622	1,262	1,079	(1,288)	(1,249)	(855)	(719)	(1,683)	(952)	1,231
Weather Normalized Income (Line 9 - Line 11)	\$24,678	\$29,614	\$31,814	\$34,335	\$39,287	\$42,749	\$39,654	\$40,522	\$43,370	\$50,494	\$55,312	\$51,063	\$43,052
Weather Normalized Return on Rate Base	7.29%	7.63%	7.02%	6.67%	7.26%	7.93%	7.39%	6.87%	7.07%	7.94%	7.93%	7.02%	5.42%
Weather Normalized Return on Equity	8.92%	9.54%	8.76%	8.38%	9.60%	10.91%	9.93%	9.86%	9.85%	11.34%	11.28%	9.40%	6.26%



Northern States Power Company
Electric Utility - North Dakota
Net Operating Income
(\$ in 000s)

Attachment 3

Description	2012	2013	2014	2015	2016	2017	2018	2019 ⁵	2020	2021	2022	2023	2024
Residential	\$ 69,329	\$ 81,128	\$ 81,066	\$ 82,172	\$ 78,298	\$ 80,013	\$ 82,625	\$ 78,813	81,239	90,859	96,408	93,047	88,553
Small Commercial & Industrial	85,328	96,704	98,244	101,810	98,996	99,278	98,195	91,850	90,637	103,401	115,100	105,352	103,513
Large Commercial & Industrial	22,301	23,654	24,600	27,904	26,257	26,996	26,829	25,578	25,170	31,217	32,366	30,396	32,921
Other ¹	42,928	48,572	53,987	54,781	54,157	54,802	43,874	59,265	56,465	68,709	76,955	64,596	46,109
Total Revenues	\$ 219,886	\$ 250,058	\$ 257,897	\$ 266,667	\$ 257,708	\$ 261,089	\$ 251,523	\$ 255,507	\$ 253,511	\$ 294,186	\$ 320,829	\$ 293,391	271,096
Fuel & Prod. Expense	120,355	134,307	134,955	127,077	115,476	112,791	113,334	110,805	103,376	126,051	141,648	118,404	119,498
Gross Margins	\$ 99,531	\$ 115,751	\$ 122,942	\$ 139,590	\$ 142,232	\$ 148,298	\$ 138,189	\$ 144,702	\$ 150,135	\$ 168,135	\$ 179,181	\$ 174,987	\$ 151,598
Transmission Expense	12,309	14,921	17,224	19,777	21,953	21,833	20,811	24,202	22,002	23,865	25,077	23,837	26,426
Distribution Expense	6,387	6,784	6,727	6,319	6,886	6,201	6,671	6,528	5,650	6,262	6,404	7,418	6,446
Customer Billing	4,128	4,121	4,300	4,198	3,307	3,319	3,380	3,379	3,787	3,976	3,986	4,531	3,933
Customer Service	370	348	439	425	68	321	261	425	240	238	197	392	373
Sales & Marketing ³	2	1	0	0	0	0	0	3	151	179	91	178	57
Admin. & General ⁴	12,969	15,576	14,664	15,462	15,380	16,077	15,966	15,129	16,909	16,439	17,238	19,665	18,945
Depreciation	20,400	22,295	25,265	32,204	33,004	35,910	36,600	38,069	46,758	56,698	64,108	64,072	72,033
<i>% of Plant in Service</i>	<i>2.61%</i>	<i>2.55%</i>	<i>2.58%</i>	<i>2.97%</i>	<i>2.91%</i>	<i>3.12%</i>	<i>3.13%</i>	<i>2.93%</i>	<i>3.47%</i>	<i>4.04%</i>	<i>4.30%</i>	<i>4.15%</i>	<i>4.25%</i>
Property Taxes	6,690	7,917	8,727	9,404	10,367	10,117	9,813	11,096	10,506	10,314	10,745	9,951	10,641
<i>% of Plant in Service</i>	<i>0.86%</i>	<i>0.91%</i>	<i>0.89%</i>	<i>0.87%</i>	<i>0.91%</i>	<i>0.88%</i>	<i>0.84%</i>	<i>0.85%</i>	<i>0.78%</i>	<i>0.73%</i>	<i>0.72%</i>	<i>0.64%</i>	<i>0.63%</i>
Other General Taxes ²	1,866	2,081	2,055	2,014	1,875	1,941	1,933	2,019	1,882	1,919	1,782	2,046	2,008
Income Tax Net of Deferred	9,874	12,236	11,871	16,074	11,367	10,909	1,812	2,080	(1,977)	(2,968)	(7,441)	(9,118)	(31,085)
<i>% of Income before Income Tax</i>	<i>28.70%</i>	<i>29.34%</i>	<i>27.26%</i>	<i>32.29%</i>	<i>23.01%</i>	<i>20.75%</i>	<i>4.24%</i>	<i>4.74%</i>	<i>-4.68%</i>	<i>-6.15%</i>	<i>-15.02%</i>	<i>-21.26%</i>	<i>-289.54%</i>
Net Operating Income	\$ 24,536	\$ 29,471	\$ 31,670	\$ 33,713	\$ 38,025	\$ 41,670	\$ 40,942	\$ 41,771	\$ 44,225	\$ 51,213	\$ 56,995	\$ 52,015	\$ 41,821

¹ Includes primarily public street & highway lighting, sales to public authorities, interchange billings, other electric operating revenues.

² Includes gross earnings taxes (franchise fees) and payroll taxes.

³ Includes economic development, demand side management and conservation incentive programs

⁴ Includes other miscellaneous expenses and SFAS amortization.

⁵ Refiled

Attachment 4

Reliability Index	2019	2020	2021	2022	2023	2024
System Average Interruption Frequency Index (SAIFI)	0.4	0.6	0.7	0.8	0.6	0.6
System Average Interruption Duration Index (SAIDI)	42.2	51.1	80.7	67.8	56.6	54.5
Customer Average Interruption Duration Index (CAIDI)	109.8	92.8	120.2	89.4	99.6	86.6