

Memorandum

To: Commissioners Randy Christmann, Julie Fedorchak and Brian Kroshus

From: Victor Schock - Public Utility Analyst 

Date: May 17, 2017

Re: Montana-Dakota Utilities, Co. 2016 Gas Operations Annual Report

Case No. PU-17-146

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 consent agenda.

Montana-Dakota Utilities, Co. (MDU) provides natural gas service to about 108,783 customers in North Dakota. Staff has reviewed MDU's annual report filing for 2016. MDU's return on equity was 7.74% in 2016. The commission authorized a rate of return of 9.5% in the most recent rate case (PU-15-90). With that in mind, MDU under earned by about \$1.8M in 2016.

Staff believes the under earning was caused by lower usage and higher infrastructure investments than anticipated by MDU. 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 MDU had 10% 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 \$126.67M, which is approximately \$10M higher than expected by MDU in their most recent rate case.

Due to the above factors and results, it is possible that MDU 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 MDU ND natural gas earnings for the last ten years.

Attachment 1 – Return Calculation

Attachment 2 – Net Operating Income

C: Tamie Aberle, MDU

Montana-Dakota Utilities Co.
 North Dakota Gas Utility
 Return Calculation
 (Dollars in Thousands)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<u>Return Deficiency</u>											
Average Rate Base	\$22,885	\$25,254	\$32,159	\$35,392	\$37,445	\$40,334	\$52,202	\$60,895	\$90,160	\$115,261	\$126,663
Common Equity	\$198,225	\$215,490	\$249,840	\$292,113	\$328,992	\$349,672	\$368,815	\$403,646	\$478,047	\$593,956	\$678,262
Rate of Return Required	8.488%	8.610%	8.031%	8.426%	8.430%	8.513%	8.273%	7.655%	7.800%	7.224%	7.216%
Return Required	\$1,942	\$2,174	\$2,583	\$2,982	\$3,157	\$3,434	\$4,319	\$4,661	\$7,032	\$8,326	\$9,140
Return Earned	\$1,760	\$2,016	\$3,207	\$3,664	\$4,949	\$4,103	\$3,804	\$3,435	\$6,838	\$7,529	\$8,021
Return Deficiency (Excess)	\$182	\$158	(\$624)	(\$682)	(\$1,792)	(\$669)	\$515	\$1,226	\$194	\$797	\$1,119
Tax Factor	60.45%	60.78%	60.78%	60.84%	60.84%	61.65%	61.65%	62.06%	62.06%	62.20%	62.20%
Revenue Def. (Excess)	\$302	\$261	(\$1,027)	(\$1,121)	(\$2,946)	(\$1,085)	\$835	\$1,976	\$313	\$1,282	\$1,799

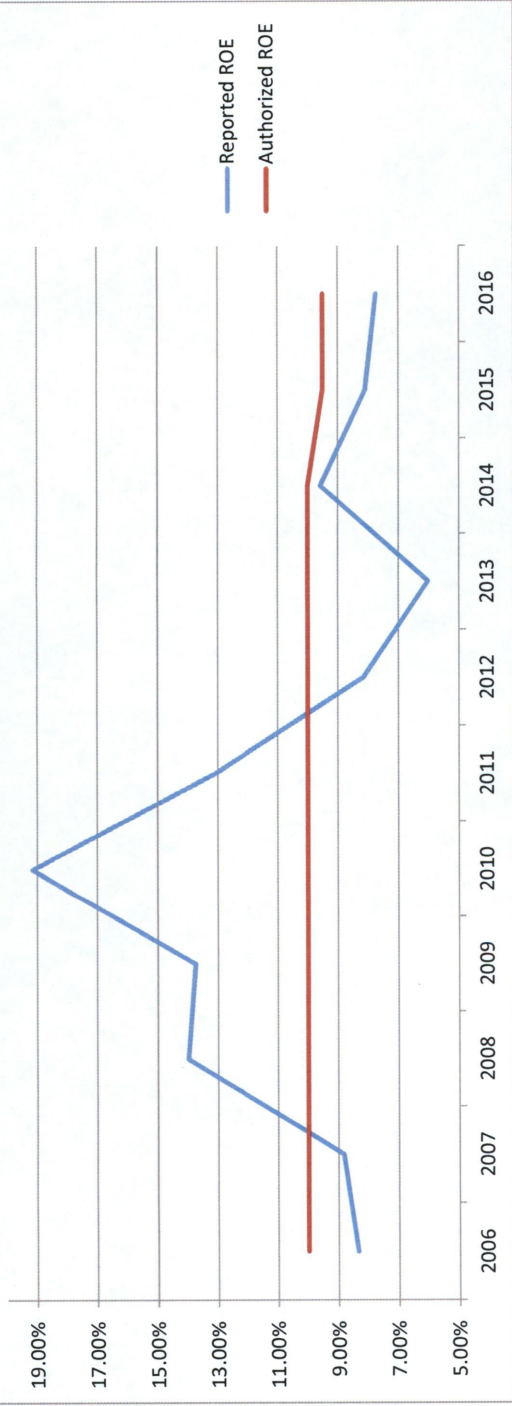
Return on Equity Calculation

Rate of Return on Rate Base	7.69%	7.98%	9.97%	10.35%	13.22%	10.17%	7.29%	5.64%	7.58%	6.53%	6.33%
Less: Cost of Debt	3.66%	3.25%	3.16%	3.28%	3.20%	3.11%	2.93%	2.60%	2.62%	2.55%	2.45%
Return available for common	4.03%	4.73%	6.81%	7.07%	10.02%	7.06%	4.35%	3.04%	4.96%	3.98%	3.88%
Common Equity Percentage	48.27%	53.55%	48.72%	51.44%	52.30%	54.00%	53.38%	50.57%	51.77%	49.17%	50.20%
Return on Equity	8.35%	8.83%	13.98%	13.75%	19.15%	13.07%	8.15%	6.02%	9.58%	8.09%	7.74%

Reported Return on Equity 8.35% 2006
 Authorized Return on Equity 10.00% 2007

2008	2009	2010	2011	2012	2013	2014	2015	2016
13.98%	13.75%	19.15%	13.07%	8.15%	6.02%	9.58%	8.09%	7.74%
10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	9.50%	9.50%

Return on Equity



Montana-Dakota Utilities Co.
North Dakota Gas Utility
Net Operating Income
(Dollars in Thousands)

Description	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Operating Revenues	\$122,206	\$105,311	\$139,464	\$113,566	\$99,628	\$104,610	\$84,849	\$110,797	\$140,007	\$110,664	\$91,870
Cost of Gas	99,532	82,212	113,198	88,881	74,119	78,480	58,003	81,268	103,658	72,479	51,338
Production						287	271	261	0	0	0
Other Gas Supply Expense	119	122	125	108	134	112	117	108	227	291	356
Net Margin	\$22,555	\$22,977	\$26,141	\$24,577	\$25,375	\$25,731	\$26,458	\$29,160	\$36,121	\$37,894	\$40,175
Distribution Expense	\$ 6,546	\$ 6,629	\$ 7,768	\$ 6,477	\$ 6,545	\$ 7,370	\$ 7,668	\$ 8,595	\$ 9,137	\$ 8,941	\$ 8,875
Customer Accounts Exp	3,108	2,973	2,745	2,588	2,263	2,364	2,159	2,616	2,854	2,494	2,757
Customer Service & Info	177	190	247	211	177	191	237	201	245	256	246
Sales Expense	366	360	313	206	132	168	148	176	160	224	133
A & G Expense	6,570	6,680	6,906	5,871	5,066	6,261	6,020	6,615	6,751	7,137	7,881
Other O&M	\$ 16,767	\$ 16,832	\$ 17,979	\$ 15,353	\$ 14,183	\$ 16,354	\$ 16,232	\$ 18,203	\$ 19,147	\$ 19,053	\$ 19,892
Depreciation	2,838	2,934	3,027	3,235	3,190	3,520	3,723	4,877	5,868	6,928	7,631
Taxes Other Than Income	1,339	1,283	1,479	1,296	1,351	1,500	1,599	1,617	1,638	1,814	1,901
Expenses (Lines 6-12)	\$ 20,944	\$ 21,049	\$ 22,485	\$ 19,884	\$ 18,724	\$ 21,374	\$ 21,554	\$ 24,697	\$ 26,653	\$ 27,795	\$ 29,424
Income Tax Expense	\$ (149)	\$ (88)	\$ 449	\$ 1,029	\$ 1,702	\$ 254	\$ 1,100	\$ 1,028	\$ 2,630	\$ 2,570	\$ 2,730
Net Operating Income	\$ 1,760	\$ 2,016	\$ 3,207	\$ 3,664	\$ 4,949	\$ 4,103	\$ 3,804	\$ 3,435	\$ 6,838	\$ 7,529	\$ 8,021

Tax Calculation:

NOI before Income Taxes	\$ 1,611	\$ 1,928	\$ 3,656	\$ 4,693	\$ 6,651	\$ 4,357	\$ 4,904	\$ 4,463	\$ 9,468	\$ 10,099	\$ 10,751
Rate Base	\$22,885	\$25,254	\$32,159	\$35,392	\$37,445	\$40,334	\$52,202	\$60,895	\$90,160	\$115,261	\$126,663
Weighted Cost of Debt	3.494%	3.073%	3.018%	3.156%	3.087%	3.004%	2.833%	2.510%	2.547%	2.495%	2.396%
Interest Deduction	\$800	\$776	\$971	\$1,117	\$1,156	\$1,212	\$1,479	\$1,528	\$2,296	\$2,875	\$3,034
Other Tax Adjustments	(\$1,188)	(\$1,376)	(\$1,541)	(\$948)	(\$1,149)	(\$2,483)	(\$557)	(\$225)	(\$240)	(\$425)	(\$495)
Taxable Income	\$ (377)	\$ (224)	\$ 1,145	\$ 2,628	\$ 4,346	\$ 662	\$ 2,869	\$ 2,709	\$ 6,932	\$ 6,799	\$ 7,222
Combined Tax Rate	39.55%	39.23%	39.23%	39.16%	39.16%	38.35%	38.35%	37.94%	37.94%	37.80%	37.80%
Income Tax Expense	\$ (149)	\$ (88)	\$ 449	\$ 1,029	\$ 1,702	\$ 254	\$ 1,100	\$ 1,028	\$ 2,630	\$ 2,570	\$ 2,730

Effective Income Tax Rate -9%

Overall Depreciation Rate 3.4%

-5%

12%

22%

26%

6%

22%

23%

28%

3.3%

3.1%

3.1%

3.0%

3.0%

3.2%

3.1%

25%

3.4%

3.1%

2.9%

3.0%

2.8%

3.2%

3.0%

3.1%