

# Memo

To: Darrell Nitschke, Executive Secretary  
From: Mike Diller  
Date: August 11, 2015  
Re: Montana-Dakota Utilities Co.—Annual Reports for Gas Operations

Case Nos.	PU-07-154	PU-08-167	PU-09-166
	PU-10-136	PU-11-119	PU-12-154
	PU-13-170	PU-14-169	PU-15-144

I recommend that the commission close the cases associated with MDU's annual report filings for its North Dakota gas operations. I will include a motion to that effect on the consent agenda for September 16, 2015.

MDU provides natural gas to about 106,000 customers in North Dakota or about two-thirds of the natural gas customers in the state. Staff has reviewed the Company's 2006 to 2014 annual reports noting reported returns on equity ranging from 6% to 19%. In the last 3 years, MDU's reported gas earnings have been between 6% and 10%. Using a return on equity of 10% for the last 3 years indicates that MDU under-earned by about \$3 million over that time period.

In the last 10 years, the commission has granted one 4% natural gas rate increase to MDU in April, 2014 and an interim increase of 3.4% in April, 2015. The increased costs to provide service are being driven primarily by infrastructure replacement and the building out of service to the Bakken oil field. For perspective, rate base totaled \$23 million in 2006 and has grown to \$90 million by the end of 2014 and projected to be \$114 million by the end of 2015.

Given the moderate earnings levels recently and the current rate case in progress, staff sees no reason to investigate further and recommends that the commission close these cases. Attached are financial summaries of annual reports filed with the commission in recent years.

- Attachment 1 – Revenue Deficiency Calculation and Rate Base
- Attachment 2 – Net Operating Income
- Attachment 3 – Cost of Capital

C: Tamie Aberle, MDU

Montana-Dakota Utilities Co.  
 North Dakota Gas Utility  
 Revenue Deficiency Calculation and Rate Base  
 ('000's)

Line	Description	2006	2007	2008	2009	2010	2011	2012	2013	2014
<i>Revenue Deficiency:</i>										
1	Average Rate Base	\$22,885	\$25,254	\$32,159	\$35,392	\$37,445	\$40,334	\$52,202	\$60,895	\$90,160
2	Rate of Return (10% ROE)	8.488%	8.610%	8.031%	8.426%	8.430%	8.513%	8.273%	7.655%	7.800%
3	Return Required	\$1,942	\$2,174	\$2,583	\$2,982	\$3,157	\$3,434	\$4,319	\$4,661	\$7,032
4	Return Earned	\$1,760	\$2,016	\$3,207	\$3,664	\$4,949	\$4,103	\$3,804	\$3,435	\$6,838
5	Return Deficiency (Excess)	\$182	\$158	(\$624)	(\$682)	(\$1,792)	(\$669)	\$515	\$1,226	\$194
6	Tax Factor	60.45%	60.78%	60.78%	60.84%	60.84%	61.65%	61.65%	62.06%	62.06%
7	Revenue Def. (Excess)	\$302	\$261	(\$1,027)	(\$1,121)	(\$2,946)	(\$1,085)	\$835	\$1,976	\$313
<i>Average Rate Base:</i>										
8	Plants in Service & CWIP	\$82,883	\$87,642	\$96,601	\$102,924	\$108,356	\$116,592	\$134,747	\$151,718	\$191,927
9	Accum. Res. for Depr.	56,270	58,772	61,169	63,093	64,762	67,112	69,690	73,336	77,487
10	Net Plant in Service	\$26,613	\$28,870	\$35,432	\$39,831	\$43,594	\$49,480	\$65,057	\$78,382	\$114,440
11	Materials & Supplies	711	811	941	909	806	968	1,891	2,362	2,478
12	Fuel Stock/Gas IRP/Other	21	29	30	28	30	25	35	45	46
13	Prepayments	155	148	117	153	117	141	149	166	185
14	Unamortized Loss on Debt			895	832	716	615	598	629	659
15	G. on Sales								0	(171)
16	Accum. Def. Income Taxes	(3,930)	(3,779)	(4,239)	(4,877)	(5,613)	(8,133)	(11,027)	(13,201)	(17,345)
17	Accum. Invest. Tax Credits	(101)	(78)	(56)	(35)	(18)	(8)	(3)	0	0
18	Customer Advances	(584)	(747)	(961)	(1,449)	(2,187)	(2,754)	(4,498)	(7,488)	(10,132)
19	Average Rate Base	\$22,885	\$25,254	\$32,159	\$35,392	\$37,445	\$40,334	\$52,202	\$60,895	\$90,160

Montana-Dakota Utilities Co.  
 North Dakota Gas Utility  
 Net Operating Income  
 (000's)

Schedule 2

Line	Description	2006	2007	2008	2009	2010	2011	2012	2013	2014
1	Operating Revenues	\$122,206	\$105,311	\$139,464	\$113,566	\$99,628	\$104,610	\$84,849	\$110,797	\$140,007
2	Cost of Gas	99,532	82,212	113,198	88,881	74,119	78,480	58,003	81,268	103,658
3	Production						287	271	261	0
4	Other Gas Supply Expense	119	122	125	108	134	112	117	108	227
5	Net Margin	\$22,555	\$22,977	\$26,141	\$24,577	\$25,375	\$25,731	\$26,458	\$29,160	\$36,122
6	Distribution Expense	\$ 6,546	\$ 6,629	\$ 7,768	\$ 6,477	\$ 6,545	\$ 7,370	\$ 7,668	\$ 8,595	\$ 9,137
7	Customer Accounts Exp	3,108	2,973	2,745	2,588	2,263	2,364	2,159	2,616	2,854
8	Customer Service & Info	177	190	247	211	177	191	237	201	245
9	Sales Expense	366	360	313	206	132	168	148	176	161
10	A & G Expense	6,570	6,680	6,906	5,871	5,066	6,261	6,020	6,615	6,751
11	Other O&M	\$ 16,767	\$ 16,832	\$ 17,979	\$ 15,353	\$ 14,183	\$ 16,354	\$ 16,232	\$ 18,203	\$ 19,148
12	Depreciation	2,838	2,934	3,027	3,235	3,190	3,520	3,723	4,877	5,868
13	Taxes Other Than Income	1,339	1,283	1,479	1,296	1,351	1,500	1,599	1,617	1,638
14	Expenses (Lines 6-12)	\$ 20,944	\$ 21,049	\$ 22,485	\$ 19,884	\$ 18,724	\$ 21,374	\$ 21,554	\$ 24,697	\$ 26,654
15	Income Tax Expense	\$ (149)	\$ (88)	\$ 449	\$ 1,029	\$ 1,702	\$ 254	\$ 1,100	\$ 1,028	\$ 2,630
16	Net Operating Income	\$ 1,760	\$ 2,016	\$ 3,207	\$ 3,664	\$ 4,949	\$ 4,103	\$ 3,804	\$ 3,435	\$ 6,838
17	Return on Equity	8%	9%	14%	14%	19%	#REF!	8%	6%	10%
Tax Calculation:										
18	NOI before Income Taxes	\$ 1,611	\$ 1,928	\$ 3,656	\$ 4,693	\$ 6,651	\$ 4,357	\$ 4,904	\$ 4,463	\$ 9,468
19	Rate Base	\$22,885	\$25,254	\$32,159	\$35,392	\$37,445	\$40,334	\$52,202	\$60,895	\$90,160
20	Weighted Cost of Debt	3.661%	3.255%	3.160%	3.282%	3.087%	3.004%	2.833%	2.510%	2.547%
21	Interest Deduction	\$838	\$822	\$1,016	\$1,162	\$1,156	\$1,212	\$1,479	\$1,528	\$2,296
22	Other Tax Adjustments	(\$1,150)	(\$1,330)	(\$1,495)	(\$904)	(\$1,149)	(\$2,483)	(\$557)	(\$225)	(\$241)
23	Taxable Income	\$ (377)	\$ (224)	\$ 1,145	\$ 2,628	\$ 4,346	\$ 662	\$ 2,869	\$ 2,709	\$ 6,931
24	Combined Tax Rate	39.55%	39.23%	39.23%	39.16%	39.16%	38.35%	38.35%	37.94%	37.94%
25	Income Tax Expense	\$ (149)	\$ (88)	\$ 449	\$ 1,029	\$ 1,702	\$ 254	\$ 1,100	\$ 1,028	\$ 2,630
26	Effective Income Tax Rate	-9%	-5%	12%	22%	26%	6%	22%	23%	28%
27	Overall Depreciation Rate	3.4%	3.3%	3.1%	3.1%	2.9%	3.0%	2.8%	3.2%	3.1%

Montana-Dakota Utilities Co.  
North Dakota Gas Utility  
Cost of Capital  
(000's)

Schedule 3

<u>Line</u>	<u>Description</u>	<u>Balance</u>	<u>Ratio</u>	<u>Cost</u>	<u>Return</u>
1	Long-Term Debt	\$141,950	34.567%	7.983%	2.760%
2	Short-Term Debt	\$55,473	13.509%	5.436%	0.734%
3	Preferred Stock	15,000	3.653%	4.567%	0.167%
4	Common Equity	198,225	48.271%	10.000%	4.827%
5	<b>Total - 2006</b>	<b>\$410,648</b>	<b>100.000%</b>		<b>8.488%</b>
6	Long-Term Debt	\$153,750	38.210%	7.311%	2.794%
7	Short-Term Debt	\$17,289	4.297%	6.512%	0.280%
8	Preferred Stock	15,850	3.939%	4.605%	0.181%
9	Common Equity	215,490	53.554%	10.000%	5.355%
10	<b>Total - 2007</b>	<b>\$402,379</b>	<b>100.000%</b>		<b>8.610%</b>
11	Long-Term Debt	\$193,254	37.683%	7.016%	2.644%
12	Short-Term Debt	\$53,998	10.529%	3.558%	0.375%
13	Preferred Stock	15,750	3.071%	4.601%	0.141%
14	Common Equity	249,840	48.717%	10.000%	4.872%
15	<b>Total - 2008</b>	<b>\$512,842</b>	<b>100.000%</b>		<b>8.031%</b>
16	Long-Term Debt	\$258,256	45.476%	6.855%	3.117%
17	Short-Term Debt	\$1,880	0.331%	11.590%	0.038%
18	Preferred Stock	15,650	2.756%	4.597%	0.127%
19	Common Equity	292,113	51.437%	10.000%	5.144%
20	<b>Total - 2009</b>	<b>\$567,899</b>	<b>100.000%</b>		<b>8.426%</b>
21	Long-Term Debt	\$280,499	44.590%	6.845%	3.052%
22	Short-Term Debt	\$4,016	0.638%	5.427%	0.035%
23	Preferred Stock	15,550	2.472%	4.592%	0.114%
24	Common Equity	328,992	52.299%	10.000%	5.230%
25	<b>Total - 2010</b>	<b>\$629,057</b>	<b>100.000%</b>		<b>8.430%</b>
26	Long-Term Debt	\$280,492	43.316%	6.845%	2.965%
27	Short-Term Debt	\$1,934	0.299%	13.053%	0.039%
28	Preferred Stock	15,450	2.386%	4.588%	0.109%
29	Common Equity	349,672	53.999%	10.000%	5.400%
30	<b>Total - 2011</b>	<b>\$647,548</b>	<b>100.000%</b>		<b>8.513%</b>
31	Long-Term Debt	\$280,485	40.597%	6.846%	2.779%
32	Short-Term Debt	\$26,206	3.793%	1.406%	0.053%
33	Preferred Stock	15,393	2.228%	4.585%	0.102%
34	Common Equity	368,815	53.382%	10.000%	5.338%
35	<b>Total - 2012</b>	<b>\$690,899</b>	<b>100.000%</b>		<b>8.273%</b>
36	Long-Term Debt	\$317,977	39.834%	6.149%	2.449%
37	Short-Term Debt	\$61,280	7.677%	0.788%	0.060%
38	Preferred Stock	15,347	1.923%	4.583%	0.088%
39	Common Equity	403,646	50.566%	10.000%	5.057%
40	<b>Total - 2013</b>	<b>\$798,250</b>	<b>100.000%</b>		<b>7.655%</b>
41	Long-Term Debt	\$392,969	42.556%	5.870%	2.498%
42	Short-Term Debt	\$37,100	4.018%	1.213%	0.049%
43	Preferred Stock	15,308	1.658%	4.581%	0.076%
44	Common Equity	478,047	51.769%	10.000%	5.177%
45	<b>Total - 2014</b>	<b>\$923,424</b>	<b>100.000%</b>		<b>7.800%</b>