MEMO

TO: DARRELL NITSCHKE, EXECUTIVE SECRETARY

FROM: MIKE DILLER Mike Diller

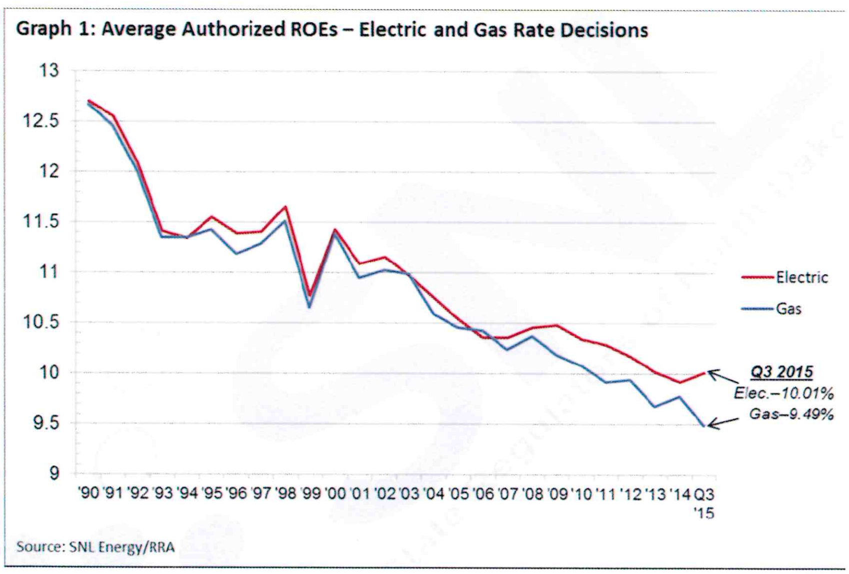
SUBJECT: CLOSE MDU ELECTRIC ANNUAL REPORTS (2010-2014)

PU-11-121, PU-12-157, PU-13-171, PU-14-168 & PU-14-745

DATE: NOVEMBER 9, 2015

CC: TAMIE ABERLE

The review of annual reports is an important tool of the commission to stay abreast of financial changes in the operations of the utilities we regulate. Following is a graph of average returns on equity (ROE) authorized by various commissions across the country:



Roughly speaking, returns authorized by various commissions have been coming down over the last 25 years. In 2014, the average ROE authorized for electric utilities was less than 10% with a slight uptick noted through Quarter 3, 2015.

Following are the adjusted returns reported by Montana-Dakota Utility Co. (MDU) for its electric operations for 2010 through 2014. The adjusted returns reflect the exclusion of Supplemental Insurance Security Plan denied by the commission in previous rate proceedings and tax benefits related to the employees' 401k plan—which has not been considered by the commission and would increase the returns shown below, if included.

6 PU-14-745 Filed 11/09/2015 Pages: 6
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Public Service Commission Staff
Mike Diller

3 PU-14-168 Filed 11/09/2015 Pages: 6
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5 PU-13-171 Filed 11/09/2015 Pages: 6
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5 PU-12-157 Filed 11/09/2015 Pages: 6
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6 PU-11-121 Filed 11/09/2015 Pages: 6
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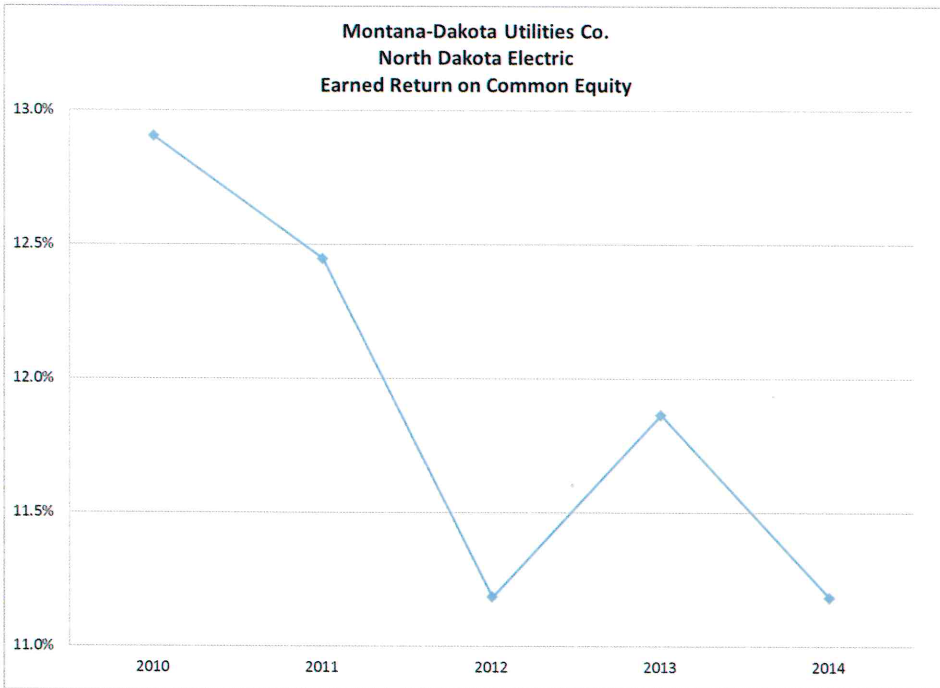

For a reference point, note that a one percentage point change in the ROE earned in 2010 was equal to about $2 million in revenue requirements. MDU's last electric rate increase of $7.6 million became effective June 18, 2010, using an authorized ROE of 10.75%. Because of the significant increases in plant investments since 2010, it takes a $3.25 million change in revenues to move the 2014 ROE one percentage point.

It has been difficult to accurately project revenue requirements during the investment and revenue cycle related to the development of North Dakota's oil industry. Settlements have been reached to share earnings above 10.75% for the years ending 2011, 2012, 2014 and 2015. While such agreements have provided some benefit to ratepayers, better forecasting is preferable to sharing continued and significant excess earnings. The following refunds were provided through the sharing agreements:

2011	$1,006,240	PU-10-124
2012	$4,028,846	PU-10-124
2014	$ 879,018	PU-14-109
2015	TBD	PU-14-109

Following are the primary ratemaking schedules along with some staff notes, recommendations and conclusions.

Montana-Dakota Utilities Co. - North Dakota Electric Operations
Revenue Excess Calculation and Rate Base
(thousands)

Line	Revenue Excess Calculation	2010	2011	2012	2013	2014
1	Average Rate Base	$231,001	$251,453	$268,445	$309,735	$389,530
2	Weighted Cost of Capital	8.82%	8.92%	8.67%	8.03%	8.19%
3	Return Required (L1x2)	$20,380	$22,426	$23,283	$24,884	$31,894
4	Return Earned	$24,036	$25,942	$23,929	$26,624	$32,769
5	Return Excess (L3-4)	($3,656)	($3,517)	($646)	($1,740)	($875)
6	Tax Factor	1.6437	1.6220	1.6220	1.6115	1.6115
7	**Revenue Excess** (L5x6)	**($6,009)**	**($5,704)**	**($1,048)**	**($2,804)**	**($1,410)**

Line	Rate Base	2010	2011	Restated[1] 2012	Restated[1] 2013	2014
8	Plant in Service	$571,134	$619,655	$660,282	$730,075	$841,576
9	Accum. Res. for Depr.	295,032	307,833	319,880	334,554	347,809
10	Net Plant in Service (L8-9)	$276,102	$311,822	$340,402	$395,521	$493,767
11	Materials & Supplies	5,173	6,266	10,446	11,234	10,221
12	Fuel Stocks	2,906	2,985	3,427	3,072	3,029
13	Prepayments	379	351	395	422	512
14	Unamortized Loss on Debt	4,949	4,465	3,883	3,582	3,389
15	Decommissioning of Retired Plant[2]	0	0	(356)	(317)	(278)
16	Accum. Def. Income Taxes	(57,850)	(73,329)	(87,659)	(100,253)	(116,873)
17	Accum. Invest. Tax Credits	(435)	(821)	(839)	(791)	(1,590)
18	Customer Advances	(223)	(286)	(1,254)	(2,735)	(2,647)
19	**Average Rate Base**	**$231,001**	**$251,453**	**$268,445**	**$309,735**	**$389,530**
20	Change in Rate Base	$26,205	$20,452	$16,992	$41,290	$79,795
21	% Change in Rate Base	12.8%	8.9%	6.8%	15.4%	25.8%

[1]When reporting 2013 earnings, MDU restated its 2012 earnings to include a negative rate base component for decommissioning of retired plant. When reporting 2014 earnings, MDU restated its 2013 earnings to include environmental upgrade costs to its Big Stone plant in rate base because cost of capital costs for the upgrade are being collected through its environmental rider.

[2]Due to over-collected decommissioning costs on retired plants, MDU created a regulatory liability and amortizing over 10 years per last rate case PU-10-124.

The Revenue Excess Calculation is a summary of the schedules that follow. However, the calculated revenue excess makes little sense when comparing the previous page depicting the 50% excess earnings sharing with customers. For instance, the first year of earnings sharing with customers totaling $1,006,240 in 2011 is far less than one-half of $5,704,000 depicted above. Similarly, the 2012 earnings sharing of $4,028,846 is way more than one-half of $1,048,000 shown above. This occurs because a number of adjustments occur to reported results in calculating what is eventually shared with customers. The adjusted earnings results are filed by MDU and reviewed by staff before the commission approves the filings for revenue sharing.

With regard to Rate Base, both 2012 and 2013 were restated when MDU filed the following years' annual reports. I have used the restated reports in this review as I agree with the changes that were made. The restatement of 2013 had no effect on customers as there was no sharing agreement in place for 2013. However, the restatement of 2012 resulted in a reduction to rate base which would have increased the excess revenue calculation by about $44,000 and therefore the customer refund by about $22,000. The amount is not material but because a sharing agreement is in place for 2015, MDU should adjust its 2015 margin sharing adjustment filing to give consideration for the 2012 restatement.

Montana-Dakota Utilities Co. - North Dakota Electric Operations
Weighted Cost of Capital

Line		Balance (000's)	Capital Ratio	Cost	Required Return
		2010			
1	Long-Term Debt	$280,499	44.59%	6.85%	3.05%
2	Short-Term Debt	4,016	0.64%	5.43%	0.03%
3	Preferred Stock	15,550	2.47%	4.59%	0.11%
4	Common Equity	328,992	52.30%	10.75%	5.62%
5	TOTAL	$629,057	100.00%		**8.82%**
		2011			
6	Long-Term Debt	$280,492	43.32%	6.85%	2.96%
7	Short-Term Debt	1,934	0.30%	13.05%	0.04%
8	Preferred Stock	15,450	2.39%	4.59%	0.11%
9	Common Equity	349,672	54.00%	10.75%	5.80%
10	TOTAL	$647,548	100.00%		**8.92%**
		2012			
11	Long-Term Debt	$280,485	40.60%	6.85%	2.78%
12	Short-Term Debt	26,206	3.79%	1.41%	0.05%
13	Preferred Stock	15,393	2.23%	4.59%	0.10%
14	Common Equity	368,815	53.38%	10.75%	5.74%
15	TOTAL	$690,899	100.00%		**8.67%**
		2013			
16	Long-Term Debt	$317,977	39.83%	6.15%	2.45%
17	Short-Term Debt	61,280	7.68%	0.79%	0.06%
18	Preferred Stock	15,347	1.92%	4.58%	0.09%
19	Common Equity	403,646	50.57%	10.75%	5.44%
20	TOTAL	$798,250	100.00%		**8.03%**
		2014			
21	Long-Term Debt	$392,969	42.56%	5.87%	2.50%
22	Short-Term Debt	37,100	4.02%	1.21%	0.05%
23	Preferred Stock	15,308	1.66%	4.58%	0.08%
24	Common Equity	478,047	51.77%	10.75%	5.57%
25	TOTAL	$923,424	100.00%		**8.19%**

The cost of capital for MDU continues to decline as it has been able to refinance all of its long-term debt in recent years. The only unusual item in MDU's cost of capital schedule is the high cost of short-term debt, especially in 2011. MDU explained that it incurs banking fees to maintain lines of credit whether the credit is used or not and therefore the low use of short-term debt can result in high cost of debt on a percentage basis. The line of credit allows MDU to aggregate its long-term debt into more cost effective tranches and represents a debt management tool. The investment supported by short-term debt is small and not material to this review.

Montana-Dakota Utilities Co. - North Dakota Electric Operations
Income Statement
(thousands)

Line	Description	2010	2011	2012	2013	2014
1	Sales for Resale	$961	$1,024	$194	$378	$442
2	All Other Revenues	127,721	135,439	143,957	159,835	177,154
3	Total Revenues	$128,682	$136,463	$144,151	$160,213	$177,596
4	Production Expense	50,047	52,232	58,998	66,445	70,653
5	Gross Margins	$78,635	$84,231	$85,153	$93,768	$106,943
6	Transmission Expense	6,205	6,486	6,155	7,993	$10,449
7	Distribution Expense	6,054	6,916	8,212	9,740	10,199
8	Customer Accounts	2,015	2,170	1,998	2,321	2,524
9	Customer Service & Info.	338	276	153	170	175
10	Sales Expense	82	156	123	96	105
11	Administration & General	10,459	11,812	11,876	13,039	12,993
12	Total O&M (lines 4,6,7,8,9,10,11)	$75,200	$80,048	$87,515	$99,804	$107,098
13	Depreciation	17,536	21,129	21,480	21,147	22,910
14	Taxes Other Than Income	4,635	4,826	5,265	5,282	5,580
15	Income Tax Exp (from L26)	7,275	4,518	5,962	7,356	9,239
16	Net Income (L3-12-13-14-15)	$24,036	$25,942	$23,929	$26,624	$32,769
17	Return on Equity	13.78%	13.34%	11.20%	11.86%	11.18%
18	MDU Adjusted Return on Equity[1]	12.90%	12.45%			
	Income Tax Calculation:					
19	Net Inc Before IT Taxes (L. 3-12,13,14)	$31,311	$30,460	$29,891	$33,980	$42,008
20	Less Interest Deduction:					
21	Rate Base	$231,001	$251,453	$268,445	$309,735	$389,530
22	Weighted Cost of Debt	3.09%	3.00%	2.83%	2.51%	2.55%
23	Interest Deduction (L. 20*21)	$7,131	$7,554	$7,604	$7,774	$9,920
24	Other Tax Adjustments	($5,603)	($11,125)	($6,740)	($6,820)	($7,739)
25	Taxable Income (L. 18-22+23)	$18,577	$11,781	$15,547	$19,386	$24,349
26	Combined Tax Rate	39.16%	38.35%	38.35%	37.94%	37.94%
27	Income Tax Expense (L. 24*25)	$7,275	$4,518	$5,962	$7,356	$9,239

[1]MDU adjusted its earnings to remove the Supplemental Income Security Plan (SISP) costs and the 401K tax deduction related to dividends paid to employees who are holders of MDU Resources shares of stock in their individual 401K account. MDU concludes that dividends are not regulated expenses and, likewise, the tax treatment is not regulated either. The commission has denied SISP costs in multiple proceedings but has not addressed whether or not the tax deduction benefits should accrue to MDU or ratepayers.

As can be noted above, gross margins (revenues less production expense) and net income have increased dramatically in recent years helping to maintain a return on equity above recent levels ordered by the commission. The increased expenses are largely due to the increased investment in recent years with transmission expense, distribution expense and depreciation expense being the main contributors.

Line 18 reflects an adjusted return on equity to exclude the Supplemental Income Security Plan (SISP) costs which were included in the reported expenses for 2010 and 2011 even though the commission denied recovery of SISP costs in several of its decisions. These costs are no longer included in reported earnings after 2011 and appropriately so.

Line 18 also includes a significant adjustment to exclude tax benefits for tax deductions related to dividends paid to employees who own stock through the 401k pension plan. The commission has not heard the arguments or made a specific determination in regards to whether this benefit should accrue to ratepayers or stockholders. These tax benefits are no longer included in reported earnings after 2011 and noted here so that the staff and the commission can address the matter directly in MDU's next rate case proceeding.

Staff recommends that the commission close MDU's electric annual reports in accordance with commission policy 5-05-97. A copy of this memo will be provided to MDU so that it can respond as deemed necessary. After sufficient time has passed, staff will prepare a motion to close these cases. Staff will continue to use MDU's annual generation rider update as the mechanism for evaluating the sufficiency of annual earnings and the need for continuing the generation rider.