BEFORE THE SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

DOCKET NG07-013

IN THE MATTER OF THE APPLICATION BY NORTHWESTERN CORPORATION D/B/A NORTHWESTERN ENERGY FOR AUTHORITY TO INCREASE RATES FOR NATURAL GAS SERVICE

Testimony and Exhibits of

Robert G. Towers

On Behalf of

the Staff of the Public Utilities Commission of South Dakota

October 19, 2007

I. Qualifications

3 4 5

1 2

6 7 8

9 10 11

12

13 14

15 16

17 18 19

20 21 22

23 24

29 30 31

32

33 34 35

36

37 38 39

40

41 42

43

44 45

III. Depreciation

Q. Please state your name, business address and occupation.

A. Robert G. Towers. I am a public utility rate consultant and a principal in the firm Chesapeake Regulatory Consultants, Inc. My office is at 1698 Saefern Way, Annapolis, MD 21401-6529. By telephone I can be contacted at 410-849-3210.

- Q. Does the Appendix to this testimony describe your education and summarize your experience in public utility rate regulation?
- A. Yes. it does. Q. Have you previously testified before the South Dakota Public Utilities Commission?
- A. Yes. Since 1976 I have testified on behalf of the Commission Staff in more than thirty rate cases involving each of the investor-owned gas and electric utilities in the state and the telephone utility, U.S. West. I have consulted with the Staff in many other proceedings which did not (or have not) result in the filing of testimony.
- Q. Did you participate actively in rate proceedings involving NorthWestern Energy's (hereafter, "NWEnergy" or "the Company") predecessor, NorthWestern Public Service Company?
- A. Yes. I testified in the Company's 1999 gas rate case (NG99-002) and in gas and electric rate cases in Docket Nos. F-3301 (1979), F-3367 (1981), F-3420 (1984), and F-3498 (1984) and I assisted the Staff with its investigations into the ratemaking implications of the Tax Reform Act of 1986 and the Financial Accounting Standards Board's pronouncement in FAS 106 dealing with retiree health care benefits.

II. Purpose of Testimony

- Q. What is the purpose of your testimony in this case?
- A. I will present the results of my analyses of the Company's proposed depreciation accrual rates, the class cost of service study submitted in support of its proposed distribution of any rate adjustment and its proposed monthly customer service charges.
 - Each of these topics is addressed in a following section of my testimony.

Q. Has the Company presented a study in this case to justify the depreciation rates it has used in the rate filing?

- A. Yes. The Company is proposing to use a newly-revised schedule of depreciation rates based on a study of its South Dakota and Nebraska Gas and Common properties completed in May 2006 by its consultants, Foster Associates.
- Q. Have you reviewed the study to evaluate the proposed depreciation accrual rates?
- A. Yes. The study procedures and results are described in the May 15, 2006, transmittal letter and attached report in the booklet entitled "2006 Depreciation Rate Study". In addition to the formal report, Staff requested and the Company provided the consultant's supporting workpapers.
- Q. What are the effects of the proposed rates?

- A. The proposed rates reflect a comprehensive analysis of available retirement data to estimate, by plant account, expected average service lives, retirement dispersion, and salvage values. Together with the average ages of plant and existing depreciation reserves, remaining lives are developed and accruals determined in an effort to provide for the recovery of plant investments over their remaining lives. Overall, the proposed rates result in a modest reduction in the proposed accruals for all of the South Dakota and Nebraska plant. The Report transmittal letter states that the proposed depreciation rates would reduce the total annual accrual by about \$120,000, or 2.6%, below the \$4.6 million accrual with existing depreciation rates.
 - For South Dakota alone the impact is greater; Statement J in the rate filing shows that South Dakota accruals would be reduced about \$370,000, or 18%, below the accrual with existing rates.
- Q. Do you believe that the proposed rates are appropriate?
- A. In most respects I believe that they are; that is, that they are supported by the plant mortality data and other information on which the study was based. However, I believe that for two of the major accounts Distribution Mains and Services the proposed rates reflect unnecessary and excessive allowances for assumed negative salvage. So-called "negative salvage" or "net negative salvage" results when the cost of removing plant from service ("cost of removal") exceeds the scrap value of recovered materials ("gross salvage").
- Q. What are the negative salvage allowances that are reflected in the proposed rates for Mains and Services?
- A. Statement A in Section IV of the Report shows that the net negative salvage allowances for Mains have been increased by 50% above the allowances reflected in the presently effective accrual rates. For both Steel and Plastic Mains, the allowances were increased from 10% to 15%. For Services the increases are much greater; the proposed rates reflect net negative allowances of 50% up from the 10% allowance in current accrual rates.

Q.	What do	the propos	ed allowances	imply?	
----	---------	------------	---------------	--------	--

1 2 3

A. The 10% allowance for Mains implies that it will cost about \$3.0 million (net of gross salvage) to remove the \$30 million of Mains presently in service in South Dakota. The 50% allowance for Services implies that the cost to remove the \$16 million of these lines will approximate \$8 million.

In order to recover these future estimated costs over the estimated remaining lives of the plant, the proposed accrual rates would charge current ratepayers just over \$400,000 annually, as shown on Page 2 of Exhibit No. (RGT-1).

- Q. Are you proposing an alternative to these allowances?
- A. Yes, I propose that accrual rates for these accounts be determined using the 10% allowances reflected in the presently effective rates. Until now these allowances have been deemed by the Company to be adequate. Using all of the other parameters reflected in its proposed accrual rates, the resulting accrual rates that I am recommending are:

Mains – Plastic	2.20%
Steel	1.82
Services – Plastic	2.48%
Steel	2.48

As shown on page 2 of my Exhibit No.___(RGT-1), these rates will result in current annual allowances for net negative salvage of about \$165,000.

- Q. What is shown on page 1 of Exhibit No.___(RGT-1)?
- A. This page shows the complete impact of the present and Company and Staff-proposed accrual rates for these accounts. Because of other parameters that enter into the determination of the accrual rates elements such as the remaining lives and already-accrued depreciation the Company's proposed rates result in a reduction in the annual accrual of about \$350,000. The rates which I am proposing result in a further reduction of approximately \$240,000.
- Q. Why do you conclude that the net negative salvage allowances proposed by the Company are unnecessary and excessive?
- A. To begin, I would emphasize that the allowances represent future costs which obviously are not now "known and measurable." As stated in the Foster Associates Report, Section III, page 9 discussion of the salvage analysis:

"An estimate of the net salvage rate applicable to future retirements is most often obtained from an analysis of gross salvage and removal

expenses realized in the past. An analysis of past experience (including an examination of trends over time) provides an appropriate basis for estimating future salvage and cost of removal. However, consideration should also be given to events that may cause deviations from net salvage realized in the past. Among the factors that should be considered are the age of plant retirements; the portion of retirements likely to be reused; changes in the method of removing plant; the type of plant to be retired in the future; inflation expectations; the shape of the projection life curve; and economic conditions that may warrant greater or lesser weight to be given to the net salvage observed in the past."

And later, at page 10, the report states that for this case:

"....Cost of removal and salvage opinions obtained from Company engineers were blended with judgment and historical net salvage indications in developing estimates for the future."

Q. Given the apparent conjectural nature of such estimates, why is it necessary or desirable to provide any allowance for such costs?

A. An allowance is needed for two reasons; first, because it is a fact that on-going retirements take place and costs are incurred (and recoveries of gross salvage occur) as a consequence of this activity. Additionally, accounting for the cost of plant used to render service to current customers calls for some effort to match plant costs, including retirement-related costs, with this service.

Q, How do you reconcile the need to recognize the retirement costs with the inability to forecast accurately what they will be?

A, I prefer to focus on the dollar level of experienced costs and to provide an allowance that is sufficient to recognize this level of costs. Indeed, this is the concept that is applied in the Internal Revenue Code where a corporation's tax deduction for removal costs is limited to its experienced costs during the tax year. It is also the concept adopted by some other regulatory agencies due to the high level of uncertainty associated with salvage forecasts.

Q. How do your recommended salvage allowances in this case compare with the Company's actual salvage experience?

A, The allowances for net negative salvage reflected in my proposed rates are shown in Column F on page 2 of Exhibit No.___(RGT-1) – approximately \$59,000 for Mains and \$106,000 for Services for a total of \$165,127. Note that these amounts are associated with Gas plant in *South Dakota only*.

Page 3 of the exhibit displays the Company's actual experience over the last ten years; however, the amounts shown on this page are for Gas plant in both South Dakota and

Nebraska. (The Foster Associates depreciation study analyzed the two-state combination). Net negative salvage averaged \$43,000 for Mains and \$131,000 for Services over the ten-year period for a total of about \$175,000 in the two-state service area. Thus, making any adjustment at all to eliminate Nebraska plant related costs, it is clear that the allowances reflected in my proposed rates closely match the Company's actual experience.

In contrast, it is clear that the Company's proposed accrual rates would provide a current allowance for negative salvage in South Dakota (\$405,092, as shown on page 2 of my exhibit) that greatly exceeds the actual experience in the two states as reported on Page 3 (\$175,000).

IV. Class Cost of Service Study and Monthly Customer Charges

 Q. Have you reviewed the Class cost of service study (CCOSS) submitted by the Company in this case?

A. Yes, and I have no objection to the methodologies (cost classifications and cost allocations) used. The methodologies are consistent with those accepted by Staff in the Company's last rate case and which underlie the development of its presently-effective class service rates. In other words, I find no flaw in the Company's distribution of its revenue requirements among customer groups. The determination of the required revenue level, however, is addressed by other Staff witnesses.

Q. Staff witness Keith Senger has summarized the Staff positions on revenue requirement issues and concluded that the required increase in the Company's presently-effective base rates, excluding purchased gas costs and ad valorem taxes, is approximately \$952,000. How should this increase be spread among the customer classes?

 A. The Company's CCOSS, based on its determination that the need for additional revenues is \$3,682,000, indicated that class rates should be increased by a nearly uniform 31%; the composite for all classes is 31.6%; the class rates of increase ranged from 30.03% to 32.73%. Residential customers – the largest class – were allocated an increase of 31.8%. In each instance, the class increase was designed to result in the same rate of return from all classes.

Since I have found no disagreement with the Company's cost study approach, I believe that the evidence supports a uniform, across-the-board increase in present base rates based on Staff's determination of the need for additional revenues.

Q. Have you examined the analysis made by the Company of the costs which it says support its proposed monthly customer charges?

A. Yes, and I believe that the Company's analysis, summarized on page 4 of Statement O, greatly overstates the relevant costs. Nevertheless, after making my own determination of the relevant costs, I have concluded that, with the exception of the Large Commercial

are cost-justified.

Q. I have no further questions at this time.

Q. What does your analysis show and how does it differ from the Company's analysis?

rates for which no increase is being proposed, the proposed monthly service charges

A. My analysis is summarized in Exhibit No. (RGT-2) and shows the following compared to the Company's cost analysis and its present and proposed customer charge rates:

	Monthly Cus	tomer Cost	<u>Montl</u>	nly Rate
Customer Class	Per Company	Per Staff	<u>Present.</u>	<u>Proposed</u>
Residential	. \$14.55	\$8.48	\$6.00	\$8.00
Small Commercial	\$16.62	\$9.62	\$7.00	\$9.00
Large Comm'l/Indu		•		
Combined	\$144.02	\$81.00		
Option A	\$116.30	\$65.22	\$80.00	\$80.00
Option B	\$306.32	\$173.39	\$280.00	\$280.00

The essential difference between the Company's cost analysis and mine is that my analysis focuses on the costs that are directly related to providing service access to the customer. These are the categories of costs that would be affected incrementally when a customer is added to the system. They include the return on investment and operating expenses associated with customer Services, Meters and Regulators and the costs of meter reading and billing.

Also, I should point out that my analysis is based on the Company's cost study adjusted. as noted at the bottom of the schedule, only for Staff's recommended depreciation rates for Services and for Staff's proposed 9% ROE.

- Q. In light of the cost-justification that you have found, is it critical that the monthly customer charges to Residential and Small Commercial customers be increased to the proposed levels?
- A. No, but that would be a deviation from cost-based rates and requires a policy determination. If increasing the fixed monthly rates to the proposed levels violates other objectives of establishing rates that are deemed to be reasonable - for example, the avoidance of "rate shock" - the customer service charge could be raised part-way to the cost level as long as the Company is allowed to recover the shortfall in other components of its rates for the same class.

STATEMENT OF EDUCATION AND EXPERIENCE ROBERT G. TOWERS

Senior Consultant
Chesapeake Regulatory Consultants, Inc.
1698 Saefern Way
Annapolis, MD 21301-6529
410.849.3210

Mr. Towers is President of Chesapeake Regulatory Consultants, Inc. Over the past forty six years he has assisted clients in dealing with a wide range of ratemaking policy, accounting, financial, economic and operational issues affecting rates and services offered by all types of utilities. He has testified in more than 200 public utility rate proceedings before regulatory commissions in 28 states and the District of Columbia, the Federal Energy Regulatory Commission and its predecessor the Federal Power Commission.

EMPLOYMENT

1986 - Present President and Senior Consultant

Chesapeake Regulatory Consultants, Inc.

Annapolis, Maryland

1970 - 1986 Vice President and Senior Consultant

Hess & Lim, Inc. Greenbelt, Maryland

1960 - 1970 Consultant

Martin Toscan Bennett Associates

Washington, D.C.

As a consultant with each of the firms listed above, Mr. Towers participated extensively in wholesale and retail rate proceedings before federal and state regulatory agencies on behalf of the firms' clients. His participation has involved analyses of a broad range of ratemaking concepts, and specific accounting, financial, operational, allocation and rate design issues raised by the utility's rate filings or in client complaints. Specific tasks included analyses of the utility's operations and filed financial data, assistance with discovery and cross-examination, presentation of affirmative testimony, assistance with the preparation of legal briefs and other pleadings, and assistance in settlement negotiations. The subject utilities have included electric, gas, steam and water distribution companies; electric generating utilities; gas and products pipeline companies; waste water systems; transit companies; and telecommunication companies.

Clients served by Mr. Towers have included numerous state regulatory commissions and their staffs; consumer advocate agencies of state governments; federal government agencies as consumers of utility services; municipalities as consumers of utility services and as representatives of their citizens; municipal agencies; municipally-owned and cooperative utility systems; civic organizations; industrial consumers; and investor-owned utilities, principally as purchasers of utility services from other investor-owned companies.

EDUCATION

June 1960 Bachelor of Science Degree in Economics
University of Maryland
College Park, Maryland
Phi Eta Sigma and
Phi Kappa Phi Honor Societies

PROFESSIONAL ORGANIZATIONS

American Economic Association
American Water Works Association

PUBLICATIONS & SPECIAL APPEARANCES

Article "Cost of Debt Capital in Allowed Rates of Return" published in Public Utilities Fortnightly, Vol. 68, No. 1.

Paper "Ratemaking Consideration of Construction Work in Progress" presented to the Conference of State Utility Consumer Advocates, University of Chicago, June 1979.

Paper on CWIP treatment presented to the Iowa State Regulatory Conference, Iowa State University, May 1980.

EXPERT TESTIMONY

Mr. Towers has presented testimony to the following regulatory authorities in more than 200 proceedings.

Arkansas Public Service Commission
Connecticut Public Utilities Control Authority
Colorado Public Utilities Commission
Delaware Public Service Commission
District of Columbia Public Service Commission

Florida Public Service Commission Hawaii Public Utilities Commission Idaho Public Utilities Commission Iowa Public Utilities Board Maryland Public Service Commission

Massachusetts Department of Public Utilities Minnesota Public Utilities Commission Mississippi Public Service Commission Montana Public Service Commission Nevada Public Service Commission

New Mexico Public Service Commission New York Public Service Commission Ohio Public Utilities Commission Pennsylvania Public Utility Commission Rhode Island Public Utilities Commission

South Dakota Public Utilities Commission Texas Public Utility Commission Texas Railroad Commission Utah Public Service Commission Vermont Public Service Board

Virginia State Corporation Commission
Washington Utilities and Transportation Commission
West Virginia Public Service Commission
Wisconsin Public Service Commission
Wyoming Public Service Commission

Federal Energy Regulatory Commission Federal Power Commission

Exhibit No. (RGT-1)
Page 1 of 3
SDPUC Docket NG07-013

NorthWestern Energy - SD Only Comparison of Company and Staff-Proposed Depreciation Rates and Accruals for Mains and Services 2006

	Avg. Plant	<u>Accrual Rate</u>			Annual Accrual		<u>I</u>	
	<u>Year 2006</u>	<u>Present</u>	Proposed	<u>Staff</u>	<u>Present</u>	<u>Proposed</u>	<u>Staff</u>	
1 Mains - Plastic 2 - Steel	\$14,724,650 \$15,517,775	3.42% 3.42%	2.43% 2.09%	2.20% 1.82%	\$503,583 \$530,708	\$357,809 \$324,321	\$323,942 \$282,424	
3 Services - Plastic 4 - Steel	\$13,734,487 \$2,329,987	3.48% 3.48%		2.48% 2.48%	\$477,960 \$81,084	\$487,574 \$75,026	\$340,615 \$57,784	
5			·		\$1,593,335	\$1,244,730	\$1,004,765	
6 Difference from presen	t rates				\$0	(\$348,604)	(\$588,570)	
7 Difference from Company-proposed rates							(\$239,966)	

Sources

Plant balances, Present and Company-Proposed rates - Statement J Staff-proposed rates: Response to DR 3-14 (Exhibit 3-14); tesimony of Staff witness R.G. Towers

DepreciationRates.xls

NorthWestern Energy - SD Only Comparison of Company and Staff Accruals for Net Negative Salvage 2006

Exhibit No.____(RGT-1)
Page 2 of 3
SDPUC Docket NG07-013

		Average Plant	Company Accrual Rate As With Zero		Proposed Annual Accrual	·	Staff Proposed Accrual for Salvage	
		<u>Yr. 2006</u>	Proposed	<u>Salvage</u>	for Salvage	Adjustment	As Adjusted	
		(A)	(B)	©	(D)	(E)	(F)	
N	<i>Mains</i>							
1	376.10 Steel	\$15,517,775	2.09%	1.64%	\$70,173	(\$41,897)	\$28,276	
2	376.20 Plastic	\$14,724,650	2.43%	1.99%	<u>\$64,510</u>	(\$33,867)	<u>\$30,643</u>	
3	Total-Mains				\$134,683	(\$75,764)	\$58,919	
5	Services							
4	380.10 Steel	\$2,329,987	3.22%	1.28%	\$45,164	(\$17,242)	\$27,922	
5	380,20 Plastic	\$13,734,487	3.55%	1.91%	<u>\$225,246</u>	(\$146,959)	<u>\$78,287</u>	
6	Total- Services				\$270,409	(\$164,201)	\$106,208	
7 7	Fotal - Mains and Servi	ces			\$405,092	(\$239,965)	\$165,127	

Sources: Statement J; Testimony of Staff Witness R.G. Towers

Exhibit No.___(RGT-1)
Page 3 of 3
SDPUC Docket NG07-013

NorthWestern Energy - SD/NE Gas Experienced Plant Net Negative Salvage

	Mains			9	Services			
	<u>Steel</u>	<u>Plastic</u>	<u>Total</u>	<u>Steel</u>	<u>Plastic</u>	<u>Total</u>		
1996	(\$2,845)		(\$2,845)	(\$85,774)		(\$85,774)		
1997	(\$27,224)		(\$27,224)	(\$79,428)		(\$79,428)		
1998	(\$51,372)		(\$51,372)	(\$140,265)		(\$140,265)		
1999	(\$13,181)		(\$13,181)	(\$80,324)		(\$80,324)		
2000	\$21,747		\$21,747	(\$181,874)		(\$181,874)		
2001	(\$25,999)		(\$25,999)	(\$258,121)		(\$258,121)		
2002	(\$160,382)	(\$17,962)	(\$178,344)	(\$92,372)	(\$70,286)	(\$162,658)		
2003	(\$18,254)	(\$87,024)	(\$105,278)	(\$33,714)	(\$33,436)	(\$67,150)		
2004	(\$24,757)	(\$3,522)	(\$28,279)	(\$69,840)	(\$38,644)	(\$108,484)		
2005	(\$14,462)	(\$8,471)	(\$22,933)	(\$63,766)	(\$84,469)	(\$148,235)		
Total			(\$433,708)			(\$1,312,313)		
Average - 10 yr.			(\$43,371)		[(\$131,231)		

Source: 2006 Depreciation Study Workpapers ("Exhibit 13" in Response to Staff Request 2-15)

NORTHWESTERN CORPORATION, DBA NORTHWESTERN ENERGY

South Dakota Retail Gas Operations
Development of Customer-Related Unit Cost
Test Year Ended December 31, 2006

		Total Service Area	Residential	Small Commerical	Large Commercial	Option A L. Commercial	Option B
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
Cu	stomer-related gross plant in service						
	ervices	\$16,231,504	\$13,413,408	\$2,014,293	\$803,803	\$599,172	\$204,631
	leters	6,243,619	4,262,182	960,020	1,021,417	715.834	305,583
	leter installations	2,745,219	1,874,013	422,105	449,101	314.741	134,360
	equiators	983,936	710,415	160,015	113,506	61,227	52,279
	egulator installations	907,010	654,873	147,505	104,632	56,440	48,192
	Subtotal gross investment	\$27,111,288	\$20,914,891	\$3,703,938	\$2,492,459	\$1,747,414	\$745,045
7. Acı	cumulated depreciation	(9,762,810)	(7,531,479)	(1,333,793)	(897,538)	(629,246)	(268,292)
	cumulated deferred income taxes	(1,626,334)	(1,254,628)	(222,190)	(149,516)	(104,823)	(44,693)
							(,/
9. Cu	stomer-related net plant	\$15,722,144	\$12,128,784	\$2,147,955	\$1,445,405	\$1,013,345	\$432,060
Cu	stomer-related cost of service						
10. R	ate of return @ 7.57%	1,231,044	949,684	168,185	113,175	79,345	33,830
11. In	come taxes on return	391,481	302,007	53,484	35,990	25,232	10,758
12. O	perating and maintenance expense	653,152	493,495	91,404	68,253	48,476	19,777
13. C	ustomer accounting expense *	691,926	586,316	88,041	17,569	9,476	8,093
14. C	ustomer service and information	545,456	462,203	69,404	13,849	7,470	6,379
15. E	mployee pensions and benefits	177,251	140,967	23,867	12,417	8,448	3,969
16. P	roperty insurance	11,152	8,603	1,523	1,026	71 9	307
17. D	epreciation	907,845	700,353	124,030	83,462	58,514	24,948
18. St	taff depreciation adj services	(164,201)	(126,672)	(22,433)	(15,096)	(10,584)	(4,512)
19. P	roperty taxes	251,150	193,749	34,312	23,089	16,187	6,902
20. Cu	stomer-related cost of service	\$4,696,256	\$3,710,705	\$631,817	\$353,734	\$243,283	\$110,451
21. An	nual number of bills	507,382	437,344	65,671	4,367	3,730	637
22. Cu	stomer cost per bill	\$9.26	\$8.48	\$9.62	\$81.00	\$65.22	\$173.39

^{*} Exlcudes uncollectibles

Note: Based on Company filing adjusted to reflect Staff-recommended 9% ROE and 2.48% depreciation rate for Services.