

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE  
STATE OF NORTH DAKOTA  
PRE-FILED RESPONSIVE TESTIMONY  
OF  
STEVE GOODNER  
NDPSC FILE NO. PU-10-124  
OAH FILE NO. 20100196**

**OCTOBER 19, 2010**

**PRE-FILED RESPONSIVE TESTIMONY  
OF  
STEVE GOODNER**

1 **Q: Please state your name and business address.**

2 A: My name is Steve Goodner. My business address is 2717 NW 45th Street, Oklahoma  
3 City, Oklahoma 73112.

4 **Q: By whom are you employed and in what capacity?**

5 A: I have been retained by Mathai & Associates Regulatory Consultants LLC to review  
6 the cost of service study, the allocation of the any rate change to customer classes and  
7 rate design recommendations.

8 **Q: What is your educational background and experience?**

9 A: I received a Bachelor of Science Degree in Accounting from Central State University  
10 and a Master of Business Administration from Oklahoma City University. I was  
11 employed by Oklahoma Gas & Electric Company (OG&E) for thirty-four years. My  
12 overall professional experience has been in the areas of accounting, internal audits,  
13 finance and regulation. I worked in accounting and finance from May 1974 until June  
14 of 1994. During this time I worked in all areas of accounting including the regulatory  
15 section where I prepared the accounting exhibits and assisted in preparation of  
16 testimony required in OG&E's filings in Oklahoma, Arkansas and the Federal Energy  
17 Regulatory Commission. From 1994 until December 2008, I worked in the Rates and  
18 Regulatory Department where I prepared the cost of service studies, assisted in rate  
19 design and fuel adjustment clause tariffs, and provided witness testimony in OG&E's  
20 Oklahoma and Arkansas rate filings. Since retiring from OG&E in December 2008, I  
21 currently provide consulting services on cost of service studies and revenue  
22 requirements.

23 **Q: What is the purpose of your testimony?**

24 A: My testimony discusses the following items:

25 • Discussion of my review of the Montana-Dakota Utilities Company (MDU)  
26 cost-of-service study.

27 • Discussion of the allocation of the proposed rate change proposed to the rate  
28 classes,

29 • Discussion of rate design recommendations.

30 **Q: What is the purpose of a cost-of-service study?**

1 A: A cost-of-service study is used to allocate the total jurisdictional revenue requirement to  
2 each customer class.

3 **Q: Mr. Goodner, please describe the term "cost of service" in common terms.**

4 A: The total revenue this Commission allows a public utility an opportunity to collect  
5 should be equal to the total costs the public utility incurs to provide electric service to  
6 its customers. In a cost-of-service study, particular costs are allocated or directly  
7 assigned to customer classes to determine the cost of service for each class. Because  
8 costs are generally determined from historical accounting records, this type of analysis  
9 is referred to as an "accounting" or "embedded" cost of service study. Costs are  
10 allocated to customer classes on a cost causation basis; referred to as a "fully  
11 distributed" or "fully allocated" cost-of-service study.

12 **Q: What are the "cost" components of a cost-of-service study?**

13 A: The cost of providing electric service generally includes: (1) Operation and  
14 Maintenance Expenses, (2) Depreciation Expenses, (3) Federal and State income taxes,  
15 (4) Taxes Other Than Income taxes, and (5) Costs of Capital (Return).

16 **Q: What are the major steps required in the development of a fully allocated cost-of-  
17 service study?**

18 A: The development of a fully allocated cost-of-service study consists of three major steps:  
19 (1) functionalization, (2) classification, and (3) allocation or assignment. More fully  
20 explained below:

21 1. First, embedded costs are categorized by operating **function** with which the costs  
22 are primarily associated. The functional categories ordinarily used in ratemaking  
23 are production, transmission, distribution and customer service.

24 2. These functionalized costs are then **classified** to reflect the manner in which the  
25 costs were incurred. Generally, classification further defines functional costs into  
26 demand-related (demand usage), energy-related (energy consumption), customer-  
27 related (the number of customers served) and directly assigned components.

28 3. Classification arranges costs into categories so that these costs may be **allocated** to  
29 customer classes based on their respective cost causative service characteristics.

30 The typical cost classifications associated with each functional category are summarized  
31 below:

<b>Cost Function</b>	<b>Cost Classification</b>
Production	Demand-Related Energy-Related
Transmission	Demand-Related Energy-Related

Distribution	Demand-Related Customer-Related
Customer Service	Customer-Related

1

2 Demand-related costs are generally fixed, and tend not to vary with the use of electric  
3 plant facilities or energy production or delivery. Thus, demand-related costs typically  
4 are allocated to customer classes based on their respective megawatt (MW) load, or  
5 demand, characteristics.

6 Energy-related costs, however, do vary with use of electric plant facilities. Fuel and  
7 variable operation and maintenance expenses are primarily energy-related costs. These  
8 costs have been allocated to customer classes based on an analysis of class energy  
9 consumption, including losses in delivery.

10 Customer-related costs are those expenses that are a function of the number and size of  
11 customers. Customer-related plant investment includes facilities needed to give  
12 customers access to the utility's system. Other customer-related costs include expense  
13 items such as customer accounts, customer service and information, meter operation  
14 and plant-associated O&M expenses.

15 **Q: What does the third step - allocation or assignment - involve?**

16 A: The final step in the process is allocation, which involves apportioning (dividing)  
17 functionalized and classified costs to jurisdictions and customer classes of service.  
18 Direct assignments are used when costs can be identified as being wholly attributable to  
19 a particular customer, customer class, or jurisdiction. Investment in a substation used  
20 solely by a customer is one example of a cost that is properly directly assigned to a  
21 specific customer class.

22 After all costs have been allocated or assigned to jurisdictions and customer classes, a  
23 cost to serve is calculated for each jurisdiction and customer class; the respective sum  
24 of such service costs constitutes the total company cost to provide service.

25 **Q: What criteria should be considered in the development of the allocation factors?**

26 A: The following criteria, although not an exhaustive list, provides an objective basis upon  
27 which to judge the appropriateness of an allocation methodology:

28 1. The method should reflect the operating and planning characteristics of the  
29 utility system.

30 2. The method should recognize the various customer class characteristics such as  
31 peak demand, energy usage, load factor, diversity characteristics, number and  
32 size of customers, points of delivery, etc.

- 1 **Q: Please discuss your review of MDU's cost of service.**
- 2 A: My review covered each step of MDU's cost of service study for reasonableness and  
3 the use of accepted cost causation principles. The National Association of Regulatory  
4 Utility Commissioners Electric Cost Allocation Manual (NARUCCAM) was the  
5 standard for the review. This manual provides cost causation principles that have been  
6 developed over time based on a consensus of how cost of service studies should be  
7 performed.
- 8 **Q: Please discuss your review of the Functionalization step.**
- 9 A: The functionalization of the cost of service components are usually straight forward  
10 since most of the rate base and cost components are already functionalized through the  
11 Federal Energy Regulatory Commission (FERC) system of accounts. The common  
12 components require that they be assigned to one of the four functions based on any  
13 direct related associations or based on plant, operation & maintenance labor or total  
14 operation & maintenance expenses.
- 15 **Q: What were the results of your review of the functionalization step?**
- 16 A I did not find any exceptions with MDU's functionalization of rate base or expenses.  
17 The functionalization followed cost causation principles and provided the separation  
18 needed to perform the next step which is classification. However, I did not go into any  
19 detailed analysis of tracing any individual expenses or investments as Mr. Mathai  
20 attempted in his Corporate and jurisdictional allocation analysis of the overall  
21 jurisdictional Revenue Requirement calculations.
- 22 **Q: What were the results of the review of the cost of service classification step?**
- 23 A: The classifications assigned by MDU followed accepted cost causation principles.  
24 Classification of costs provides a direct link between costs and the tariffs developed to  
25 collect those costs. Tariffs that are based on costs then are considered to be just and  
26 reasonable.
- 27 **Q: What were the results of the review of the cost of service allocation step?**
- 28 A: The allocators used in the Company's cost of service were reviewed in light of two  
29 criteria. First, verification to determine if each allocator used was consistent with the  
30 type of classification assigned to each component to be allocated. For example, if the  
31 cost of service component was classified as customer, the allocator should include the  
32 number of customers as the basis for the calculation. Second, I reviewed the inputs  
33 and structure of the allocator calculation. For example, the review considers whether  
34 the allocator should include the number of customers or weighted customers. It  
35 appears the allocators used in MDU's cost of service followed accepted guidelines and  
36 provide a reasonable allocation of costs to each class based on cost causation principles.
- 37 **Q: In summary what are your recommendations or general comments related to the  
38 Company's cost of service?**
- 39 A: The MDU class cost of service study provides in my judgment, results that follow  
40 established guidelines and allocates the costs that each class causes MDU to incur to

1 provide service. The cost of service study then provides a reasonable standard to use  
2 in the development of rates to be charged to each customer class. I also performed a  
3 review to determine if the cost of service properly matched fuel revenue with fuel  
4 costs. The fuel revenue was properly matched with fuel costs and therefore did not  
5 impact the excess or deficiency calculation.

6 **Q: How do you propose to spread the rate change to the customer classes?**

7 A: Mr. Mathai has proposed a reduction of \$2,804,000 to the base rates. This would be a  
8 2.5% decrease to the current projected electric retail revenues of \$110,925,000. I  
9 propose to spread the reduction based on the ratio of each class's electric revenue to the  
10 total electric revenue (less contracts revenue). The allocation of the reduction is shown  
11 on Exhibit No. (SMG-1).

12 **Q: Please discuss your rate design recommendations.**

13 A: First, I recommend the elimination of the declining block rates in the October through  
14 May period for the Residential Electric Service Rate 10 and the Small General Electric  
15 Service rate 20. Tariffs should provide price signals that indicate the amount of  
16 resources or costs that are required to provide the customer with electric service. If  
17 costs increase with the use of energy, prices should also signal this increase. Declining  
18 block rates send a price signal to customers that when usage exceeds a certain kilo-watt  
19 hour (kwh) level that the costs decline with usage of kwhs greater than a certain level.  
20 This price signal does not encourage the efficient use of energy. A flat rate per kwh  
21 for the months of October – May will send the proper price signal to customers to help  
22 encourage their efficient use of energy.

23 **Q: What is the second rate design recommendation?**

24 A: The second recommendation is for the Commission to accept MDU's proposal to  
25 increase the Basic Service Charge to \$10.64 per month for the Residential Electric  
26 Service Rate 10. This adjustment will move the charge closer to the actual cost shown  
27 in the class cost of service. MDU's class cost of service for the Residential class  
28 calculated a Basic Service Charge of \$16.50 per month. This adjustment will move the  
29 Basic Service Charge approximately half way to the cost of service determined by the  
30 cost of service study. Gradualism is needed to minimize the impact on customers and  
31 allow them to adjust to the change in costs. Any negative customer impacts from this  
32 change should be partially or totally offset by the proposed rate reduction to this class.

33 **Q: Are there any additional recommendations?**

34 A: Yes. I concur with MDU's proposal to charge different fuel prices for the primary and  
35 secondary service levels. The MDU proposed projected base cost of fuel is \$.02055  
36 per kwh as shown on RAM-1. MDU is proposing to charge a fuel price of \$.02024  
37 per kwh for primary service and \$.02087 per kwh for secondary service to recognize  
38 the real difference in the delivered cost of fuel at different service levels. This price  
39 change is needed to charge customers a price of fuel that better represents the actual  
40 cost of fuel cost at each service level.

41 **Q: Please discuss MDU proposed adjustment clauses.**

1 A: MDU is proposing to add three adjustment clauses, Load Management Tracking  
2 Adjustment Rate Schedule 54, Renewable Resource Cost Recovery Rider Rate  
3 Schedule 55 and Transmission Cost Recovery Rider Rate Schedule 56. The Renewable  
4 Resource Cost Recovery Rider is addressed by Mr. Mathai. Tariffs should be  
5 developed when a need to collect costs exists and can be supported by known and  
6 measureable facts and figures. This allows for an adequate review process needed to  
7 develop tariffs. These conditions do not currently exist; therefore, I recommend that  
8 the approval of the Load Management Tracking Adjustment and the Transmission Cost  
9 Recovery Rider be denied in this case. The Commission should consider these riders  
10 when all facts are available for analysis and determination. In Staff's opinion, these  
11 proposals are premature for current approval.

12 **Q: Does this conclude your testimony?**

13 A: Yes, it does.

**MONTANA-DAKOTA UTILITIES CO.  
ADVOCACY STAFF POSITION  
ELECTRIC UTILITY - NORTH DAKOTA  
PROPOSED ALLOCATION OF REVENUE CHANGE**

<u>Class Name</u>	<u>Class Code</u>	<u>Projected Electric Revenues</u>	<u>%/1</u>	<u>Allocated Rate Change</u>
Residential	R10	\$ 45,802	42.3%	\$ (1,187)
Small General	R20	\$ 8,259	7.6%	\$ (214)
Irrigation Service	R 25	\$ 45	0.0%	\$ (1)
Large General Service Primary	R 30-P	\$ 5,278	4.9%	\$ (137)
Large General Service Secondary	R 30-S	\$ 41,418	38.3%	\$ (1,073)
TOD Large General Service	R 31	\$ 537	0.5%	\$ (14)
Space Heating	R32	\$ 1,854	1.7%	\$ (48)
Small Municipal Service	R 40	\$ 310	0.3%	\$ (8)
Municipal Lighting Service Primary	R 41 P	\$ 111	0.1%	\$ (3)
Municipal Lighting Service Secondary	R 41 S	\$ 1,302	1.2%	\$ (34)
Municipal Pumping Service Primary	R 48 P	\$ 418	0.4%	\$ (11)
Municipal Pumping Service Secondary	R 48 S	\$ 1,281	1.2%	\$ (33)
Outdoor Lighting Service	R 52	\$ 494	0.5%	\$ (13)
Interruptible Power Service	R 39	\$ 173	0.2%	\$ (4)
Interruptible Demand Response	R 38	\$ 911	0.8%	\$ (24)
Contracts		\$ 2,732	0.0%	
	<b>Total</b>	<b>\$ 110,925</b>	<b>100.0%</b>	<b>\$ (2,804)</b>
Electric Revenues Less Contracts		\$ 108,193		

1 Projected Electric Revenues / Electric Revenues Less Contracts

Proposed Revenue Change (Reduction) (2,804)