BEFORE THE

PUBLIC UTILITIES COMMISSION

STATE OF SOUTH DAKOTA

IN THE MATTER OF THE APPLICATION OF MONTANA-DAKOTA UTILITIES CO. FOR AUTHORITY TO INCREASE ITS NATURAL GAS RATES

DOCKET NO. NG12-008

TESTIMONY & EXHIBITS OF BRITTANY A. MEHLHAFF

ON BEHALF OF THE COMMISSION STAFF

OCTOBER 1, 2013

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Q. Please state your name, business address, and current position.

A. My name is Brittany Mehlhaff. My business address is South Dakota Public Utilities Commission, State Capitol Building, 500 East Capitol Avenue, Pierre, South Dakota 57501. I am employed as a Utility Analyst by the South Dakota Public Utilities Commission (Commission).

Q. Please describe your educational background and work experience.

A. In May 2011, I completed the degree requirements for a Masters of Arts degree in Mathematics from the University of South Dakota, graduating with a 4.0 GPA. Prior to completing my master's degree, I received a B.S.Ed. degree in Mathematics from the University of South Dakota in May 2009, graduating magna cum laude. I began my employment with the Commission as a Staff Utility Analyst in July of 2010. During my employment at the Commission, I have attended several trainings and seminars relating to the regulation of electric and natural gas public utilities and completed coursework in accounting. I have participated in Staff's analyses of five previous utility rate cases including Dockets EL10-011, NG11-003, EL11-019, EL12-046, and EL12-061. I filed direct testimony in Docket EL12-046. Also during my time at the Commission, I have worked on numerous other cost of service related filings including several transmission and environmental rider proceedings as well as one phase-in rate increase proceeding.

Q. Are you familiar with Montana Dakota Utilities Company ("MDU" or "Company") application for an increase in natural rates in South Dakota in Docket NG12-008?

A. Yes. I have examined MDU's testimony, exhibits, and work papers included in the Company's initial filing as well as MDU's responses to data requests relating to the issues I address in this testimony.

Q. What is your role in this proceeding?

A. I am the lead analyst for the Commission Staff in this proceeding. First, I will introduce the other Staff witnesses who are presenting testimony. Second, I will summarize MDU's approach to measuring its revenue requirement. Third, I will explain Staff's approach to measuring MDU's South Dakota natural gas revenue requirement, including differences in historic test year amounts. Fourth, I present Staff's summary of MDU's revenue requirements through exhibits I have prepared, and I will provide recommendations to the Commission on several specific pro forma adjustments.

Q. Please introduce the other Staff witnesses who are testifying in this proceeding and briefly identify the issues that each address.

A. The following Staff witnesses provide testimony in this proceeding:

- Mr. Basil Copeland
  - Capital Structure
  - Return on Equity
  - Rate of Return
  - Weather Normalization – Base for Heating Degree Days
- Mr. Dave Peterson
  - Labor Costs
  - Employee Benefits Expense
  - Insurance Expense
  - Billings Landfill Gas Costs
  - Cash Working Capital
  - Rate Consolidation
  - Class Cost of Service Study – Spread of the Increase

- Margin Sharing
- Customer Service Charge
- Other Tax Deductions
- Elimination of Closing/Filing & Prior Period Adjustment
- Unamortized Gain/Loss on Debt
- Deferred FAS 106 Costs
- Deferred Tax Normalization

- Mr. Jacob Pous
  - Depreciation Studies
- Mr. Patrick Steffensen
  - Uncollectible Accounts
  - Postage
  - Advertising
  - Industry Dues
  - Regulatory Commission Expense
  - Economic Development
  - Lobbying
  - Demand Side Management
  - Charitable Contributions
  - Aviation Expense
  - Mains Maintenance Expense
  - Rate Design

Q. What issues are addressed in your testimony?

A. In addition to sponsoring Staff's revenue requirement exhibits, my testimony provides recommendations on the following pro forma adjustments:

- Cost of Gas
- Current Revenue
- Weather Normalization
- Annualized Volumes
- Other Revenue
- Company Consumption
- Depreciation Adjustment

- Vehicles and Work Equipment
- Interest Synchronization
- Pierre Office Rental
- Plant Additions
- Other Working Capital Updates (Materials and Supplies, Prepayments, & Accumulated Provision for Injuries and Damages)
- Customer Guarantee
- Customer Advances for Construction

SUMMARY OF MDU'S CASE

Q. What is MDU requesting in this proceeding?

A. MDU is requesting the Commission authorize a pro forma revenue requirement of approximately $49,205,000[1] for natural gas service in the Black Hills and East River service areas in South Dakota. This includes a 10.50% rate of return on common equity capital[2]. More importantly, MDU's request represents an increase in test year revenues of approximately $1,548,000[3], or approximately 3.3%[4].

Q. What was MDU's approach to measuring its revenue requirement?

A. Generally speaking, MDU started with a twelve-month historic test year ended June 30, 2012. MDU then adjusted test year operating results using 25 adjustments to operating income and 10 adjustments to rate base[5].

Q. What standard does MDU claim to have relied on in proposing these adjustments?

A. MDU claims its adjustments are based on known and measurable changes; however, a few adjustments exceed those parameters. They will be discussed individually by various Staff witnesses.

SUMMARY OF STAFF'S CASE

[1] Statement M, Page 7 of 7
[2] Statement G, Page 1 of 1
[3] Statement M, Page 7 of 7
[4] Application Letter, Page 3 of 4
[5] Statement M, pages 3 and 4 of 7

Q. How did you measure MDU's revenue requirement?

A. Following Staff's traditional approach to analyzing utility rate requests, I calculated MDU's South Dakota natural gas revenue requirement using a recently completed (i.e., historic) twelve-month period (test year). Staff's analysis of the South Dakota electric operations reflects a number of adjustments to MDU's revenues, expenses, and investments for that test year. These adjustments are made with the objective of conforming the test year to emulate normal, ongoing conditions, and to reflect cost and operational changes that are known and reasonably measurable.

Q. Have you prepared exhibits which summarize Staff's positions?

A. Yes. Staff Exhibit___(BAM-1), Schedule 3 lists Staff's positions on the specific issues relating to MDU's South Dakota gas operating income. Staff Exhibit___(BAM-2), Schedule 2 lists Staff's positions on specific issues relating to MDU's South Dakota gas rate base. Staff Exhibit___(BAM-1), Schedule 2 and Staff Exhibit___(BAM-2), Schedule 1 summarize these positions. Finally, Staff Exhibit___(BAM-1), Schedule 1 shows my calculation of MDU's revenue deficiency and revenue requirement.

Q. Based on analysis performed, have you found MDU's request for approximately $1,548,000 of additional revenue to be justified?

A. No. Staff's case indicates that the Company's request exceeds its requirement for additional revenue from South Dakota gas customers by a substantial amount. Specifically, Staff determined rates should be decreased by $1,393,261[6]. Staff believes the resulting revenue requirement allows the Company to recover its ongoing costs and allows for the opportunity to earn a reasonable and fair return on utility investment. Staff's recommendation includes an 8.70% rate of return allowance on common equity[7].

TEST YEAR AMOUNTS

Q. What test year did MDU rely upon to measure its revenue requirement in this case?

A. MDU used the twelve-month period ended June 30, 2012 as its test period in this case.

[6] Staff Exhibit___(BAM-1), Schedule 1, column b, line 10
[7] Testimony of Basil L. Copeland Jr. and Staff Exhibit___(BLC-1), Schedule 1

Q. What did you use as a test year for Staff's case?

A. I also used the same historic test year as MDU, i.e., the twelve-month period ended June 30, 2012. I obtained MDU's test year (per books) operating results from various Company financial statements, supporting schedules, and the Company's responses to Staff data requests. Staff's test year amounts are found on Staff Exhibit___(BAM-1), Schedule 3, column b and Staff Exhibit___(BAM-2), Schedule 2, column b.

Q. Do your test year amounts agree with MDU's claimed test year amounts?

A. Yes. My test year revenues and expenses agree with those amounts claimed by MDU. However, my test year rate base amounts differ from those claimed by MDU.

Q. Please explain.

A. The differences between my rate base determination and that of MDU are due to the method used in calculating "average" rate base. MDU's average rate base was calculated using the test year beginning (6/30/11) and ending (6/30/12) account balances. Most of my average amounts are the result of using a thirteen-point average which used the ending account balances for thirteen consecutive months ending June 30, 2012. The ending balances for the thirteen-month period captures the entire year's activity. The Commission has historically used thirteen-point averages for rate base determinations because it better reflects the matching of costs, investments, and revenues.

Under MDU's method, plant placed in service during the last month of a test year is inappropriately weighted as if it had been in service for six months. Since revenue is recorded as an accumulation of a year's activity, the books and records for that year would only reflect one month's worth of revenue generated from the newly installed facility, thus creating a mismatch. A thirteen-month average, on the other hand, weights that plant appropriately to better reflect the matching principle. The calculation of Staff's thirteen-point averages are found on Staff Exhibit___(BAM-3), Schedule 1 and Staff Exhibit___(BAM-3), Schedule 2.

COST OF GAS

Q. Have you reviewed Ms. Mulkern's proposed Adjustment No. 5 regarding the cost of gas?

A. Yes, I have. Ms. Mulkern proposed a $3,480,480 adjustment to purchased gas expense for the test year to reflect MDU's projection of gas costs for the twelve months ended June 30, 2013. MDU's gas cost adjustment also incorporates pro forma sales and a combined gas cost, reflecting the effects of the proposed rate consolidation on the purchased gas adjustment (PGA).

Q. Do you agree with Ms. Mulkern's adjustment?

A. No, I do not. Ms. Mulkern's adjustment is based on projections that are not known and measurable. Also, I do not agree with the sales volumes that Ms. Mulkern used to calculate her adjustment. I do not agree with the Company's weather normalization and annualization adjustments from which Ms. Mulkern's sales were derived. I discuss these sales adjustments in later sections of my testimony.

Q. What do you recommend?

A. I recalculated Ms. Mulkern's adjustment using actual gas costs for the twelve months ended June 30, 2013, rather than relying on MDU's projections[8]. My use of actual gas costs is known and measurable. My recalculation of Ms. Mulkern's adjustment relies on actual sales during the test year to agree with the gas cost-related revenues as adjusted in the current revenue adjustment. The cost of gas is also appropriately adjusted as part of my proposed weather normalization adjustment discussed in a later section of my testimony. This ensures any adjustment to the cost of gas is equally offset by a revenue adjustment, resulting in a neutral impact to the revenue requirement, except for minor effects such as gross receipts tax, uncollectible accounts, and cash working capital.

CURRENT REVENUE

Q. Please explain MDU's adjustment to revenues at current rates, Adjustment No. 1.

A. Ms. Mulkern proposed an adjustment to test year revenues to restate the per books consumption at current rates, to reflect a projected annual gas cost for the period July 2012 to June 2013, and to eliminate unbilled revenues.

[8] Refer to MDU's Response to Staff Data Request 9-35, Attachment A, for the updated gas commodity costs.

Q. What is your recommendation regarding Ms. Mulkern's current revenue adjustment?

A. I calculated an adjustment similar to Ms. Mulkern's, with two major differences. First, I used the actual gas commodity costs for the twelve months ended June 30, 2013, to be consistent with my purchased gas cost adjustment.

The other difference is quite significant. The Company included all per books gas cost-related and distribution delivery charge revenues within the per books distribution delivery charge revenues for Air Force Rate 641. My current revenue adjustment corrected this misclassification by restating most of these revenues as purchased gas-related revenues. Classifying revenues as gas-related revenues vs. distribution delivery charge revenues should be a revenue neutral change. Since the change to purchased gas-related revenues is offset by the change to gas cost expense, the cost of gas portion of the adjustment is revenue neutral. However, Ms. Mulkern's adjustment to remove over $1 million from the distribution delivery charge revenues results in an unwarranted impact to the revenue deficiency, an increase of over $1 million. My adjustment removes this unnecessary impact by first reclassifying the Air Force revenues into the appropriate categories in per books prior to calculating the current revenue adjustment. As one can see on Exhibit___(BAM- 4), page 3, mine is properly a revenue-neutral adjustment.

WEATHER NORMALIZATION

Q. Please describe the Company's proposed weather normalization adjustment.

A. The Company proposed an adjustment to test year sales and revenues to reflect normal weather based on historic heating degree day (HDD) data. The company was unable to provide the source data used in calculating the actual and normal HDDs. However, the Company stated that it used a base of 60 degrees to develop the actual and normal HDDs and that the normal HDDs were developed using a 30-year average based on the period 1971-2000[9]. The Company adjusted test year sales based on this information for all weather-sensitive customers. Black Hills area sales were adjusted based on HDDs in Rapid City and the East River area sales were adjusted based on HDDs reported in Pierre and Mobridge. In addition, MDU adjusted the sales for non-weather sensitive customers based on a 3-year average of sales for those customers. The Company's adjustment resulted in a $5,831,766 increase in test year revenues.

[9] MDU Response to DR 4-22

Q. Do you agree with the Company's methodology for calculating the weather normalization adjustment?

A. No. I agree it is necessary to adjust test year sales to reflect normal weather conditions in the Company's service territories. However, my methodology differs from the Company's in several respects. Most notably, my weather adjustment uses daily normal HDDs for the period 1981-2010, as reported by the National Oceanic and Atmospheric Administration (NOAA), using a 65 degree base, as recommended by Staff Witness Copeland. MDU's "normals" were developed using a 60 degree base and what appears to be a rolling 30-year average.

Q. How did you calculate Staff's weather normalization adjustment?

A. After obtaining the daily actual and normal HDDs for the Rapid City Airport, Pierre Airport, and Mobridge Airport, I calculated each location's monthly actual and normal HDDs for each of the 20 billing cycles in the test year. Next, I calculated the average monthly actual and normal HDDs for each location based on the monthly amounts for the 20 billing cycles. Then I calculated the monthly actual and normal HDDs to be used for the East River rate schedules using a weighted average of the HDDs calculated for Mobridge and Pierre areas based on the number of customers located in the Mobridge and Pierre areas. The HDDs calculated for Rapid City are used for the Black Hills area. These calculations are shown on Exhibit___(BAM-6), Schedule 3.

Next, I calculated the weather normalization sales adjustment for each rate schedule. Only weather-sensitive customer sales were adjusted. I did not calculate a normalization adjustment for non-weather sensitive customers. For rate schedules that have some degree of weather sensitivity, the weather normalization adjustment was calculated for each weather-sensitive customer individually.

The first step in this process for each rate schedule is to determine the base load sales. I used the average use per customer for the lowest consecutive three-month average of sales to determine base load use for each month. The sales for the months that are a part of the lowest consecutive three-month average are not weather normalized. After excluding the base load sales for the other nine months, the remaining temperature sensitive sales are weather normalized using the ratio between the normal and actual HDDs for the corresponding month. For most rate schedules, I used the average HDDs based on the 20 billing cycles since customers' billing varies between the 20 cycles. However, customers on Rates 81, 82, and 64 are billed on cycle 5. Therefore, for these rate schedules I used the monthly actual and normal HDDs calculated for billing cycle 5 only. Finally, I added the normalized temperature sensitive sales and the base load sales to determine the normalized total sales.

Once I determined the normalized total sales for each rate schedule, I calculated each rate schedule's normalized revenues using present rates and normalized sales. The resulting total adjustment is an increase to revenues of $3,453,009. The gas cost portion of the revenue adjustment, $2,159,416, is offset by a corresponding adjustment to purchased expense.

Q. Do you have any other comments regarding the weather normalization adjustment?

A. Yes. It should be noted that the grain drying customers and sales were removed from Rate 761, Firm General Large Meters, consistent with Staff Witness Peterson's recommendation regarding the grain drying margin sharing that will flow through the PGA.

ANNUALIZED VOLUMES

Q. Please explain your position regarding MDU's Adjustment No. 3, Annualized Volumes.

A. MDU's third adjustment annualizes customer numbers and related sales volumes to the June 2012 level. I disagree with this adjustment, because it violates the matching principle. Adjusting the number of customers necessarily requires corresponding adjustments to operating expenses, which are not easily measured. However, one component of MDU's adjustment should be considered. Due to privatization of housing at Ellsworth Air Force Base, a portion of the sales previously a part of the Ellsworth Air Force Base load were moved from Rate 64 to Rate 70. I calculated this adjustment on Exhibit___(BAM-15).

OTHER OPERATING REVENUES

Q. Have you reviewed Ms. Mulkern's adjustment to other operating revenues, Adjustment No. 4?

A. Yes, I have. Ms. Mulkern proposed an adjustment to decrease test year operating revenues by $37,558 to eliminate an out-of-period transaction, to include late payment revenue, and to restate penalty revenue to a three-year average. I accept the adjustments to eliminate the out-of-period transaction and to restate the penalty revenue to a three-year average, since penalty revenues vary from year to year. However, the adjustment to include late payment revenue should not be reflected, as recommended by Staff Witness Peterson. This adjustment is found on Staff Exhibit___(BAM-14).

COMPANY CONSUMPTION

Q. Please explain MDU's adjustment to company consumption (Adjustment No. 9).

A. MDU proposed an adjustment to increase the test year expense for natural gas that MDU consumes in its buildings by 7.56% based on the increase from per books to normalized firm general sales revenues.

Q. Explain how your adjustment differs from the adjustment proposed by the Company.

A. My adjustment also increases the expense for natural gas consumption in company buildings based on the increase from per books to normalized firm general sales revenues. The change in firm general sales is representative of the increase in company natural gas consumption expense, since company consumption is billed on Firm General Service. My adjustment differs from the Company due to Staff's level of normalized firm general sales revenues as compared to that proposed by MDU. The increase in company consumption following this methodology is 3.67%, or $1,660. The details supporting this adjustment are found on Exhibit___(BAM-7).

DEPRECIATION ADJUSTMENT

Q. Please explain Staff's position regarding the Company's proposed depreciation adjustment.

A. The Company proposed an adjustment to test year depreciation expense and accumulated depreciation based on pro forma plant in service and proposed depreciation rates resulting from a 2008 depreciation study. I calculated Staff's depreciation adjustment based on the depreciation rates recommended by Staff Witness Pous and Staff's pro forma plant in service. This adjustment is found on Exhibit___(BAM-8).

VEHICLES AND WORK EQUIPMENT

Q. Please explain the Company's proposed vehicles and work equipment adjustment.

A. The Company proposed an adjustment to adjust depreciation and accumulated depreciation for vehicles and work equipment charged to operations & maintenance expense through clearing accounts. Similar to the depreciation adjustment, the vehicles and work equipment adjustment is based on MDU's depreciation rates and pro forma plant in service.

Q. What do you recommend?

A. I adjusted the test year depreciation expense and accumulated depreciation for vehicles and work equipment charged to O&M based on Staff Witness Pous' recommended depreciations rates and Staff's pro forma cost of service. This adjustment is found on Exhibit___(BAM-9).

INTEREST SYNCHRONIZATION

Q. Did MDU propose an interest synchronization adjustment?

A. Yes. MDU proposed an adjustment to federal income tax to synchronize the tax deduction for interest on debt with the adjusted rate base and weighted cost of long-term debt.

Q. Did you calculate a synchronized interest expense adjustment based on Staff's proposed rate base?

A. Yes. My tax expense adjustment uses Staff's adjusted rate base and Staff Witness Copeland's recommendation for MDU's weighted cost of debt. The details for this adjustment are found on Exhibit___(BAM-10).

PIERRE OFFICE RENTAL

Q. Please explain your position regarding the Pierre Office Rental adjustment.

A. MDU proposed an adjustment to remove the test year rent expense of $31,305 for the Pierre office and warehouse. MDU claims it will no longer incur this expense due to the construction of a new office and warehouse. Because this is a known and measurable change, I accept MDU's adjustment. I have included this adjustment in Exhibit___(BAM-1), Schedule 3, page 2, column I.

PLANT ADDITIONS

Q. Has the Company proposed any adjustments to test year plant in service?

A. Yes. MDU proposed an adjustment to plant in service (Adjustment A) for budgeted and projected plant additions through June 30, 2013. Additionally, MDU proposed corresponding adjustments to accumulated depreciation and depreciation expense for those plant additions using its requested depreciation rates. The Company also made an adjustment for related accumulated deferred income taxes.

Q. Do you agree with MDU's plant adjustments?

A. No, I do not. MDU's plant adjustments are based on budgeted amounts and projected in-service dates. Neither budgets nor projected in-service dates are known with reasonable certainty. That is, there are no assurances projects will be placed in service by the projected in-service dates and for the amounts that were originally budgeted. If a project is not in service, the plant is not considered used and useful, and the costs for such plant should not be borne by ratepayers until the plant is ultimately placed in service and providing benefits to customers. Furthermore, until the plant addition is placed in service, actual final construction costs are not known. Budgeted costs are not known and measurable and should not be relied upon for ratemaking purposes.

Q. Have you included any post-test year plant additions in your rate base determination?

A. Yes, I propose to adjust test year plant in service to allow recovery for non-revenue producing plant additions that were completed and placed in service by June 30, 2013. These plant additions are used and useful prior to the implementation of interim rates and are providing service to customers. My post-test year plant adjustment is found on Exhibit___(BAM-11). The related depreciation and accumulated depreciation amounts are included with Staff's depreciation adjustment using pro forma plant and proposed depreciation rates found on Exhibit___(BAM-8). I've also adjusted the related accumulated deferred income taxes occurring as result of the plant additions. The details regarding this adjustment are found on Exhibit___(BAM-11), page 3.

OTHER WORKING CAPITAL UPDATES

Q. What is your recommendation regarding materials and supplies, prepayments, and the accumulated provision for injuries and damages?

A. I adjusted materials and supplies and prepayments to reflect the thirteen-point average as of June 30, 2013. MDU's proposed adjustment, however, was based on projected account balances for the thirteen months ended June 30, 2013. The Company did not include the accumulated provision for injuries and damages as a deduction to rate base. I included such a deduction to per books rate base as recommended by Staff Witness Peterson and adjusted the balance to reflect the thirteen-point average as of June 30, 2013. The details for this adjustment are found on Exhibit___(BAM-12).

CUSTOMER GUARANTEE

Q. Please explain MDU's adjustment for the customer guarantee, Adjustment G.

A. The Company included customer guarantees as a deduction to rate base. This represents the net plant amounts relating to plant investment covered by a letter of credit or customer guarantee. If a new load associated with an extension does not meet volume expectations, MDU will call on the letter of credit. As this is similar to a customer advance, it is appropriate to deduct it from rate base. Adjustment G adjusts the per books balance to the average pro forma balance as of June 30, 2013, reducing rate base by $876,672. According to the Company, the customer guarantees are in the form of a letter of credit or surety bond in support of the gas extensions necessary to serve grain drying customers[10].

Q. Please explain your position regarding this adjustment.

A. I accept the Company's adjustment which is reflected on Exhibit___(BAM-2), Schedule 2, page 1, column i.

CUSTOMER ADVANCES FOR CONSTRUCTION

Q. What is your recommendation regarding Adjustment H, Customer Advances for Construction?

A. Ms. Mulkern restated customer advances to the projected thirteen-point average balance ending June 30, 2013, resulting in a deduction to rate base of $9,485. As Ms. Mulkern's adjustment was not known and measurable at the time of the filing, my adjustment reflects the

[10] MDU Response to Staff Data Request 4-10.

actual thirteen-point average balance ending June 30, 2013, resulting in a deduction to rate base of $64,508.

Q. Does this conclude your testimony?

A. Yes, it does.