

**BEFORE THE SOUTH DAKOTA PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA**

IN RE: IN THE MATTER OF THE APPLICATION OF MIDAMERICAN ENERGY COMPANY FOR AUTHORITY TO INCREASE NATURAL GAS RATES	DOCKET NO. NG26-__
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**DIRECT TESTIMONY
OF
STEPHEN P. STRATTON**

I. WITNESS INFORMATION

2 **Q. Please state your name and business address.**

3 A. My name is Stephen P. Stratton. My business address for MidAmerican Energy
4 Company (“MidAmerican” or “Company”) is 1615 Locust Street, Des Moines,
5 Iowa 50309.

6 **Q. By whom are you employed and in what capacity?**

7 A. I am employed by MidAmerican as a Senior Regulatory Advisor.

8 **Q. Please describe the responsibilities of your current position.**

9 A. I am responsible for helping to develop and support MidAmerican’s regulatory
10 policy strategy. I also provide input regarding development of MidAmerican’s
11 retail rates, retail cost of service and rate design, and innovative pricing programs.

12 **Q. Please describe your educational background and business experience.**

13 A. I am a 1984 graduate of Northern Illinois University where I received a Bachelor
14 of Science degree in Accountancy. Upon graduation, I became a Certified Public
15 Accountant and worked as an auditor in the Regulated Industries and
16 Government Services division of Arthur Andersen & Company in Chicago,
17 Illinois. I have been employed by MidAmerican and its predecessor companies
18 since 1990, where I began in the rates department supporting development of
19 electric and gas cost-of-service studies and rate case filings in both Iowa and
20 Illinois. From 1997 until 2020, I held positions in various areas of the company,
21 including financial services, information technology business management,
22 financial planning and budgeting, operational business unit financial support,
23 strategic investment analysis, risk management, and damage prevention and

1 recovery. I rejoined the Regulated Pricing department in January 2020 in my
2 current role.

3 **Q. Have you testified previously before the South Dakota Public Utilities**
4 **Commission?**

5 A. No, I have not testified before the South Dakota Public Utilities Commission.

6 **II. PURPOSE OF DIRECT TESTIMONY**

7 **Q. What is the purpose of your direct testimony?**

8 A. The purpose of my testimony is to:

- 9 • Describe and support MidAmerican's cash working capital calculation;
10 • Describe and support MidAmerican's natural gas cost of service study and
11 resultant proposed natural gas rates; and
12 • Describe MidAmerican's rate design considerations and methods.

13 **Q. In addition to your testimony, are you sponsoring any exhibits?**

14 A. I am sponsoring Exhibit SPS 1.1, which includes the following schedules:

- 15 • Schedule A: Cash Working Capital
16 • Schedule B: Advanced Tax Collections

17 I am also sponsoring Exhibit SPS 1.2, which includes the following schedules:

- 18 • Schedule A: Gas Cost of Service Functional Allocators
19 • Schedule B: Gas Cost of Service Results
20 • Schedule C: Derivation of Gas Rates
21 • Schedule D: Proposed Gas Rates

1 **III. CASH WORKING CAPITAL**

2 **Q. How do you define cash working capital?**

3 A. I define cash working capital generally as the amount of day-to-day capital
4 required to operate a business. Cash working capital is required to cover the time
5 lag between the expenditure of cash in the delivery of services and the collection
6 of revenues from the sale of such services.

7 **Q. How did you determine the level of cash working capital included in the rate**
8 **base?**

9 A. I determined the level of cash working capital included in rate base by comparing
10 the amount and timing of payments MidAmerican must make to provide gas
11 service to its customers with the amount and timing of the receipt of revenue
12 from customers for that service. I obtained the amounts of costs and revenues
13 from MidAmerican's accounting and customer service systems.

14 I calculated cash working capital by taking the difference between the
15 revenue lag and the expense lead (as defined below) and multiplying by the total
16 daily expense. Statement F – Working Capital, Schedule F-3 – Working Capital
17 Calculations of the filing requirements shows the calculation of cash working
18 capital needs. This is the same method that we used in the settlement of
19 MidAmerican's most recent South Dakota natural gas rate case, Docket No.
20 NG22-005.

21 **Q. How do you define revenue lag days and expense lead days?**

22 A. I define revenue lag days as the time between the rendering of service to a
23 customer and the payment by the customer for that service. The revenue lag days

1 I use is consistent across all items needed to provide gas service. I define expense
2 lead days as the time between MidAmerican's acquisition of labor, materials,
3 services, and all other costs used to provide gas service and the payment for those
4 costs by the Company.

5 **Q. What is the number of revenue lag days you propose to use?**

6 A. In this proceeding I propose to use 35.91 revenue lag days. The basis for the lag
7 days is explained and summarized in the workpapers for Schedule F-3 – Working
8 Capital Calculations of the filing requirements. This figure includes the twenty-
9 day allowance after the mailing date for customers to make timely payment per
10 the Company's current gas tariff filed with the Commission. Since a calculation
11 of the collection period made by the Company utilizing actual data supports an
12 amount greater than twenty days, the Company has made a pro forma adjustment
13 to the test period income statement to remove late payment penalties. This
14 adjustment, supported by Witness Blake M. Groen, corresponds to the use of the
15 twenty-day pay lag cutoff which does not reflect cost of service for payments
16 made after the twenty-day period. Such treatment is consistent with the position
17 taken in Docket No. NG22-005.

18 **Q. What is the number of expense lead days you propose to use?**

19 A. I propose to use 44.25 expense lead days. I provide the basis for the lead days for
20 each expense item in my workpapers for Schedule F-3 – Working Capital
21 Calculations of the filing requirements. The method of calculating the expense
22 lead is consistent with that used in Docket No. NG22-005, including refinements
23 to labor lead calculations addressing vacation pay and incentive pay.

1 **Q. What is the amount of cash working capital that you included in the rate**
2 **base?**

3 A. I included cash working capital of negative \$2,358,000 and advance tax
4 collections of negative \$240,000 in rate base as shown in Schedule F-3 – Working
5 Capital Calculations.

6 **IV. NATURAL GAS COST OF SERVICE STUDY**

7 **Q. Please describe your approach to the natural gas cost of service study.**

8 A. As in our prior South Dakota gas rate case, my proposed natural gas cost of
9 service study reflects a two-step process. In the first step, I assign the overall
10 revenue requirement to the purpose – or business function – of the cost. In the
11 second step, I assign or allocate the revenue requirement for each business
12 function to each customer class. The result is a revenue requirement for each
13 customer class, the sum of which equals the total revenue requirement.

14 **Q. What are the results of your natural gas cost of service study?**

15 A. Exhibit SPS 1.2, Schedule B shows the results of my cost of service study,
16 including the allocation of revenue requirement to function and the allocation of
17 the costs associated with each function to customer classes. I provide a full and
18 complete working copy of my natural gas cost of service and rate design model
19 as a workpaper for Statement O – Comparison of Cost of Service in the natural
20 gas filing requirements.

21 **Q. What are the business functions to which you assign revenue requirement in**
22 **the first step of your gas cost of service study?**

23 A. I assign revenue requirement to the following business functions:

- 1 • Peaking facilities
- 2 • Mains (both average and peak demand functions)
- 3 • Services
- 4 • Meters
- 5 • Regulators
- 6 • Industrial meters
- 7 • Customer accounts
- 8 • Administration, both daily and monthly transportation service
- 9 • Gas supply costs for non-Purchased Gas Adjustment (“PGA”) use

10 **Q. How do you assign individual accounts that make up MidAmerican’s**
11 **revenue requirement to a function?**

12 A. I assign individual accounts to a business function at the time the costs are
13 incurred based on the type of cost being incurred. For example, a project to
14 extend service to a new customer may include services and meters. The costs for
15 those items are recorded into the appropriate accounts when they are paid. The
16 majority of the accounts that make up MidAmerican’s revenue requirement are
17 directly assigned to a single function. Examples of this include metering and
18 compressor equipment plant.

19 Accounts not directly assignable to a single function are allocated
20 between functions based on appropriate allocation factors. Examples of this
21 include general and intangible plant, accumulated deferred income taxes,
22 administrative and general expenses, and payroll taxes.

1 Exhibit SPS 1.2, Schedule A identifies the assignment of each account,
2 whether that account is direct assigned or allocated, and the method used for
3 allocation. Statement O – Comparison of Cost of Service, Workpapers (Tab FUN-
4 4) lists all the functional allocators and shows the percentage of each assigned or
5 allocated to each business function. A summary of the resulting allocation of
6 revenue requirement across functions in MidAmerican’s natural gas cost of
7 service study is provided in Statement O – Comparison of Cost of Service,
8 Workpapers (Tab FUN-3).

9 **Q. To which customer classes do you assign the revenue requirement by**
10 **business function in the second step of the gas cost of service study?**

11 A. I assign the functionalized revenue requirement from the first step of the cost of
12 service study to the following customer classes:

- 13 • Small Volume (defined as Rates SVS, SVT, STM, SSS, SVI)
- 14 • Medium Volume (defined as Rates MVS, MVT, MTM)
- 15 • Large Volume (defined as Rates LVS, LVT, LVI, LSS)

16 The following portion of this testimony explains my basis for allocating the
17 functionalized revenue requirement to customer classes.

18 **Q. How do you propose to allocate the cost of peaking facilities to customer**
19 **classes?**

20 A. I allocate peaking facilities to customer classes based on estimated design day
21 peak demand for sales service customers in each class, the same method used in
22 MidAmerican’s last South Dakota gas rate case. These peaking facilities provide
23 MidAmerican-supplied gas to sales service customers at times of high peak

1 demand on the system. Peaking facilities are generally not used to provide service
2 to transport customers, and therefore transportation customers do not receive an
3 allocation of these facilities.

4 For each of the customer classes, I conducted a simple regression analysis
5 of billing sales to billing month heating degree days. This analysis produces two
6 values for each class: a constant value which represents the amount of billing
7 sales for each class in a month assuming zero heating degree days (e.g., a summer
8 month), and a slope value that represents the incremental usage in a month for
9 that class for every increase of one heating degree day. I then used these two
10 values in an algebraic formula to estimate monthly or daily usage for every class
11 for presumed number of heating degree days. For the purpose of estimating
12 design day load, I divided the constant value by 30.42 to convert from a monthly
13 value to a daily value. I then added the result to the product of the slope value
14 multiplied by 98 effective heating degree days, which is the design day value.
15 This calculation results in an estimate of design day load for each of the customer
16 classes.

17 **Q. How did you allocate the revenue requirement associated with distribution**
18 **mains to customer classes?**

19 A. I allocated the revenue requirement associated with distribution mains costs to
20 customer classes based on a combination of a design day allocator and a total
21 throughput allocator that reflects the splits of the mains system between a peaking
22 function and a total throughput function. This is the same method MidAmerican
23 used in its last South Dakota gas rate case.

1 My gas cost of service study recognizes that the primary purpose of the
2 distribution mains system is to deliver gas to customers on a year-round basis,
3 but that the mains system needs to be sized to accommodate gas loads under
4 design day conditions. For this reason, I split the costs of owning, operating, and
5 maintaining the mains system into two components: a peaking component and a
6 total throughput (i.e., average load) component.

7 I split the cost associated with distribution mains between the peaking
8 component and the average load component based on the system annual capacity
9 factor. I calculated the system capacity factor as total weather-normalized system
10 throughput divided by 365 days divided by estimated effective design day
11 throughput. I estimated MidAmerican's South Dakota capacity factor in this case
12 to be 24.0%. Therefore, I assigned 76.0% of the plant value and associated
13 operations and maintenance expense for mains to the peaking component and
14 24.0% to the average component.

15 I further allocated the cost associated with the *peaking* component of
16 mains to customer classes based on estimated total design day throughput. The
17 method I used to estimate design day throughput is the same as the method
18 described above for peaking facilities, but for transport loads being included for
19 mains.

20 I further allocated the cost associated with the *average* component of
21 mains to customer classes based on total weather-normalized annual throughput,
22 as estimated through the weather normalization process described in the
23 testimony of Witness Derek C. Nelson.

1 **Q. How did you allocate the revenue requirement associated with services to**
2 **customer classes?**

3 A. I allocated service costs to customer classes based on a weighted number of
4 customers calculation. I determined customer weights in each class based on the
5 ratio of the current average cost of service installations (per customer) required
6 to serve particular customer groups to the current average cost of a service
7 installation for small volume customers.

8 **Q. How did you allocate the revenue requirement associated with meters to**
9 **customer classes?**

10 A. I allocated the cost of meters to four separate meter classes, which are the basis
11 for the metering charge. These classes are as follows:

- 12 • Class 1: Up to 675 cubic feet per hour
- 13 • Class 2: Over 675 up to 3,000 cubic feet per hour
- 14 • Class 3: Over 3,000 up to 11,000 cubic feet per hour
- 15 • Class 4: Over 11,000 cubic feet per hour

16 I allocated metering costs to metering classes based on a weighted
17 number of meters calculation in each class. I calculated meter weights in each
18 class based on the ratio of the current average cost of a meter installation in each
19 class to the current average cost of a meter installation in Class 1.

20 **Q. How did you allocate the revenue requirement associated with regulators to**
21 **customer classes?**

22 A. I allocated regulators costs to customer classes based on a weighted number of
23 customers calculation. I calculated customer weights in each class based on the

1 ratio of the current average cost of regulator installations (per customer) required
2 to serve particular customer groups to the current average cost of a regulator
3 installation for small volume customers.

4 **Q. How did you allocate the revenue requirement associated with industrial**
5 **meters to customer classes?**

6 A. I allocated industrial meters to customer classes based on the total number of
7 industrial customers in each class.

8 **Q. How did you allocate the revenue requirement associated with the customer**
9 **accounts function to customer classes?**

10 A. I allocated customer account costs to customer classes based on a weighted
11 number of customers calculation. My calculation of customer weights in each
12 class was based on the ratio of the current cost per customer of providing
13 customer service and key account management functions to particular customer
14 groups to the current cost per customer of providing customer service functions
15 to small volume customers.

16 **Q. How did you allocate the revenue requirement associated with**
17 **transportation administration to customer classes?**

18 A. I allocated transportation administration costs to customer classes based on the
19 number of transportation customers in each class. Statement O – Comparison of
20 Cost of Service, Workpapers, tab CLS1-1 shows how I subdivided the
21 transportation administration expense associated with daily transportation
22 customers (i.e., Rates SVT, MVT, and LVT) and monthly transportation
23 customers (i.e., Rates STM and MTM). This subdivision of transportation

1 administration expense uses a weighted customer allocation that assumes daily
2 transportation customers require three times the amount of full-time equivalent
3 labor relative to a daily transportation customer.

4 **Q. How have you addressed the farm tap customers acquired as a result of**
5 **Docket No. NG17-011 in the cost of service study?**

6 A. I reflected revenue from these customers as a reduction to the overall revenue
7 requirement to be recovered from the rates applicable to all other customers. In
8 2028, these farm tap customers will complete a ten-year rate phase-in as
9 determined in Docket No. NG17-011. As approved in that proceeding, any
10 difference between the final rate and the phase-in rate is recovered from all gas
11 sales customers via the PGA clause until the phase-in is complete. Therefore, the
12 revenue requirement adjustment for farm tap revenues in the cost of service study
13 is made at the final 2028 rate level. As discussed later in this testimony, I am
14 proposing to adjust the 2027 farm tap rates by an amount equal to the overall
15 revenue requirement increase, followed by a small increase in 2028 to eliminate
16 the shortfall of projected farm tap revenues as compared to an updated estimate
17 of the cost of to serve these customers.

18 **V. RATE DESIGN CONSIDERATIONS AND METHODS**

19 **Q. Please describe the relationship between cost of service results and the goals**
20 **of rate design.**

21 A. An important goal of rate design is to develop prices for natural gas service to
22 retail customers that recover the Company's approved revenue requirement and
23 reflect the cost of providing service to retail customers. MidAmerican is

1 submitting a full set of rates based upon the cost of service study provided in this
2 case. The rate design is directly based on cost of service, is designed to recover
3 MidAmerican's proposed revenue requirement, and reflects the costing and
4 pricing principles of the cost of service study. I used detailed financial
5 information from the cost of service study to develop the individual components
6 of the rate design.

7 **Q. What rates are you proposing to implement in this case?**

8 A. In Exhibit SPS 1.2, Schedule D, I provide a complete set of proposed rates for
9 MidAmerican in this filing. I propose implementing rates for the following rate
10 classes:

- 11 • Small Volume (defined as Rates SVS, SVT, STM, SSS, SVI)
- 12 • Medium Volume (defined as Rates MVS, MVT, MTM)
- 13 • Large Volume (defined as Rates LVS, LVT, LVI, LSS)
- 14 • Farm Tap (defined as Rates NFS, NFT)

15 **Q. How are you proposing to charge customers for meters?**

16 A. I am proposing to continue applying a separate meter charge instead of including
17 the meter charge in the monthly service charge.

18 **Q. How did you calculate the monthly interval meter charge associated with**
19 **service that requires additional telemetry metering equipment, such as daily**
20 **transportation and interruptible service?**

21 A. I determined the appropriate annual revenue requirement per interval meter based
22 on the average net plant balance and calculated a return, annual depreciation
23 expense (assuming a ten-year depreciable life), and property taxes. I used the

1 resultant per meter revenue requirement to produce a total interval meter revenue
2 requirement. I removed this total interval meter revenue requirement from the
3 overall revenue requirement associated with metering expense to ensure these
4 revenues will not be accounted for twice in the resulting rates.

5 **Q. How did you use the various cost components of the class cost of service**
6 **study to design MidAmerican's proposed rates?**

7 A. In Exhibit SPS 1.2, Schedule C, I describe how I used the different components
8 of cost of service to build the rates.

9 **Q. Are you proposing any changes to the terms approved in Docket No.**
10 **NG17-011 regarding farm tap customers?**

11 A. No, I am not proposing any changes to the terms approved in Docket No.
12 NG17-011.

13 **Q. Are you proposing any changes to the rates approved in Docket No.**
14 **NG22-005 regarding the farm tap customers?**

15 A. Yes. I am proposing to increase the 2027 rates developed in that docket by a
16 percentage equal to the overall revenue requirement percentage increase in this
17 docket. In addition, I am proposing an additional 2.6% increase in 2028 farm tap
18 rates (vs. proposed 2027 rates) so that farm taps revenues equal the estimated
19 cost to serve the farm taps customers. The estimated current cost of service per
20 farm tap customer was calculated by: (1) applying the proposed overall
21 percentage increase to the annual cost per customer for peaking facilities, meters,
22 customer account expense, and non-PGA gas supply costs from Docket No.
23 NG22-005 and (2) adding an updated estimate of the inspection and testing costs

1 associated with these customers. The result is that on January 1, 2028, proposed
2 farm tap rates will be approximately 16.8% higher than the rates currently
3 scheduled to become effective on January 1, 2028.

4 **VI. CONCLUSION**

5 **Q. Does this conclude your direct testimony?**

6 **A. Yes, it does.**