STAFF MEMORANDUM

TO: COMMISSIONERS AND ADVISORS

FROM: KRISTEN EDWARDS, AMANDA REISS, BRITTANY MEHLHAFF, MARY ZANTER, AND PATRICK STEFFENSEN

RE: Docket NG17-011 – In the Matter of the Filing by MidAmerican Energy Company for Approval of Tariff Revisions regarding Farm Tap Service

DATE: August 11, 2017

Commission Staff (Staff) submits this memorandum in support of the proposal and tariff revisions submitted by MidAmerican Energy Company (MidAmerican or Company) on August 10, 2017, in the above captioned matter.

BACKGROUND

In order to provide a full and accurate history of this docket, it is necessary to first provide a significant amount of background information, much of which can be found in Docket No. NG16-014. The facts as Staff understands them are as follows. From the 1930s to through the 1950s, Northern Natural Gas Company (Northern) engaged in the construction of a natural gas transmission line throughout much of eastern South Dakota. When Northern obtained easements from landowners to install its transmission lines, a number of landowners signed easements providing for farm tap[1] natural gas service from Northern or a vendee of Northern rather than taking a proportionate payment for the easement.

Peoples Natural Gas (Peoples), a prior local distribution operating division of Northern, provided service to the farm tap customers for a number of years. Northern and Peoples executed an agreement in 1987 to document the services Peoples agreed to provide on behalf of Northern regarding the farm tap customers (1987 Agreement). Minnesota Energy Resources Corporation (MERC) acquired Peoples' farm taps in South Dakota and Minnesota in a 2006 transaction including assignment of the 1987 Agreement. In 2011, in conjunction with acquiring the Milbank pipeline from Northern, NorthWestern agreed to a partial assignment of the 1987 Agreement, providing services to the South Dakota farm tap customers. These services include emergency response, filling the odorizer annually, billing monthly[2], reading the meter annually, locking the tap if needed, and nominating gas. There were 197 farm tap customers served pursuant to the partial assignment of the 1987 Agreement. Staff understands that approximately 180 of the 197 farm tap customers are active and the remaining farm taps are inactive.

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[1] In past rulemakings, PHMSA has defined a 'farm tap' as "industry jargon for a pipeline that branches from a transmission or gathering line to deliver gas to a farmer or other landowner." See, *Customer-Owned Service Lines,* 60 Fed. Reg. 41821, 41823 (August 14, 1995).

[2] The customer is responsible for reading his or her meter each month.

The 1987 Agreement allows for termination any time after May 31, 2017 and NorthWestern has exercised its right to terminate the 1987 Agreement, effective December 31, 2017. Refer to Staff's Petition for Declaratory Ruling Regarding Farm Tap Customers and attached Staff Memorandum in Docket No. NG16-014 for further background. A hearing on this matter was held on December 14, 2016, and the Commission issued a Declaratory Ruling on January 24, 2017.

Staff engaged in countless meetings with NorthWestern and Northern in an effort to continue service to the farm tap customers. Unfortunately, in the end, these negotiations were not fruitful. However, recently Staff and MidAmerican engaged in discussions to find a solution whereby MidAmerican could serve these customers.

Following discussions with Staff, on July 24, 2017, MidAmerican filed a letter requesting a docket be opened to consider a proposal that would allow MidAmerican to provide services to the approximately 180 active farm tap customers connected to the interstate pipeline owned and operated by Northern and currently served by NorthWestern. On July 27, 2017, MidAmerican filed a letter providing further details regarding its proposal to serve the farm tap customers. The Commission considered this docket at its August 1st Commission meeting and asked several questions of the Company and Staff. Taking these questions and comments into consideration, Staff and MidAmerican held further discussions in order to finalize the proposal.

Pursuant to a commissioner request at the August 1st Commission Meeting, Staff reached out to Northern again to determine whether Northern had any interest in working with Staff and MidAmerican. Northern confirmed that it refuses to provide any financial assistance to this service arrangement and reiterated its position that its only responsibility is to provide and maintain the tap and its belief that Northern has no responsibility to pay for services or facilities from its interstate pipeline tap to the landowner usage location.

On August 10, 2017, MidAmerican filed its proposed tariff revisions and additional information regarding its proposal. Staff discusses its analysis and recommendations regarding the proposal in detail below.

STAFF ANALYSIS OF PROPOSAL

Ownership of Facilities

MidAmerican is working on an interconnection agreement with Northern. In general, Northern will continue to own the farm tap as they have in the past and farm tap customers will continue to own their service lines from the farm tap to the point of gas usage. Staff maintains that the farm tap customer needs to be responsible for any repairs necessary to safely deliver gas through these service lines. The farm tap customers will also be responsible for all future maintenance to these lines. MidAmerican will not own any physical facilities and will provide the services discussed below.

Services Provided

MidAmerican proposes to provide services to all of the farm tap customers that are at risk of losing natural gas service along the transmission line owned and operated by Northern. As discussed above, the actual number of customers, originally thought to be 197, is subject to change as more information is discovered and some farm taps are found to have been abandoned over the years.

The services provided by MidAmerican will be very similar to those services the customers are currently receiving from NorthWestern. MidAmerican will provide emergency services, check and fill odorizers, nominate gas[3], and bill customers. Examples of emergency services include responding to leaks and to no gas situations. Since some farm tap customers are located far from MidAmerican's current service area, MidAmerican is working on mutual aid arrangements to identify how emergency services can be provided consistent with the needed responses times.

Odorizers will generally be filled once a year and MidAmerican will perform annual maintenance checks of the odorizer. MidAmerican will perform an odorometer "sniff" test and check odorant levels on a monthly basis, filling the odorizers as needed. NorthWestern previously performed this task on an annual basis. However, it is consistent with MidAmerican's procedures detailed in its operations and maintenance manual that all sniff tests be performed on a monthly basis. While Staff initially questioned the need for such increased frequency, Staff understands that it is a requirement of the federal regulations that every operator have a policy specified in its operations and maintenance manual and follow that policy consistently. Performing sniff tests on a less frequent basis would require MidAmerican to change its operations and maintenance manual and would be applicable to its entire service area, not just the farm taps. Therefore, Staff supports the Company's proposed monthly tasks.

At the time MidAmerican performs the sniff tests and checks the odorant levels, the meters will also be read for the purpose of billing. Currently, in most cases, customers are responsible for reading their own meters monthly, and NorthWestern reads the meter once a year and trues up bills as necessary.

Safety Standards and Inspections

Staff believes that pipeline safety is very important and steps should be taken to ensure that the farm tap customers have safe systems. Staff developed a list of safety standards and inspections for MidAmerican to consider when establishing service for the farm tap customers. MidAmerican reviewed the proposed safety standards and inspections list and added a couple additional items. After the Commission's discussion about the safety standards and inspections at the August 1, 2017 Commission meeting, MidAmerican reviewed the list again and determined that these steps were essential to safety and Staff agrees.

[3] MidAmerican's proposed Rate NF allows for the same option provided other customers: Service under Rider S (System Gas Service) or Rider T (Transportation of Customer-Owned Gas). MidAmerican and Staff anticipate most, if not all, customers will choose to take service under Rider S whereby customers purchase Company-supplied gas.

Customers rely on skilled and qualified plumbers to properly install their fuel gas piping. Unfortunately, in the State of South Dakota, the Uniform Plumbing Code does not include Chapter 12 of the National Uniform Plumbing Code[4]. The National Fuel Gas Code is not enforced throughout the state and is only enforced in specific cities with building inspectors. Therefore, it is possible that no one has ensured that fuel gas systems installed have been installed correctly.

Staff believes that MidAmerican has a right and obligation to make an initial inspection to ensure that its customers' fuel lines operate safely and effectively prior to beginning service. According to MidAmerican's South Dakota Gas Tariff Schedule No. 2, Section No. 5, Original Sheet No. 41, Section 2.20 REFUSAL OR DISCONNECTION OF SERVICE WITHOUT NOTICE, the Company may refuse or disconnect service without notice for the various reasons, including: "A condition on the Customer's Premises determined by the Company to be unsafe or unhealthy". Even though a customer may believe that his or her system has been working fine for the past 60 years, with age, materials can fail. Although one can never completely eliminate risks, a single gas leak due to unmaintained aging material could cause damage to life and property. This type of damage is not something that can be easily measured. MidAmerican's business is to deliver gas safely to its customers and in order to do that certain steps must be taken to ensure the quality and integrity of the customer fuel line.

To assist in describing the importance that Staff places on the safety checks, we offer this example as an analogy. One has been driving the same car for 60 years. The car runs and gets one from point A to point B. One's daughter will now drive it. One will want to know if this car is perfectly safe and ready for her to drive. One will want to ensure that the car has been checked over before she starts driving it, including the tires, gas gauge, fan belt, and oil. Absent complete knowledge of wear and tear and maintenance, one needs an expert to measure its road worthiness.

Each step of the safety requirements helps ensure that the service line is safe. It is not the intent of Staff or MidAmerican to prescribe safety steps that will be cost prohibitive or designed to eliminate farm taps. Rather the process is designed to provide the customers with information as quickly as possible so that they can make informed decisions regarding their gas service. Staff and MidAmerican have discussed the order of each step in the safety checklist to ensure that things are done in the most economical and logical order. Refer to the proposed 1st Revised Sheet No. 56 Canceling Original Sheet No. 56, Original Sheet No. 56.1, and Original Sheet No. 56.2 found in Options 1, 2, and 3 in MidAmerican's August 10, 2017 filing for a detailed description of how the safety checks will be completed.

Due to the safety recognition this docket has generated, MidAmerican will be working on a procedure to conduct similar inspections on its thirteen existing farm tap customers' facilities.

MidAmerican estimates the costs of the safety inspections will range from $300-$1,000 per customer. Each customer will be assessed a one-time $200 charge to cover a portion of these inspection costs. The

[4] Chapter 12 covers Fuel Gas and essentially incorporates the National Fuel Gas Code (NFPA 54).

remainder of the safety inspection costs will be contributed by MidAmerican and recovered through rates using the Purchased Gas Adjustment (PGA).

Line Replacement

As discussed above, if the customer's farm tap service line does not meet the safety requirements and inspections, the customer will be required to replace his or her service line in order to receive service from MidAmerican. Until the safety inspections are completed, it is difficult to estimate the number of service lines that will need to be replaced. However, it is likely that at least half of the customers will need to replace their service lines. If all 180 farm tap service lines need to be replaced (which is unlikely), MidAmerican estimates a total cost of $1.2 - $1.5 million, or an average of $6,500-8,500 per service. This amount is based on an estimated cost per foot of pipe and the estimated lengths of the farm tap service lines. Staff notes that the replacement costs are an estimate and Staff cannot verify the accuracy of this estimate. Actual costs to replace necessary service lines will depend on many factors that are not known with certainty at this time. Recognizing this fact, MidAmerican also presents information based on a total cost of $2.7 million, or an average of $15,000 per service.

MidAmerican's initial proposal dated July 27, 2017, stated that customers will be responsible for the costs of completing any repairs necessary to meet the safety requirements. However, in response to commissioner concerns stated at the August 1, 2017 commission meeting, MidAmerican now proposes to contribute towards the line replacements. This scenario is described as Option 1.

MidAmerican proposes to contribute towards the replacement of farm tap facilities comparable to amounts MidAmerican would contribute for other new South Dakota customers, based on its line extension policy. The contribution would consist of approximately $1,000 per farm tap customer plus the amount equal to the lesser of the actual cost or 3 times the estimated annual net revenue, excluding purchased gas and energy efficiency. Assuming all 180 farm tap service lines needed to be replaced, this would amount to an approximate $600,000 MidAmerican contribution, an average of approximately $3,300 per customer. This contribution would be recovered from MidAmerican's customers through the PGA. MidAmerican also provides as Option 2, contributing the entire line replacement costs with recovery through the PGA. The Company also presents Option 3 whereby the farm tap customers would be responsible for all replacement costs.

Staff does not agree that MidAmerican's other customers should contribute towards the farm tap customer's service line as this line is owned by the customer, not MidAmerican. Staff does not feel this is consistent with the existing line extension policy where it is a new service at a new location and the service line is owned by MidAmerican. Furthermore, there is an equity concern among the farm tap customers since some customers would receive the credit to replace their service lines at this time and other customers who have already replaced their service lines in recent years or may need to replace their service lines in the future did not or will not receive the credit. Therefore, Staff agrees with Option 3, in which the farm tap customers will be responsible for the costs of service line replacements deemed necessary to meet the safety requirements.

Costs to Provide Service

Based on MidAmerican's recent analysis of the costs to serve these farm tap customers, as provided in the Cost of Service Analysis in its August 10, 2017 filing, it currently projects an estimate of $773.26 per customer annually. This cost is primarily driven by the $654.50 per customer annual labor cost incurred by MidAmerican to perform monthly odorometer "sniff" tests, odorant level checks, and meter reads and annual odorizer maintenance checks. Add to this a $53.29 per customer annual allocation of overheads to arrive at a $707.79 per customer annual subtotal. However, this amount by itself does not provide any incentive for MidAmerican to take on these approximate 180 farm tap customers, as there is only dollar for dollar recovery of operating expense without any addition to rate base. Thus, Staff and MidAmerican agree a management fee is necessary in lieu of a return on rate base, and have included a 9.25 percent fee, or $65.47 per farm tap customer.

Given the approximate 180 farm tap customers, the annual revenue requirement to serve these farm tap customers is an estimated $139,187.35. The current estimate of annual revenues, exclusive of gas costs, at the existing NorthWestern rates is $70,842.33, leaving a current annual revenue deficit of $68,345.02.

Considering this disparity in current revenues and the estimated revenue requirement, it is evident there needs to be a rate increase for these 180 farm tap customers. However, to avoid rate shock, this rate increase is proposed to be implemented over a period of ten years, resulting in an approximate 7.36 percent annual increase in the non-gas commodity charge and a $0.40 annual increase in the customer charge. Staff agrees with the Company's proposal.

Cost Recovery Options

In order to keep MidAmerican whole during the 10-year transition period, Staff and MidAmerican agreed to allow recovery of the annual revenue deficits in the PGA. This will be paid by all MidAmerican customers subject to the PGA, with an estimated initial residential bill impact of $0.45 per year. As mentioned, the cost to provide safety inspections in excess of the $200 per farm tap customer will be subsidized as well. The inspection costs will be amortized over 10 years with a 6.92% return (after-tax), consistent with the allowed rate of return from the Company's most recent rate case, Docket No. 14-005. When the inspection cost recovery is factored in, consistent with Option 3, the estimated initial residential bill impact, assuming all customers require inspection of all items, is $0.60 per year[5]. The PGA impact will reduce each year as the farm tap rates are phased in.

While Staff initially had concerns about using the PGA as a mechanism for MidAmerican to recover these costs, Staff recognizes this is a unique situation that will likely not be replicated. The PGA includes payment for the delivery of gas. The delivered cost of gas includes transportation charges from interstate pipelines. Farm tap customers' easements have paved the way for interstate pipelines to

[5] Refer to page 6 of South Dakota Farm Tap Proposal Estimated PGA Impacts in MidAmerican's August 10, 2017 filing.

supply natural gas to all South Dakota customers. While not a part of the FERC tariff, the costs proposed to be passed on to customers through the PGA bear strong resemblance to the costs included in interstate pipeline rates. One can view these costs as an add-on to the transportation costs required to get gas to the city gate. At the very least, these costs bear cost of service characteristics that more closely resemble delivery related costs than routine local distribution company operations and maintenance costs. Therefore, Staff is comfortable using the PGA as a recovery for the deficit created by allowing for a phase in of rates and the contribution towards the safety inspections for this unique and one time purpose.

As discussed above, MidAmerican has proposed to provide the farm tap customers a line extension credit consistent with what is in its current tariff, also subsidized by the current MidAmerican customers (Option 1). Assuming all lines need to be replaced (which is highly unlikely), the cost to the system would be approximately $600,000. MidAmerican's proposed recovery of the line replacement contribution includes amortizing the contribution over 10 years at a return of 6.92% after tax. This results in a total initial residential bill impact of $1.24 per year when added to the rate phase-in and inspection costs[6].

Also, to add some perspective, MidAmerican has included calculations which assume the entire line replacement costs are absorbed by MidAmerican's current customers through the PGA (Option 2). Since the costs of the line replacements are estimated, MidAmerican provided the rate impact of Option 2 at three different levels of line replacement costs[7]. Assuming a total line replacement cost of $1.2 million, or an average of approximately $6,500 per customer assuming all lines needed replaced, the estimated initial residential bill impact in this scenario is $1.88 per year. Considering an average of approximately $8,500 per customer, or $1.5 million total for replacement of all 180 service lines, the estimated initial residential bill impact in this scenario is $2.20 per year. Assuming a total line replacement cost of $2.7 million, or an average of approximately $15,000 per customer assuming replacement of all service lines, the estimated initial residential bill impact in this scenario is $3.49. The scenarios provide a reasonable range of the rate impact of Option 2, however Staff reiterates that the exact replacement costs are unknown at this time.

RECOMMENDATION

While Staff does not object to the subsidization caused by the ten year phase in of rates and the safety inspections, it cannot support additional subsidization to help pay for the replacement of farm tap customers' personal service lines. Staff feels an important component of this process is the fact the farm tap customers will have "skin in the game". If customers have the opportunity to have service lines replaced with minimal to no contribution of their own, they may not have any incentive to remain on their natural gas service as rates increase over the next ten years. This could potentially account for stranded, subsidized investment of fairly new service lines. Also, Staff is concerned in maintaining equity

[6] Refer to page 2 of South Dakota Farm Tap Proposal Estimated PGA Impacts in MidAmerican's August 10, 2017 filing.
[7] Refer to pages 3 through 5 of South Dakota Farm Tap Proposal Estimated PGA Impacts in MidAmerican's August 10, 2017 filing.

amongst the farm tap customers, as some have replaced their service lines recently without a credit from their utility, and some would likely need to replace in the future without a credit.

In essence, Staff agrees with the proposal as initially set-forth in MidAmerican's proposal filed July 27, 2017, which is presented in MidAmerican's August 10, 2017 filing as Option 3. While Staff has considered the Commission's comments discussed at the August 1, 2017 Commission meeting, Staff unfortunately does not see another solution for this situation that would address some of these concerns without increasing the costs passed on to MidAmerican's existing customers. Therefore, Staff recommends the Commission approve the proposed Option 3 tariff revisions included in MidAmerican's August 10, 2017 filing, on less than 30 days' notice, effective August 15, 2017 and approve recovery of the rate phase in deficit and contribution towards the safety inspections through the PGA, as described in MidAmerican's August 10, 2017 filing as Option 3. Staff recognizes, however, that this is a unique situation and the Commission may deem it appropriate to deviate from certain principles. Ultimately, Staff defers to the Commission for a policy decision regarding the level of subsidization desired.