

STATE OF SOUTH DAKOTA
SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

MIDAMERICAN ENERGY COMPANY)	
)	
Proposed general increase in electric rates.)	DOCKET NO. EL14-__
)	
)	

DIRECT TESTIMONY
OF
DEHN A. STEVENS

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

2 A. My name is Dehn A. Stevens. My business address is 106 East Second Street, Davenport,
3 Iowa 52801.

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

5 A. I am employed by MidAmerican Energy Company (“MidAmerican”) as Director –
6 Transmission Services.

7 **Q. What is your educational and employment experience?**

8 A. I received a Bachelor of Science degree in Electrical Engineering in 1991 from Iowa
9 State University. I have been employed by MidAmerican or its predecessor company,
10 Iowa-Illinois Gas and Electric Company (“Iowa-Illinois”), since 1991. My duties have
11 included working as an engineer in the electric design division and as an engineer in the
12 electric planning division for Iowa-Illinois. With Iowa-Illinois’ merger into MidAmerican
13 on July 1, 1995, I became an engineer in the system planning department and was
14 subsequently promoted to Senior Engineer in the System Planning Department in 1996.
15 In 1998, I was promoted to Supervisor – Transmission and Distribution Planning and
16 subsequently to Supervisor - Electric System Planning when the name of the department
17 was changed. On December 1, 2008 I was promoted to Manager – Transmission Services
18 and on February 1, 2014 I was promoted to my present position. I am a member of the
19 Institute of Electrical and Electronics Engineers (“IEEE”) and have served as Chair of the
20 Executive Committee of the IEEE’s Iowa-Illinois Section. I am also a registered
21 professional engineer in the state of Iowa.

22 **Q. Please describe activities that occur in your area of responsibility at MidAmerican.**

23 A. I develop strategy and business plans for efficient, safe, reliable and regulatory-compliant
24 utilization of the MidAmerican transmission system. I manage the business use of
25 MidAmerican's high-voltage distribution and transmission assets, including existing and
26 new interconnections. With MidAmerican being a Transmission Owner in the
27 Midcontinent Independent System Operator, Inc. ("MISO"), my responsibilities include
28 the development of annual rate updates to MidAmerican's formula transmission rate
29 template and participation as one of MidAmerican's primary representatives to the MISO
30 Transmission Owners Committee. I am currently serving as the Chair of the MISO
31 Transmission Owners Committee. I direct the handling of transmission interconnection
32 requests, the processing of transmission-related agreements, the development of
33 transmission-related rates and charges, and I represent the Company's interest in regional
34 transmission-related forums.

35 **Q. Have you previously testified before the South Dakota Public Utilities Commission**
36 **("Commission") or other regulatory authorities?**

37 A. Yes. I testified before the Commission in Docket No. EL06-018 regarding the
38 interconnection of distributed resources. In addition, I have testified before or submitted
39 written testimony to the Iowa Utilities Board, the Illinois Commerce Commission and the
40 Federal Energy Regulatory Commission ("FERC").

PURPOSE OF DIRECT TESTIMONY

41 **Q. What is the purpose of your direct testimony in this proceeding?**

42 A. My testimony explains the uses of MidAmerican's electric transmission system and how
43 those uses should impact cost recovery of transmission costs consistent with cost
44 causation. I also propose and support the Transmission Cost Recovery ("TCR") clause.

45 **Q. Are you sponsoring any exhibits as part of your testimony?**

46 A. Yes. I am sponsoring Exhibit DAS 1.1 containing five schedules:

- 47 • Schedule A (2013 MISO Transmission Charges)
- 48 • Schedule B (Allocation of 2013 MISO Transmission Charges to South Dakota)
- 49 • Schedule C (Forecasted 2015 MISO Transmission Charges)
- 50 • Schedule D (Forecasted 2015 MISO Credit)
- 51 • Schedule E (Forecasted Allocation of 2015 MISO Transmission Charges to South
- 52 Dakota).

53 **Q. How is the MidAmerican transmission system used?**

54 A. The transmission system is used for two distinct purposes. First, the MidAmerican
55 transmission system has traditionally been used to serve the load of MidAmerican's retail
56 customers and certain wholesale loads of entities such as nearby utilities, municipal
57 utilities and power cooperatives. MidAmerican derives transmission-related wholesale
58 revenues for such uses in serving local load. Second, as a result of the significant
59 expansion of the MidAmerican transmission system presently underway, regional
60 services will be provided to other utilities in the MISO footprint and beyond.
61 MidAmerican will derive transmission-related wholesale revenues for such regional use
62 of its transmission system. Similarly, MidAmerican is allocated a portion of the
63 transmission costs of other utilities within MISO for the regional support those other
64 transmission assets provide for MidAmerican's retail load. FERC-approved MISO tariffs
65 determine the charges MidAmerican incurs. MISO has determined that these new
66 regional transmission facilities provide benefits for load serving utilities across the region
67 in the form of additional access to renewable resources, transmission congestion relief,

68 production cost savings, operating reserve margin benefits, system planning reserve
69 benefits, transmission line loss reduction, wind turbine investment benefits, and
70 reliability benefits. South Dakota customers will benefit immediately from reduced fuel
71 and purchased power costs resulting from production cost savings and transmission
72 congestion relief, as these savings will be passed through to customers in the Energy Cost
73 Adjustment clause.

74 **Q. How do the changes to add regional transmission facilities relate to the development**
75 **of transmission rates for costs incurred to provide retail electric service?**

76 A. These changes provide the basis for separation of costs and revenues that are largely
77 incurred for the provision of retail electric service versus those that are largely for
78 regional wholesale purposes.

79 **Q. What is the significance of these different uses of the MidAmerican transmission**
80 **system?**

81 A. The distinction between local and regional uses of the MidAmerican transmission system
82 is a key element of the manner in which I propose to allocate transmission costs between
83 base rates and the TCR clause, a new automatic adjustment to rates.

84 **Q. Please provide an overview of the TCR clause.**

85 A. The TCR clause will include an allocation of those transmission charges imposed by
86 MISO which are related to MidAmerican's provision of retail electric service.
87 Specifically, the charges are those assessed to MidAmerican, based on its retail load, for
88 use of multi-value project ("MVPs") and market efficiency projects ("MEPs"), both of
89 which are transmission facilities resulting from the MISO regional transmission planning
90 process and which have their costs shared regionally. The TCR clause will also include

an allocation of certain MISO-related administrative costs. In my direct testimony, I will explain the costs that are to be recovered through the TCR clause and those that will remain in base rates. I will also state why I believe the TCR clause is consistent with South Dakota law regarding the recovery of transmission costs through automatic annual adjustments.

Q. Is the concept of establishing an automatic annual adjustment clause for transmission costs new to South Dakota?

A. No. As I address later in my testimony, both Northern States Power Company and Otter Tail Power Company (“Otter Tail”) have adjustment clauses for recovering transmission costs. Those adjustment clauses are mechanically similar to MidAmerican’s proposal in many respects.

OVERVIEW OF TRANSMISSION COSTS AND REVENUES

Transmission Costs

Q. Please generally describe the transmission costs associated with providing electric service to MidAmerican’s retail customers.

A. MidAmerican incurs a variety of costs associated with the electric transmission services needed to serve its retail customers. These costs include (1) the costs of capital investments in physical transmission assets needed to serve local retail load needs and operations and maintenance (“O&M”) expenses on those assets (collectively, “Local Transmission Costs”), (2) transmission service related administrative costs assessed by MISO (“MISO Administrative Costs”), and (3) regional transmission service costs assessed by MISO related to transmission facilities built, in whole or substantial part, to serve regional needs (“MISO Regional Transmission Costs”). I describe each of

these cost categories below.

Q. Please describe the Local Transmission Costs associated with providing electric service to retail customers.

A. MidAmerican incurs the costs of capital investments as well as the direct O&M expenses related to the transmission assets it builds and owns to serve retail customers. Because the electric transmission system serves all MidAmerican customers, a portion of the costs of these transmission assets, regardless of physical location (e.g. in Iowa, Illinois or South Dakota), are allocable to South Dakota retail rates. The existing MidAmerican transmission facilities are primarily used to serve retail load. These facilities are also used to a lesser extent to provide wholesale service to third parties subject to the MISO Open Access Transmission, Energy and Operating Reserve Markets Tariff ("Tariff"), which is under the jurisdiction of the FERC. Wholesale use of such assets is arranged by MISO as I describe in more detail later in my testimony.

Q. Please explain the MISO Administrative Costs associated with providing service to retail customers.

A. MidAmerican incurs two administrative charges assessed by MISO, charged under Schedule 10 and Schedule 10-FERC. The charges are imposed on all load being served regardless of whether the load is also paying Schedule 9 (network service) charges. Schedule 10 is the MISO charge for recovering its costs as an independent system operator. The charge includes MISO costs related to providing reliability coordination services, tariff administration services, and transmission planning. All of these services are critical to the proper planning and operation of the transmission system. Schedule 10-FERC is the MISO charge for the annual FERC assessment. Schedule 10-FERC recovers

MISO's costs in paying its annual assessment. Both of these costs are directly incurred in the provision of electric service to retail customers.

Q. Please explain the Regional Transmission Costs associated with providing service to retail customers.

A. MidAmerican incurs two regional transmission charges assessed by MISO. The charges are imposed on all loads in the MISO system. Schedule 26 is the MISO network upgrade charge associated with certain cost-shared baseline reliability projects, generator interconnection projects and MEPs. Under the MISO tariff, a portion of the costs of such projects is allocated outside of the local area because such projects provide benefits outside the local area. Schedule 26-A is the MISO network upgrade charge associated with MVPs. Under the MISO tariff, 100% of the costs of such projects are allocated on a regional basis because such projects provide many benefits across the entire region. The MVP category of transmission project provides a framework enabling the construction of transmission projects to address a variety of needs including renewable energy policy requirements, market needs and reliability requirements. Both of these regional transmission charges are directly incurred in the provision of electric service to retail customers.

Transmission Revenues

Q. Please generally describe the wholesale transmission revenues MidAmerican receives.

A. There are two broad categories of wholesale transmission revenues including (1) revenues attributable to MidAmerican's locally-allocated transmission facilities and (2) revenues attributable to MidAmerican transmission facilities which are fully or in

substantial part regionally cost allocated under the MISO tariff.

Q. Please describe the wholesale transmission revenues attributable to MidAmerican's locally-allocated transmission facilities.

A. There are three types of revenues MidAmerican receives attributable to locally-allocated transmission facilities. First, MidAmerican receives transmission revenues from MISO related to transmission service provided under the MISO tariff related to network service within the MidAmerican system, typically to serve municipal utilities, and related to transactions sinking into the MidAmerican system. Such revenues are considered "non-cost shared" revenues and are fully distributed to MidAmerican. MISO transmission service related to transmission service transactions that "drive out" of (leave) or "drive across" the MISO footprint are also considered non-cost shared revenues and are distributed to transmission owners in such a way that MidAmerican receives a portion of the total revenues received by MISO. MidAmerican does not directly bill wholesale customers for transmission service provided under the MISO tariff. Instead, MISO bills each wholesale customer (including MidAmerican's Electric Trading function) for transmission and ancillary services under the MISO tariff and then distributes transmission related revenues to Transmission Owners based on the revenue distribution requirements under the MISO Transmission Owners Agreement.

Second, MidAmerican receives transmission revenues from several agreements which pre-date its MISO membership. These agreements include several "grandfathered" transmission service agreements and a transmission rent.

Third, MidAmerican receives revenues related to the wholesale use of its distribution facilities. The use of distribution facilities for wholesale purposes is subject

to FERC jurisdiction and a number of agreements with transmission customers are in place with respect to such use.

Q. Please describe the wholesale transmission revenues attributable to MidAmerican's regionally-allocated transmission costs.

A. I first note that MidAmerican did not receive any transmission revenues attributable to regionally-allocated transmission costs prior to 2014. MidAmerican began receiving revenue of this type in 2014. With that being said, there are two types of revenues MidAmerican expects to receive attributable to regionally-allocated transmission costs. First, MidAmerican expects to receive transmission revenues from MISO for cost-shared generator interconnection projects and MEPs it constructs and owns under Schedule 26 of the MISO tariff. The portion of the costs allocated regionally varies depending on the type and characteristic of project. For example, generator interconnection projects at 345 kV have 10% of their costs allocated regionally. MEPs typically have the majority of their costs allocated outside the footprint of the constructing transmission owner. Second, MidAmerican expects to receive transmission revenues from MISO related to facilities constructed and owned by MidAmerican qualifying for cost allocation under Schedule 26-A of the MISO tariff. Schedule 26-A is the MISO network upgrade charge associated with MVPs. Under the MISO tariff, 100% of the costs of such projects are allocated on a regional basis.

TRANSMISSION PLANNING

Q. What is the significance of transmission planning with respect to the determination of which transmission facilities are constructed and which transmission facilities serve regional needs and thus are regionally cost allocated?

206 A. The transmission planning process is important in determining projects that serve local or
207 regional benefits. The local and regional transmission planning processes are required by
208 FERC and form part of the MISO tariff. As a transmission-owning member of MISO,
209 MidAmerican is required to engage in the MISO-wide transmission planning processes.
210 MidAmerican has also maintained its own local transmission planning process in the
211 MISO tariff which provides for stakeholder input into MidAmerican's transmission
212 plans. MidAmerican's plans are "rolled up" to the overall MISO-wide transmission plan.
213 MISO's transmission planning also includes a separate "top-down" component whereby
214 MISO itself can determine projects to be included in the transmission plan. Each year a
215 MISO Transmission Expansion Plan ("MTEP") is approved by the MISO Board of
216 Directors. MidAmerican and the other MISO transmission owners are required to
217 construct the transmission projects assigned to them in the MTEP.

218 MidAmerican's experience prior to 2011 was that nearly all of the costs of its
219 transmission projects (i.e., those developed through the local transmission planning
220 process) were allocated to its own pricing zone, meaning that MidAmerican's retail
221 customers and the wholesale customers within the MidAmerican system pay the costs of
222 those facilities. It had also been MidAmerican's prior experience that the costs allocated
223 to it from projects completed by other MISO transmission owners were not significant in
224 terms of overall transmission costs. Beginning with the MTEP approved in 2011, a
225 substantial amount of costs of new transmission projects have been determined to benefit
226 the entire region and are hence to be regionally cost allocated. MidAmerican has a
227 number of transmission projects receiving regional cost allocation, and it will likewise be
228 subject to the costs of projects completed by other MISO Transmission Owners which are

regionally allocated.

Q. Please explain the benefits of the MISO Multi-Value Projects.

A. There are many benefits of the MISO MVPs. The MISO 2011 MVP Portfolio of seventeen 345 kV and 765 kV transmission projects is designed to meet the need to accommodate renewable requirements as defined based upon the input from many stakeholders. The stakeholder input included significant participation by the Midwest Governor's Association and the Upper Midwest Transmission Development Initiative which included representation from the State of South Dakota and/or the Commission. The Organization of MISO States was a key stakeholder in the development of the portions of the MISO Tariff which describe the requirements to be considered MVPs as well as the cost allocation aspects. The Commission is typically represented at the Organization of MISO States.

Besides meeting energy policy requirements, the MISO 2011 MVP Portfolio of projects provides transmission congestion relief, production cost savings, operating reserve margin benefits, system planning reserve benefits, transmission line loss reduction, wind turbine investment benefits, and reliability benefits. The congestion and production cost savings include reduction of congestion, which enhances market efficiency, and the ability to use low cost generation to serve load and thus displace higher cost resources. Operating reserve margin benefits include more economical dispatch of units, improved unit commitments, reduced instances of binding constraints, reduced stranded generation reserves, enhanced access to generators with high ramp capabilities, and access to a wider variety and number of generation resources under emergency conditions. System planning reserve margin benefits include the reduction in

future generation to serve load plus margin to cover for generation outages in tight capacity periods. The system planning reserve margin benefits are due to reduced congestion. Transmission line loss benefits result from the reduction in effective system impedance due to the MISO 2011 MVP Portfolio which reduces the energy spent in transmission line losses throughout the system. The decrease in system losses under peak conditions results in less generation capital investment in the future. Wind turbine investment benefits include reduction in capital investment in wind to meet renewable portfolio standards due to the higher capacity factor of wind. The future transmission investment benefits include the reduction in the need for baseline transmission investment due to the reliability benefits of the MISO 2011 MVP Portfolio.

The MISO 2011 MVP Portfolio provides benefits in excess of its costs under all scenarios studied, with MISO's estimated Benefit-to-Cost ratio ranging from 1.8 to 3.0. Most of the estimated benefits are congestion and fuel savings that result from providing access to lower electric energy costs, relieving transmission congestion, collecting renewable energy from the wind energy zones, and enabling the delivery of the wind across the MISO footprint. These benefits were estimated using production cost modeling that simulates the integrated electric generation and transmission system.

As shown in Figure 1 below, when these MISO system wide benefits were evaluated for their distribution within the MISO footprint, MISO's estimates of the benefits to Load Resource Zone 1, consisting of utilities located in South Dakota, North Dakota, Minnesota and part of Wisconsin amounted to between 1.6 and 2.9 times portfolio costs.

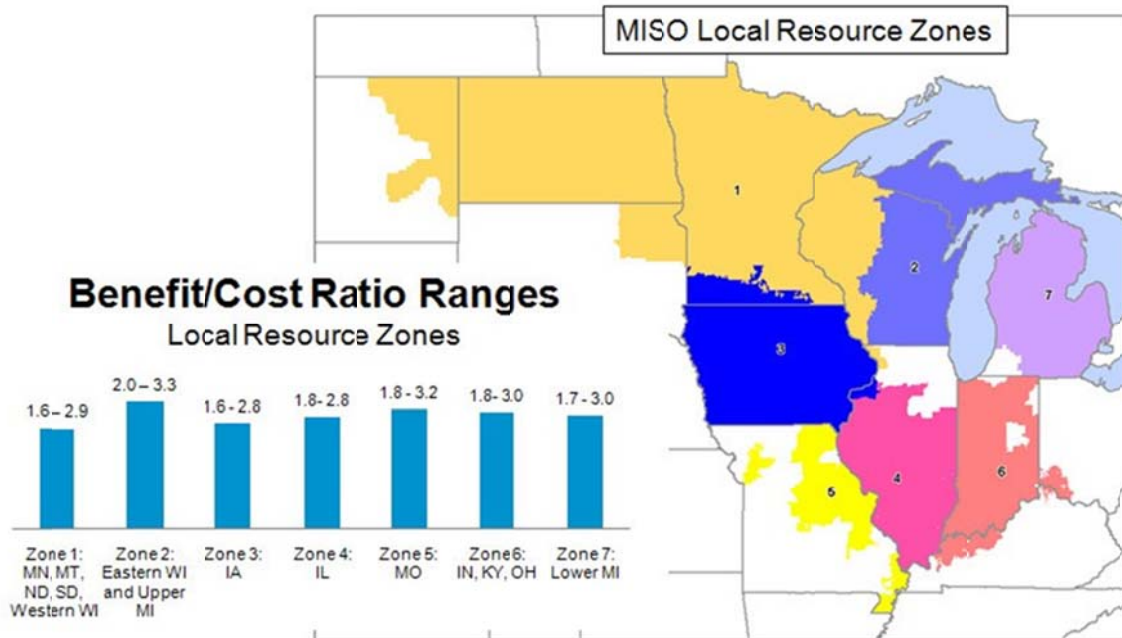


Figure 1 – MVP Portfolio Benefits Spread from “Multi Value Project Portfolio – Results and Analyses, January 10, 2012” (MVP Report)

TRANSMISSION RATEMAKING

Q. Please explain how the MISO transmission planning process is related to transmission ratemaking.

A. As I mentioned, the transmission planning process is part of the MISO Tariff. In MISO, projects can be included in MISO rates for regional cost allocation purposes only if they are approved by MISO in an MTEP with such a designation. Importantly, MidAmerican had not had any projects eligible for regional cost allocation approved until the 2011 MTEP. Likewise, the costs MidAmerican is assessed for regional transmission projects is substantially due to projects approved in the 2011 MTEP and subsequent MTEPs.

Proposed Treatment of Transmission Related Costs and Revenues

Q. Please generally describe MidAmerican’s proposed treatment of transmission

related costs and revenues in this rate case.

A. MidAmerican proposes to treat costs and revenues in a manner consistent with the local or regional basis for the costs and revenues and the associated benefits to retail customers. MidAmerican's proposal is consistent with present regulation in that an allocation of the known and measurable capital and O&M costs of MidAmerican's transmission facilities built to serve retail load will be included in the adjusted test year revenue requirement. Likewise, an allocation of the known and measurable transmission revenues MidAmerican receives in relation to its non-cost allocated transmission facilities will be accounted for as a reduction to the retail revenue requirement.

MidAmerican proposes to account for its capital and O&M costs related to its transmission facilities which qualify for regional cost allocation under the MISO tariff in a separate accounting jurisdiction such that those costs do not form part of the South Dakota retail revenue requirement. Because the facilities serve regional needs and have regional benefits, the vast majority of their costs will be recovered from other users than retail load through the MISO Tariff. A very small portion of the costs of MidAmerican's regionally allocated transmission projects as billed to MidAmerican by MISO will be recovered through the TCR clause. These costs are the small portion of costs of MidAmerican's regionally-allocated projects used to serve South Dakota retail load and not allocated to other transmission customers in MISO or other MidAmerican state retail jurisdictions. The TCR clause will also recover MISO administrative costs and MISO regional cost allocations of regionally allocated facilities built by other MISO Transmission Owners.

Q. Does MidAmerican propose to recover the costs of incremental transmission

314 **projects, whether regionally-allocated or used to serve native load, through the TCR**
315 **clause?**

316 A. No. MidAmerican has no plans to recover the costs of any incremental transmission
317 facilities (those going into service after December 31, 2013), whether regionally allocated
318 or used to serve native load, from South Dakota retail customers via the TCR clause.
319 Instead, South Dakota customers pay a small portion of the overall MISO Schedule 26
320 and 26-A charges for their use of regionally-allocated facilities and costs of incremental
321 facilities used to serve native load would be recovered in a subsequent base rate case.

322 **Q. Please summarize the proposed treatment of transmission costs and revenues.**

323 A. The following table summarizes the proposed treatment of transmission costs and
324 revenues:

<u>Item</u>	<u>Rate Treatment</u>
Facilities used primarily to serve local load (including new facilities not regionally allocated, as approved in future rate cases)	Base electric rates
Multi-Value Projects and Market Efficiency Projects used primarily for regional transmission purposes	Separate accounting jurisdiction
MISO administrative costs	TCR clause
MISO regional transmission cost allocations to MidAmerican	TCR clause

325
326 Each of these areas is more fully discussed below.

327 **Transmission Costs and Revenues in Base Electric Rates**

328 **Q. Please summarize the transmission costs and revenues that are proposed to continue**
329 **to be reflected in base rates.**

330 A. The transmission costs that remain in base rates include all transmission costs not
331 recovered wholly by the MISO tariff or in the TCR clause. These costs include the
332 transmission plant costs, transmission O&M costs, depreciation, and amounts paid to

MISO for transmission service. The transmission revenues that remain in base rates include all wholesale transmission revenues received for transmission facilities other than MidAmerican's MVPs and MEPs. The revenues remaining in base rates include revenues from MISO from Schedules 7, 8 and 9, revenues from grandfathered transmission service and wholesale revenues related to the use of MidAmerican's distribution facilities.

Q. Why is the proposed treatment of non-cost allocated projects in base rates appropriate?

A. It is appropriate to include MidAmerican's transmission facilities which are ineligible for MISO regional cost allocation in base rates because the facilities are needed to serve local retail load and including the costs in base rates therefore meets cost causation principles. Furthermore, this approach is consistent with the past practice for integrated utilities owning transmission assets as well as generation and distribution assets.

Transmission Costs and Revenues in Separate Accounting Jurisdiction

Q. Please describe the separation between the costs and revenues associated with MVPs/MEPs and other MidAmerican transmission facilities.

A. MidAmerican's capital investment in MVPs and MEPs as well as the ongoing O&M and depreciation costs of those investments will be recovered almost entirely from other users through the MISO tariff. However, a relatively small portion of the regional costs MISO assesses to MidAmerican are attributable to MidAmerican's regionally-allocated projects and will be recovered through the TCR clause. None of the costs or associated revenues of MVPs and MEPs will be included in base retail rates. Instead, these costs and revenues are reflected only in FERC-approved transmission rates. A small allocation of the costs of these facilities will be recovered from MidAmerican's South Dakota retail customers

through the TCR clause commensurate with the benefits which accrue to such customers.

Q. Do you have an estimate of the portion of the MISO-wide MVP and MEP costs that will be allocated to MidAmerican's retail customers in South Dakota?

A. Yes. Approximately 0.04% of the revenue requirements related to all of the MISO MVPs will be ultimately assessed to MidAmerican's customers in South Dakota. This is based on the South Dakota retail jurisdiction share of approximately 4-5% of the revenue requirements related to all of the MISO MVPs that will be assessed by MISO to MidAmerican's retail jurisdiction through MISO's transmission rate process. The portion of the MISO-wide MVP revenue requirements allocated to MidAmerican is based on MidAmerican's energy use in proportion to the energy use of the entire MISO footprint. That ratio varies from year to year but is expected to be approximately 4-5% based on the current MISO footprint. Under MidAmerican's proposed retail rate design, approximately 0.85% of the transmission costs MISO imposes on MidAmerican will be allocated to South Dakota retail rates via the TCR clause. The estimate of 0.04% is derived by applying the 0.85% allocator to the upper end of the 4-5% estimate.

With respect to MEPs, the MISO tariff requires that 20% of the annual costs of MEPs be allocated on a footprint-wide basis, with MidAmerican being allocated approximately 4-5% of that portion, and the remaining 80% of the annual costs of MEPs being allocated to the sub-regions expected to benefit from the MEP. Therefore, the portion of the MEP revenue requirements to be assessed to MidAmerican will depend to a great extent on the particular MEP and the benefits it provides to the sub-region in which MidAmerican resides. It is expected that the portion of the MISO MEP costs allocable to MidAmerican's retail customers in South Dakota will be relatively small

because of the 0.85% allocation factor discussed above.

Q. You have testified that approximately 0.04% of the MISO-wide MVP and MEP costs will be allocated to MidAmerican's retail customers in South Dakota. Will a similar proportion of the costs of MVPs and MEPs constructed by MidAmerican be charged through the TCR clause to South Dakota retail customers?

A. Yes. As with MISO-wide MVP costs, approximately 0.04% of the revenue requirements related to MidAmerican's MVPs will be ultimately assessed to MidAmerican's customers in South Dakota via the TCR clause. The reason is that MidAmerican's MVP costs will be treated the same as any other MVP costs by MISO in terms of recovery.

Q. Do you have any estimate of the dollar amount of revenue requirements of MidAmerican's MVPs to be collected from MidAmerican's South Dakota retail customers?

A. I have not yet developed an initial estimate of 2015 revenue requirements of MidAmerican's MVPs because the 2015 MVP revenue requirements are not required to be posted until September 1, 2014. For the 2014 rate year, MidAmerican's total revenue requirement for its MVPs is \$9,174,200. Assuming MidAmerican's energy use remains at 5% of the total MISO energy to which MVP charges are assessed and applying the 0.85% allocator, the portion which would have been allocated to South Dakota in 2014 had the TCR clause been in effect is approximately \$3,900. In addition to the reasons for separate accounting I address above, because the portion of the known and measurable costs of these assets to be recovered from South Dakota retail customers is so small it seems most appropriate to place these kinds of assets in a separate accounting jurisdiction and not include them in base rates.

402 **Q. Why is the proposed treatment of cost-allocated transmission projects and related**
403 **revenue in a separate accounting jurisdiction appropriate?**

404 A. There are several reasons why it is appropriate to treat cost-allocated transmission
405 projects in a separate accounting jurisdiction. First, the projects will not be constructed
406 for local load-serving needs. Such projects receive regional cost allocation because of
407 their regional benefits. Second, in contrast to locally allocated transmission facilities, as
408 noted above, the MISO tariff will recover the vast majority of the costs of such projects
409 from third parties. Third, this approach appropriately removes much of the risk related to
410 such projects from MidAmerican retail customers.

411 **Q. Is the separate accounting jurisdiction approach consistent with how MidAmerican**
412 **has treated the costs and revenues of its MVPs in its other state jurisdictions?**

413 A. Yes. In Iowa, where about 89% of MidAmerican's MISO transmission costs are
414 allocated, the costs of MidAmerican's MVPs are accounted for as a separate jurisdiction.
415 The costs of those MVPs allocated by MISO to MidAmerican's Iowa retail load are
416 included in the amounts ultimately paid via a Transmission Cost Adjustment ("TCA").
417 The TCA is mechanically very similar to the TCR clause with nearly the same types of
418 costs being recovered. The TCA recovers some additional costs because some Iowa retail
419 load is served from another MISO transmission owner. Like the proposed rate design in
420 South Dakota, the Iowa TCA includes only the MVP costs allocated to MidAmerican
421 retail load and does not include MVP revenues as credits because all of the costs and
422 revenues are permanently reflected in the separate accounting jurisdiction.

423 In Illinois, where about 10% of MidAmerican's MISO transmission costs are
424 allocated, treatment of the costs of MidAmerican's MVPs is essentially the same. Costs

of the MVP assets are accounted for in a separate jurisdiction and the MISO-allocated costs are included in the amounts ultimately paid via a Transmission Service rider (“Rider TS”). Rider TS also recovers an allocation of MidAmerican’s local non-regional cost allocated facilities in order to be consistent with costs competitive retail suppliers pay under the state’s unbundled rate structure.

Transmission Costs in Transmission Cost Recovery clause

Q. Please describe the changes in circumstances which are causing MidAmerican to propose the TCR clause at this time.

A. With the 2009 integration into MISO as a transmission-owning member, MidAmerican’s transmission facilities became subject to the functional control of MISO and are subject to the MISO local and regional transmission planning process I described above. While MidAmerican does not pay MISO for network service needed by its retail load connected to its own transmission system (Schedule 9 under the MISO tariff), MidAmerican is assessed a number of other charges under the MISO tariff. These other charges are expected to become more significant.

In addition to charges imposed on MidAmerican as a transmission-owning MISO member, a substantial set of projects meeting the definition of MVP was approved in the 2011 MTEP and those projects are now in varying stages of construction. MidAmerican started incurring costs related to such projects in 2012. It is expected that the costs MidAmerican incurs will increase as projects advance through the construction process. A number of MEPs are currently undergoing planning and economic studies by MISO with the potential for a substantial number of projects to be approved.

Q. Does MidAmerican believe it is appropriate to change the manner in which

transmission costs are recovered from its retail customers?

A. Yes. The development of projects designed for regional benefits has caused MidAmerican to conclude that it is appropriate to separate the costs traditionally associated with retail and local wholesale operations of its transmission system from those associated with projects with costs that are regionally allocated. This is because the level of costs associated with most MVPs and MEPs will be outside of the direct control of MidAmerican and will be much more variable and unpredictable than costs associated with MidAmerican's transmission projects designed primarily to serve its load.

It is also the case that MidAmerican is assessed a number of other transmission related charges by MISO including Schedule 10 and 10-FERC which I described earlier in my testimony. Given that all of these charges are levied by MISO and are outside of MidAmerican's direct control, it is appropriate to consider alternative cost recovery mechanisms for these costs as part of this rate case.

Q. Please generally describe the transmission costs to be recovered in the TCR clause.

A. MidAmerican proposes to recover transmission charges assessed by MISO to serve MidAmerican's retail load in the TCR clause. The costs generally consist of charges under MISO Tariff Schedules 10, 10-FERC, 26 and 26-A. These charges are pursuant to the FERC-approved MISO tariff and are assessed by MISO and thus are outside of MidAmerican's direct control and may be subject to significant changes in magnitude and timing. Furthermore, the Commission has already approved inclusion of these costs in other riders. The Commission has granted Otter Tail the ability to recover such costs via similar riders. These other riders are substantially similar to the TCR clause proposed by MidAmerican.

Q. Please describe the charges under MISO Tariff Schedule 10.

A. Schedule 10 is the MISO charge for recovering its costs as an independent system operator (“ISO”). The charge includes MISO costs related to providing reliability coordination services, tariff administration services, and transmission planning all of which provide substantial benefits to the local transmission system.

Q. Does MidAmerican have any control over the costs it pays for retail load subject to Schedule 10?

A. No. MISO develops the charge by calculating a demand and energy rate which it applies monthly based on its own budgeted costs and including any true-up adjustments. MISO assesses the charge to MidAmerican’s native load using after-the-fact monthly load information. The charge is subject to change as MISO’s overall costs and as the load served by MISO changes. MidAmerican has no control over MISO’s costs for providing these services. Also, the charge is approved by FERC and MidAmerican’s only way to impact the approval process would be to participate as one of many parties in a regulatory proceeding. It is therefore appropriate that costs assessed to MidAmerican by MISO under MISO’s Schedule 10 be collected pursuant to the TCR.

Q. What costs were incurred in 2013 for Schedule 10?

A. In 2013, MidAmerican paid \$3,853,673 in Schedule 10 charges.

Q. Please describe the charges under MISO Tariff Schedule 10-FERC.

A. Schedule 10-FERC is the MISO charge for the annual FERC assessment. MISO is subject to annual charges assessed by FERC. Schedule 10-FERC recovers MISO’s costs in paying its annual assessment.

Q. Does MidAmerican have any control over the costs it pays for retail load subject to

Schedule 10-FERC?

A. No. The charge is assessed monthly to MISO's transmission customers based on energy usage. The charge is derived from MISO's forecast of its upcoming annual FERC assessment divided by MISO's forecast of the energy to be served over the period of time associated with the FERC assessment. The annual rate includes a true-up component to account for any difference between the amount owed and the amount collected over the previous period. MISO assesses the charge to MidAmerican's native load using after-the-fact monthly load information. The charge is subject to change as MISO's costs of regulation change and as the load served by MISO changes. MidAmerican has no control over FERC's annual assessment to MISO. It is therefore appropriate that costs assessed to MidAmerican by MISO under MISO's Schedule 10-FERC be collected pursuant to the TCR.

Q. What costs were incurred in 2013 for Schedule 10-FERC?

A. In 2013, MidAmerican paid \$1,551,825 in Schedule 10-FERC charges.

Q. Please describe the charges under MISO Tariff Schedule 26.

A. Schedule 26 is the MISO network upgrade charge associated with cost-shared baseline reliability projects, generator interconnection projects and MEPS. Under the MISO tariff, certain types of projects which are expected to benefit more than one pricing zone have a portion of their costs allocated outside of that pricing zone. For example, a 345 kV project needed to address reliability concerns can have a portion of its costs allocated across the entire MISO footprint on a "postage stamp" basis and a portion of its costs allocated to nearby pricing zones because they experience electrical benefits from the project. Generator interconnection projects can also have a portion of their costs allocated

on a footprint wide basis under the MISO tariff. MEPs have the majority of their costs allocated outside the footprint of the constructing transmission owner. These projects can be contrasted to the MVPs, which provide region wide benefits (as opposed to just benefits to certain pricing zones), and which are charged through Schedule 26-A which I describe below. The decision as to what projects will be allocated in this manner is made by MISO. For each annual MTEP, MISO determines which projects are eligible for cost allocation as baseline reliability projects and generator interconnection projects. Percentage cost allocations to each pricing zone are developed by MISO and included in the MTEP document.

Q. Does MidAmerican have any control over the costs it pays for retail load subject to Schedule 26?

A. No. Revenue requirements for each qualifying project are determined by the constructing transmission owner in accordance with Attachment GG of the MISO tariff. The revenue requirements are then allocated to pricing zones using the percentage allocations identified in the MTEP document. Monthly demand rates are developed by MISO using the amounts to be allocated to each pricing zone and charges are calculated on that basis. MISO assesses the charge to MidAmerican's native load using after-the-fact monthly load information. The charge is subject to change as additional projects are approved as qualifying for cost allocation. MidAmerican has no control over MISO's assessment of these costs. It is therefore appropriate that costs assessed to MidAmerican by MISO under MISO's Schedule 26 be collected pursuant to the TCR.

Q. What costs were incurred in 2013 for Schedule 26?

A. In 2013, MidAmerican paid \$56,645 in Schedule 26 charges.

Q. Do you anticipate changes in Schedule 26 charges?

A. I first of all note that Schedule 26 charges are difficult to forecast based on the large number of unknowns in terms of timing of applicable projects, variability in terms of individual transmission owner cost recovery methodologies and potential changes in project costs. However, I do believe that the Schedule 26 charges will substantially increase in the next five years. Based on MISO's estimates of Schedule 26 rates as available on the MISO website and based on MidAmerican's forecasted loads, I estimate that MidAmerican's Schedule 26 costs will be approximately \$185,000 in 2015 and will be approximately \$430,000 by 2019. It is obvious that the Schedule 26 costs are expected to ramp up substantially from 2014 to 2019 in comparison to the 2013 actual costs. It is for this reason that the costs are appropriately collected through the TCR clause.

Q. Why do you expect the Schedule 26 charges to increase so much over time?

A. The regional MTEP planning process has had the salutary effect of enhancing inter-zonal reliability and approving projects to achieve these benefits. At the present time, MidAmerican is experiencing costs related to projects approved in MTEP 2010, 2011, 2012 and 2013. As each successive MTEP is approved, there will be additional projects eligible for cost-sharing. The key reason the costs are increasing with time is the calendar time delay it takes to build projects and include them in rates. It takes time for utilities to construct projects and for resulting investments to be included in the Schedule 26 charges. This is true even for companies with forward-looking rate templates. As the projects are built or forecasted to be built in the next rate year, the charges related to those projects appear in the overall Schedule 26 charge.

Q. Please describe the charges under MISO Tariff Schedule 26-A.

A. Schedule 26-A is the MISO network upgrade charge associated with MVPs. For each annual MISO transmission expansion planning cycle, MISO determines which projects are eligible for cost allocation as MVPs. Projects are eligible for classification as MVPs only if they have multiple benefits across the MISO region.

Q. Does MidAmerican have any control over the costs it pays for retail load subject to Schedule 26-A?

A. With the exception of costs of MidAmerican's own MVP investments, the answer is no.¹ Revenue requirements for each qualifying project are determined by each constructing transmission owner in accordance with Attachment MM of the MISO tariff. The revenue requirements of each MVP are then summed to determine the total MISO-wide MVP revenue requirements. Monthly energy rates are developed by MISO using the total MVP annual revenue requirements and weighting factors which are based on prior year energy withdrawals. MISO assesses the charge to MidAmerican's native load using after-the-fact monthly energy information. The charge is subject to change as additional MVPs are approved and constructed qualifying for cost allocation. MidAmerican has no control over MISO's assessment of these costs. It is therefore appropriate that costs assessed to MidAmerican by MISO under MISO's Schedule 26-A be collected pursuant to the TCR.

Q. What costs were incurred in 2013 for Schedule 26-A?

A. In 2013, MidAmerican paid \$4,039,284 in Schedule 26-A charges.

Q. Do you anticipate significant changes in Schedule 26-A charges?

A. I again note that Schedule 26-A charges are difficult to forecast for many of the same reasons that Schedule 26 costs are difficult to estimate; namely, there is a large number of

¹ If MidAmerican does not build MVP projects, presumably other transmission owners would build such facilities with MidAmerican paying an allocated charge for use of such facilities.

unknowns in terms of timing of applicable projects, variability in terms of individual transmission owner cost recovery methodologies and potential changes in project costs. However, I do believe that the Schedule 26-A charges will substantially increase in the next five years. Based on MISO's current estimates of Schedule 26-A rates as available on the MISO website and based on MidAmerican's forecasted energy needs, I estimate that MidAmerican's total Schedule 26-A costs will be approximately \$14 million in 2015 and will be approximately \$46 million by 2019. It is obvious that the Schedule 26-A costs are expected to ramp up substantially from 2015 to 2019 in comparison to the 2013 actual costs. It is for this reason that the costs are appropriately collected through the TCR.

Q. Why do you expect the Schedule 26-A charges to increase so much over time?

A. The key reason is that the first projects eligible for cost allocation under Schedule 26-A were approved in the 2011 MTEP and are only in the early phases of implementation. In total, there are 17 MVPs in MISO which have been approved so far, totaling some \$5.6 billion in investment. The projects have in-service dates ranging between 2014 and 2020. Many of the MVPs will take several years to construct. Also, many constructing Transmission Owners have received FERC incentive rate treatment for inclusion of construction work in progress in rates via forward-looking rates which has the effect of costs being reflected in rates as the projects are constructed (as opposed to the alternative of a sudden larger increase in rates which would occur under the traditional approach of accruing AFUDC). The capital expenditure profile of each MVP varies but it is common for each to have a period of 2-5 years of build-up in terms of revenue requirements. Therefore, as projected expenditures for an upcoming year are added to rates, the charges increase. As the projects are built or forecasted to be built in the next rate year, the

charges related to those projects appear in the overall Schedule 26-A charge.

Q. Will any revenues received from MISO related to MidAmerican's MVPs and MEPs be included as credits under the TCR clause?

A. With the exception of a small portion of total company A&G expense, no.

Q. Why not?

A. As I have described earlier, the wholesale revenues related to MidAmerican's transmission facilities built solely to serve native load are included as revenue credits in base rates and as such are not included in the TCR clause. With respect to revenues collected in relation to MidAmerican's MVPs and MEPs, those revenues are not included as credits because those facilities are accounted for in a separate accounting jurisdiction. MidAmerican's MVP and MEP costs will be recovered solely under the MISO tariff via Schedules 26 and 26-A. The costs of such facilities will not be included in retail rate base and South Dakota customers will have no responsibility for those costs other than as they are assessed through MISO. The TCR clause does include a credit related to a portion of total company A&G costs.

Q. Please explain the credit related to the portion of total company A&G costs.

A. The MISO Attachment MM rate template used to develop the revenue requirement for MVPs includes allocators of total company administrative & general costs, common costs, depreciation expenses and property taxes (referred to herein as "A&G Costs") to MVP transmission revenue requirements. The allocators are based on the Attachment O rate template amounts for these costs which are themselves allocations of total company amounts. Since allocations of total company A&G Costs are already included in base retail rates, an adjustment is needed to prevent double-recovery of these costs through the

TCR clause. The TCR clause therefore includes a credit for the MVP revenues attributable to the allocation of total company A&G Costs to the Schedule 26-A revenue requirement. A credit will be calculated for each TCR clause rate year period based on the Attachment MM rate template in effect at that time.

Q. Are other credits needed to prevent double-recovery of MVP costs?

A. No. The other allocations in the Attachment MM rate template do not result in double-recovery of costs in base retail rates and the TCR clause.

Q. Is the TCR clause consistent with cost adjustment mechanisms approved for other utilities in South Dakota?

A. Yes. The Commission has previously approved transmission cost recovery mechanisms for Northern States Power and Otter Tail. These other transmission cost adjustment mechanisms are mechanically similar in many respects to MidAmerican's cost adjustment mechanism.

Q. What are the similarities and differences between the costs recovered under the other Commission-approved mechanisms and the TCR clause?

A. The adjustment mechanism used by Otter Tail and the TCR clause proposed by MidAmerican both include costs imposed by MISO for Schedules 26 and 26-A. Otter Tail includes the costs for MISO Schedule 10 in its energy adjustment cost rider as opposed to in its transmission cost recovery mechanism. The TCR clause proposed as part of this case adds an explicit reference to Schedules 10 and 10-FERC in lieu of recovering these costs in an energy adjustment rider. Keeping the various MISO-related costs together from a cost-recovery standpoint is proposed in order to gain efficiencies in terms of reporting these costs. I also note that Otter Tail's cost recovery mechanism

654 employs the same revenue credit component to prevent double-recovery of total company
655 administrative & general costs, general & common depreciation and property taxes.

656 The key difference between MidAmerican's TCR clause and the other cost
657 recovery mechanisms is that MidAmerican does not contemplate the incremental
658 inclusion of either local or regional transmission projects via its TCR clause.

659 **Q. Why doesn't MidAmerican plan to include incremental transmission investments in**
660 **its TCR clause?**

661 A. MidAmerican believes that periodic updates to base rates remains an effective
662 mechanism at this time to recover MidAmerican's non-regional transmission costs from
663 its South Dakota retail customers. Because MidAmerican proposes to account for its
664 regional transmission projects in a separate jurisdiction, those costs would not be
665 included in the TCR clause either, except as assessed by MISO.

666 I note that significant administrative efficiencies will be gained from this
667 approach because the annual filings will not contain all of the detail typically required
668 when utilities add incremental amounts of revenue requirements of their own
669 transmission investments. The additional burden of providing the detailed maps,
670 diagrams, revenue requirement calculations and other supporting information and then
671 processing the annual filings through to ultimate completion is significant. Given that
672 only about 0.85% of the costs of such projects would be allocable to MidAmerican's
673 South Dakota retail customers, the benefit is outweighed by the costs. With respect to the
674 MidAmerican MVPs, the benefit would be further reduced as only about 0.04% of the
675 costs of MidAmerican's MVPs would be allocable to MidAmerican's South Dakota retail
676 customers.

677 **Q. Please explain the measures MidAmerican will take to control costs recovered**
678 **through the TCR clause.**

679 A. As I have testified, MISO determines the vast majority of the costs to be recovered
680 through the various tariff schedules. Namely, Schedules 10, 10-FERC, 26 and 26-A costs
681 are based on rates determined by MISO. However, as a Transmission-Ownning member of
682 MISO, MidAmerican can influence rate related matters at MISO and at FERC in several
683 ways. First, MidAmerican actively participates on the MISO Transmission Owners'
684 Committee, which is a committee entrusted with decisional authority over certain MISO
685 tariff filings at FERC. MidAmerican can influence decisions of that committee based on
686 actively monitoring various matters and advocating on behalf of its retail customers.

687 Second, MidAmerican actively monitors matters in various stakeholder groups
688 including the Planning Advisory Committee, the Planning Subcommittee, the Markets
689 Subcommittee and the Advisory Committee. Those venues offer multiple opportunities to
690 provide feedback and influence MISO's decisional process.

691 A third area involves MidAmerican's active participation in FERC filings made
692 by MISO, by other MISO transmission owners and by third parties which affect costs.
693 MidAmerican consistently monitors such filings and intervenes and protests where
694 necessary to protect its interests. Our determination of interest is always guided by how a
695 particular filing affects our customers and other stakeholders.

696 The Commission can depend on MidAmerican to continue its demonstrated
697 practice of consistently taking such actions where possible and appropriate. Moreover,
698 MidAmerican will be making annual filings with the Iowa Utilities Board for the next
699 five years describing its cost containment efforts. MidAmerican would be happy to share

these reports with the Commission.

TRANSMISSION COST RECOVERY CLAUSE TARIFF DESIGN

Q. Please provide details concerning the TCR clause rate design.

A. The TCR clause is calculated by first estimating the total transmission expenses for a rate year, applying the A&G credit as noted above to prevent double-recovery of those costs, and then allocating a portion of the net expenses to South Dakota retail rates for purposes of collection via the TCR clause. The costs to be included in the TCR clause are projected costs for the upcoming year based, where possible, on MISO's projections of rates to be charged and MidAmerican's projections of monthly demand and energy use. Following the completion of the rate year, a true-up calculation will be performed comparing actual costs to projected costs, with the difference to be included in the subsequent year's TCR clause rates. In this filing, MidAmerican has included the total estimated 2015 MISO transmission costs of \$20,218,364 as detailed in Exhibit DAS 1.1, Schedule C. The A&G credit for 2015 is currently estimated at \$37,281 as shown in Exhibit DAS 1.1, Schedule D. Such amount is based on the 2014 Attachment MM rate template because MidAmerican has not yet developed an Attachment MM rate template for its MVPs for use in the 2015 rate year. MidAmerican estimates the South Dakota jurisdictional amount upon which to base the TCR clause for 2014 at \$171,856 as detailed on Exhibit DAS 1.1, Schedule E.

It is proposed that MidAmerican file updated TCR clause information annually with a filing of the proposed rates and charges to be made by March 1 and rates to be effective April 1 of each year. MidAmerican proposes this schedule because it coincides with the timetable for MISO's Schedule 26 and 26-A rate updates which occur for the

722 January billing cycle. The Schedule 26 and 26-A rates change twice per year with the
723 most significant change occurring in January and a smaller change occurring in June.
724 MISO is required to post the January rates no later than February 8 which is the first date
725 that a bill for January can be issued. Following issuance of the MISO rate information by
726 February 8, MidAmerican will make the required filing by March 1 with an effective date
727 of April 1.

728 MidAmerican Witness Kutsunis describes the detailed design of the TCR clause
729 including the allocation of the costs to customer rate class.

730 **Q. Does that complete your prepared direct testimony?**

731 **A.** Yes, it does.