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April 20, 2012

**Via e-filing**

Honorable Kimberly D. Bose  
Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, D.C. 20426

Re: MidAmerican Energy Company  
Petition for Declaratory Order  
Docket No. EL12-\_\_\_\_\_

Dear Ms. Bose:

MidAmerican Energy Company (“MidAmerican” or “Applicant”) hereby requests the Federal Energy Regulatory Commission (“FERC” or “Commission”) to issue an order approving the proposed re-delineation and re-classification of its electric facilities between transmission and local distribution (“2011 Delineation”) on an expedited basis but no later than sixty (60) days from the date of this Application.<sup>1</sup> In this Application, MidAmerican provides the Technical Report for Delineation of Transmission and Local Distribution Facilities (“2011 Technical Report”), attached as Exhibit A, which supports its request, and at Exhibit B, the recommendation of the Iowa Utilities Board that the Commission approve MidAmerican’s 2011 Delineation. Approval of this Request on an expedited basis also will fulfill the objectives of the Settlement Agreements approved by FERC in *MidAmerican Energy Company*, 135 FERC ¶ 61,028, Letter Order issued April 19, 2012 in Docket No. ER12-1070 (“*Clipper*”) and *City of Pella, Iowa v. Midwest Independent Transmission System Operator, Inc. and MidAmerican Energy Company*, 134 FERC ¶ 61,081 (“*Pella*”).

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<sup>1</sup> This request is submitted under Rule 207 of the Commission’s Rules of Practice and Procedure, 18 C.F.R. § 385.207 (2011). Pursuant to the Commission’s filing requirements, 18 CFR § 381.302, MidAmerican is mailing via overnight mail the filing fee of \$24,860.

## I. OVERVIEW OF 2011 DELINEATION FILING

MidAmerican's 2011 Delineation is based on the Commission's seven-factor test established in Order No. 888<sup>2</sup> and reflects the current use of MidAmerican's electrical facilities. The Commission approved MidAmerican's original delineation between transmission and local distribution ("1998 Delineation") in Docket Nos. ER98-3887 and EL99-92-000 by order issued February 4, 2000 in order to permit MidAmerican to participate in the state of Illinois retail access program. As fully described in the 2011 Technical Report, there have been substantial changes in the use of the MidAmerican electrical system between the time that the 1998 Delineation was prepared and the 2011 Delineation was conducted. As a result of these changes, MidAmerican proposes to reclassify (1) non-radial 69 kV distribution facilities and (2) non-radial 161 kV facilities connecting to such 69 kV facilities from distribution to transmission (collectively, "High Voltage Distribution Facilities").

MidAmerican decided an updated delineation study was in order to determine whether there had been any changes in the use of its electrical system stemming from integration with the Midwest Independent Transmission System Operator, Inc. ("MISO") and the development of additional generation and transmission resources within and in the vicinity of MidAmerican's footprint. In addition, MidAmerican was prompted to review the 1998 Delineation after issues were raised about the appropriate classification of portions of its 69 kV system in two Commission proceedings, *Clipper* and *Pella*. The 2011 Technical Report shows that the previous determinations with respect to non-radial 345 kV and 161 kV facilities being classified as transmission are still appropriate. In addition, the 2011 Technical Report showed that the High Voltage Distribution Facilities should be re-classified from local distribution to transmission.

The Iowa Utilities Board, the state regulatory authority with oversight of MidAmerican's electric rates for the majority its retail customers, has approved the 2011 Delineation. Approximately 1,294 miles of non-radial 69 kV lines are physically located in Iowa, or about 94.1 percent of the total of MidAmerican's 1,375 miles of non-radial 69 kV lines. The non-radial 69 kV lines are the primary component to be reclassified as transmission facilities under the 2011 Technical Report. On a cost basis, approximately 93.6 percent of the original costs to be reclassified to transmission are attributable to facilities physically located in Iowa.

A proceeding seeking approval of the 2011 Delineation from the Illinois Commerce Commission ("ICC") is pending in ICC Docket No. 11-0492. Approximately 78 miles of non-radial 69 kV lines are physically located in Illinois, or about 5.7 percent of MidAmerican's total miles of non-

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<sup>2</sup> *Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Service. By Pub. Utils. And Recovery of Stranded Costs by Pub. Utils. And Transmitting Utils.*, Order No. 888, FERC Stats. & Regs. ¶ 31,036 (1996); *clarified* 76 FERC ¶ 61,009 (1996) *order on reh'g*, Order No. 888-A, FERC Stats. & Regs. ¶ 31,048 (1997), *order on reh'g*, Order No. 888-B, 81 FERC ¶ 61,248 (1997), *order on reh'g*, Order No. 888-C, 82 FERC ¶ 61,046 (1998), *aff'd in part and remanded in part sub nom. Transmission Access Policy Study Group v. FERC*, 225 F.3d 667 (D.C. Cir. 2000), *aff'd sub nom. New York v. FERC*, 535 U.S. 1 (2002); *order on remand*, 101 FERC ¶ 61,104 (2002) ("Order No. 888").

radial 69 kV lines. On a cost basis, approximately 6.3 percent of the original costs to be reclassified to transmission are attributable to facilities physically located in Illinois. All testimony has been filed in the ICC proceeding, the record is closed, and no objections to the 2011 Delineation have been raised. MidAmerican awaits the final ruling of the ICC on the 2011 and will furnish the ruling when it is issued. As noted below, MidAmerican has proceeded with this request for declaratory order in advance of the final ruling of the ICC because of deadlines imposed in the *Pella* Settlement Agreement filed with the Commission.

MidAmerican also owns and operates 2.5 miles of non-radial 69 kV lines in the state of South Dakota. MidAmerican has advised the South Dakota Public Utilities Commission (“SDPUC”) of this filing and served it with a copy. No approval or recommendation from the SDPUC is required under South Dakota law.

MidAmerican respectfully requests the Commission defer to the determination of the Iowa Utilities Board and issue an order accepting the Applicant’s proposal within sixty days of this filing. Such action by the Commission is consistent with the Settlement Agreement in *Clipper* as well as *Pella*.

## **II. REQUEST FOR EXPEDITED CONSIDERATION**

MidAmerican respectfully requests expedited consideration of the 2011 Delineation so that the Delineation can be effective on the first day of the first calendar month following this submission. As further described below, in their settlement, the parties to *Pella* agreed to request expedited consideration of the 2011 Delineation in order to timely include the costs of the MidAmerican non-radial 69 kV facilities and the non-radial 69 kV facilities of Pella in MISO transmission rates by September 1, 2012.

## **III. DESCRIPTION OF MIDAMERICAN**

MidAmerican is a public utility engaged in the production, transmission, and distribution of electricity for domestic, commercial and industrial use in the states of Iowa, Illinois and South Dakota and the sale and distribution of natural gas at retail in the states of Iowa, Illinois, South Dakota and Nebraska. MidAmerican’s electric public utility operations are subject to the regulation of the Iowa Utilities Board, the Illinois Commerce Commission, the South Dakota Public Utilities Commission and FERC. MidAmerican owns and operates electric transmission and distribution facilities. On September 1, 2009, MidAmerican integrated its electric generation and transmission facilities with the Midwest Independent Transmission System Operator, Inc. (“MISO”). MISO is a regional transmission organization and is responsible for the functional control of MidAmerican’s transmission system and economic dispatch of MidAmerican’s generation resources. Transmission service across MidAmerican facilities is pursuant to MISO’s Open Access Transmission, Energy and Operating Reserve Markets Tariff (“MISO Tariff”).

#### IV. APPLICANT'S REDELINEATION PROCEEDINGS

In Order No. 888, the Commission held that it has exclusive jurisdiction over interstate transmission of electric energy, including the retail transmission component of an unbundled retail sale.<sup>3</sup> To determine whether facilities should be classified as transmission (subject to the jurisdiction of the Commission) or local distribution (subject to state jurisdiction) the Commission, in Order No. 888, formulated a seven factor test to be used for guidance in classifying assets between transmission and local distribution. The seven factors are:

1. Local distribution facilities are normally in close proximity to retail customers.
2. Local distribution facilities are primarily radial in character.
3. Power flows into local distribution systems; it rarely, if ever, flows out.
4. When power enters a local distribution system, it is not reconsigned or transported on to some other market.
5. Power entering a local distribution system is consumed in a comparatively restricted geographical area.
6. Meters are based at the transmission/local distribution interface to measure flows into the local distribution system.
7. Local distribution systems will be of reduced voltage.<sup>4</sup>

As discussed further below, MidAmerican has classified its electrical facilities in accordance with the seven-factor test and has received state regulatory approvals for the re-classification of certain 69 kV facilities and connecting 161 kV facilities to transmission accounts. In Order No. 888, the Commission said that it would defer to state commission recommendations provided such recommendations are consistent with the essential elements of Order No. 888.<sup>5</sup> The Commission recognized that state regulators have significant knowledge and expertise about the utilities they regulate, and that there may be other relevant factors, including technical factors and the historical use of facilities, that the state regulators believe are appropriate.<sup>6</sup>

The 1998 Delineation was the first application of the seven-factor test to analyze MidAmerican electrical facilities and delineate them between transmission and distribution. The delineation was filed in the context of the Illinois retail access program. In its "Order Approving Classifications" issued February 4, 2000 in Docket Nos. ER98-3887 and EL99-92-000, the Commission granted MidAmerican's request for classification, deferring to recommendations of the Iowa Utilities Board and the Illinois Commerce Commission and approving the 1998 Delineation. The 1998 Delineation generally classified non-radial 345 kV and 161 kV facilities as transmission with the exception of certain local area load-serving high voltage facilities which

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<sup>3</sup> Order No. 888, at 31,781. *See also New York v. FERC*, 535 U.S. 1 (2002).

<sup>4</sup> Order No. 888 at 31,771.

<sup>5</sup> Order No. 888 at 31,783-784 and n. 548; Order No. 888-A at 30,336.

<sup>6</sup> *See* Order No. 888 at 31,783.

were classified as distribution along with all of the radial 345 kV and 161 kV facilities and all of the 69 kV and 34.5 kV facilities.

In 2009, when MidAmerican integrated its operations with MISO, MidAmerican transferred functional control of its transmission facilities consistent with MISO requirements. Thus, the MidAmerican “transmission system” that was made subject to the functional control of MISO consisted of (i) its networked transmission facilities with voltages of over 100 kV and (ii) its networked transformers where the two highest voltages are over 100 kV. *See* Section I.P. of the Agreement of Transmission Facilities Owners to Organize the Midwest Independent Transmission System Operator, Inc., a Delaware Non-stock Corporation, MISO Third Revised Rate Schedule FERC No. 1 of the MISO Tariff.

At the time of integration with MISO, not all of the costs of MidAmerican non-radial facilities over 100 kV were reflected in MidAmerican’s transmission rates. Two categories of networked facilities with voltages of 100 kV or over were classified as local distribution: (1) certain high voltage urban-center lines and related facilities that were found to serve primarily distribution functions and (2) certain networked 161 kV facilities located in substations determined to primarily serve distribution functions.

To align the accounting for its facilities with the transmission system subject to MISO functional control under the TO Agreement, MidAmerican made two accounting filings with the Commission. First, MidAmerican requested and received authorization from the Commission to reclassify certain high voltage urban-center facilities to transmission in its books of accounts in Docket No. AC10-9. Second, MidAmerican requested and received authorization from the Commission to reclassify certain non-radial 161 kV substation facilities to transmission in its books of accounts in Docket No. AC10-142. The result of these two activities is that the costs of MidAmerican’s non-radial 100 kV and above facilities are now reflected in MidAmerican’s transmission rates. If the 2011 Delineation is approved by the Commission, the High Voltage Distribution Facilities will also be delineated as transmission under the seven-factor test.

#### **IV. MIDAMERICAN RECLASSIFICATION PROPOSAL**

On June 15, 2011, MidAmerican filed an Application for Redelineation of Local Distribution Facilities to Transmission and Reorganization with the Iowa Utilities Board. On June 16, 2011, MidAmerican filed a Petition with the Illinois Commerce Commission asking for approval of the 2011 Delineation and a recommendation to FERC that the 2011 Delineation be approved. With both filings, MidAmerican submitted the testimony of Dehn A. Stevens, Manager – Manager Transmission Services, who sponsored the 2011 Technical Report, which was prepared under his supervision and direction. The 2011 Technical Report describes the characteristics of the MidAmerican transmission and distribution systems, applies the seven-factor test to delineate the jurisdictional line between transmission facilities and distribution facilities and analyzes the MidAmerican electrical system in relation to the seven-factor test.

### **A. Background**

MidAmerican determined it would be appropriate to conduct a new delineation study to determine the impact of events occurring since preparation of the 1998 Delineation on the flow of power across MidAmerican's facilities. There have been a number of significant changes which MidAmerican felt might affect the use of its transmission system. These include:

- The integration of MidAmerican's transmission and generation systems with MISO;
- The development of substantial additional electric generation within the MidAmerican footprint and the neighboring ITC Midwest LLC ("ITC Midwest") footprint, including wind facilities, at locations where generation has not previously been located, such as in rural portions of the State of Iowa;
- Significant changes in transmission system topology including several new 345 kV and 161 kV lines as well as a significant number of new 345-161 kV and 161-69 kV transformer substations; and
- MidAmerican's former balancing authority area being integrated into the multi-state MISO balancing authority area resulting in a significant shift away from the pre-MISO block energy scheduling paradigm to a dispatch algorithm which solves every 5 minutes to balance load, losses, generation and net interchange across the entire 13-state footprint of MISO.

In addition to these physical changes, several regulatory and business changes suggested a need to reconsider the 1998 Delineation:

- The migration of most former Mid-Continent Area Power Pool ("MAPP") members into MISO and some of the former MAPP members into the Southwest Power Pool, Inc., which has resulted in the termination of the MAPP regional transmission tariff – rendering meaningless the MAPP delineation guidelines which were central to the approach used in the 1998 Delineation;
- The classification as transmission of 69 kV and 34.5 kV facilities by neighboring Interstate Power and Light Company, which sold its electrical transmission facilities to ITC Midwest;
- The decision of FERC in *Pella* finding the city of Pella, Iowa's 69 kV facilities to be non-integrated transmission under the seven-factor test; and

- Testimony filed in *Clipper* finding local area looped 69 kV facilities to serve transmission functions, which, as a signatory to a settlement agreement, MidAmerican has agreed to reflect appropriate classification of the subject facilities.

Mr. Stevens testifies that these events have caused changes to the utilization of MidAmerican's transmission and local distribution systems such that (1) non-radial 69 kV distribution facilities and (2) non-radial 161 kV facilities connecting to such 69 kV facilities should from re-classified from local distribution to transmission. In addition, he found that the previous determinations that non-radial 345 kV and 161 kV facilities perform a transmission function and that radial facilities, regardless of voltage, perform a distribution function remain correct determinations.

### **B. *Pella and Clipper***

Two Commission proceedings involving portions of the MidAmerican 69 kV system and initiated at about the time MidAmerican integrated with MISO also prompted MidAmerican to reconsider the 1998 Delineation.

In *Clipper*, the classification of 69 kV facilities as transmission came into issue in the context of an unexecuted large generator interconnection agreement ("LGIA"). The LGIA provided for a distribution classification of certain facilities required to be installed as the result of Clipper's proposal to interconnect a wind farm to the MidAmerican system. As a result of this classification, the generator was responsible to pay for upgrades as directly assigned facilities instead of receiving the revenue credit and refund benefits accruing from a classification as Network Upgrades to the MidAmerican transmission system. The matter was resolved by settlement, but prior to the filing of the settlement, both a Commission Staff witness and a witness for Clipper Wind Development Company testified that the 69 kV facilities at issue were integrated transmission facilities.<sup>7</sup> In Article I of the *Clipper* Settlement Agreement,<sup>8</sup> the parties agree that the subject facilities should be delineated as integrated transmission for all purposes including ratemaking, jurisdiction, and accounting. In addition, MidAmerican is obligated by Section 1.3 of the *Clipper* Settlement Agreement to delineate as transmission the 69 kV facilities at issue in that proceeding.

In *Pella*, the city of Pella, Iowa filed a Petition for Declaratory Order and Complaint against MidAmerican and MISO asking the Commission to reclassify Pella's non-radial 69 kV facilities as transmission facilities eligible for inclusion under the MISO Tariff and to order MidAmerican and MISO to provide appropriate compensation for use of these facilities as part of the MISO transmission system. On February 2, 2011, the Commission granted in part and denied in part

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<sup>7</sup> Prepared Direct and Answering Testimony of Commission Staff Witness Antonio Maceo and Answering Testimony of Whitfield A. Russell on behalf of Clipper Windpower Development Company, LLC.

<sup>8</sup> 138 FERC ¶ 61,028 (2012); Letter Order issued April 19, 2012.

Pella's Complaint and Petition for Declaratory Order.<sup>9</sup> The Commission determined that Pella's 69 kV facilities constituted transmission facilities but in the same order the Commission found that the Pella facilities were not integrated with the MISO transmission system. On January 30, 2012, the parties filed a Settlement Agreement which calls for the filing of the 2011 Delineation with the Commission and also requires MidAmerican to take certain steps that will result in inclusion of the Pella 69 kV non-radial facilities and the MidAmerican 69 kV non-radial facilities as part of the MISO transmission system. In addition, at Section 3.2, the Settlement Agreement requires MidAmerican and the city of Pella, Iowa to request expedited consideration of the 2011 Delineation by the Commission.

These proceedings, including the positions taken by the parties regarding the 69 kV facilities, in part caused MidAmerican to consider that certain portions of its 69 kV system serve transmission functions. Accordingly, in 2011 MidAmerican conducted a new study of its electrical system and its classification between transmission and distribution.

### **C. Overview of 2011 Technical Report**

The 2011 Technical Report assesses the impact of these changes on MidAmerican's electric system. It applies each of the seven factors of the Commission's test to MidAmerican's transmission and distribution plant, using a variety of types of analytical methods, including power flow analysis, estimates of distances between facilities, and current facility utilization. The facilities studied were those with voltages of 345 kV, 161 kV, 69 kV and 34.5 kV and below.

There were many consistent results in the 1998 and 2011 analyses. Specifically, both analyses showed the same results for certain facilities:

1. All non-radial 345 kV and 161 kV lines perform a transmission function and should be categorized as transmission facilities;
2. 345 kV and 161 kV substations which connect 345 kV and 161 kV transmission lines together perform a transmission function and should be categorized in whole or in part as transmission facilities;
3. The 161 kV portion of load-serving substations should be classified as transmission facilities; and
4. Radial 345 kV and 161 kV lines, as well as radial 69 kV lines and all of the 34.5 kV lines should remain categorized as distribution facilities.

There is one group of key differences, which is related to 69 kV facilities. Since the 1998 Delineation, MidAmerican, as well as other utilities interconnected with MidAmerican, have

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<sup>9</sup> 134 FERC ¶ 61,081 (2011).



participated in the MISO real time and day ahead energy markets. As a result, the generation across the market footprint is used to efficiently serve the load in the market footprint and the MidAmerican system has seen increased transfers in support of the market. The result of this change is that MidAmerican networked facilities, including those with voltages at 69 kV and above, serve a broader area than previously. The Technical Report concludes that

1. All non-radial 69 kV lines should be categorized as transmission facilities.
2. Certain associated 69 kV substations should also be categorized as transmission.

The result of the delineation of these 69 kV facilities to transmission accounts is that all MidAmerican non-radial 345 kV, 161 kV and 69 kV facilities have been determined to perform transmission functions.

#### **D. Details of Classification of Substation Facilities**

To determine which substation facilities should be classified as transmission, MidAmerican used an approach that is consistent with the one used to prepare the 1998 Delineation. This approach classifies substations consistent with the facilities connecting to each substation. When both transmission and distribution lines connect to a substation, it is considered a combination substation and a specific methodology was used to allocate the investment between transmission and distribution accounts. Combination substations where all components are transmission (i.e., those with 69 kV and 161 kV facilities only) remain or are reclassified as transmission. A “three or more” test is used to classify portions of 69 kV substations as transmission when at least three 69 kV or greater non-radial lines or at least two non-radial 69 kV lines and one 69 kV capacitor connect to the substation. 69 kV substations which do not pass the “three or more” test (i.e., the substation has only two 69 kV transmission line connections) remain classified as 100% distribution. Common facilities, such as substation land, rock, fence and control buildings are allocated between transmission and distribution by pro-rating based on the original cost of the transmission and distribution facilities located in the substation. The reclassification will cause the additional non-radial 161 kV and 69 kV facilities to be accounted for and ultimately reflected in FERC-jurisdictional transmission rates.

#### **E. Further Use of Redelineation Report.**

Should the Commission approved the 2011 Delineation, MidAmerican expects to execute an Agency Agreement for open Access Transmission Service Offered by the Midwest ISO for Non-transferred Transmission Facilities (Appendix G of the MISO Transmission Owners Agreement) that will subject its networked 69 kV facilities to MISO functional control. MidAmerican also expects to take such other actions required of it as identified in Article III of the *Pella* Settlement Agreement in order to effectuate the inclusion of non-radial 69 kV facilities in transmission rates and in revenue sharing agreements with municipal utilities owning such facilities.

### III. CONTENTS OF FILING

This Filing consists of the following:

- This Letter of Transmittal;
- MidAmerican's Technical Report for Delineation of Transmission and Local Distribution Facilities issued June 7, 2011 (Attachment A);
- Order Recommending Delineation and Terminating Docket issued by the Iowa Utilities Board on September 12, 2011 (Attachment B); and
- A Form of Notice suitable for publication in the *Federal Register* (Attachment C).

### V. SERVICE AND CORRESPONDENCE

MidAmerican has provided a copy of this filing to the Iowa Utilities Board, the Illinois Commerce Commission, the South Dakota Public Utilities Commission and the Iowa Office of Consumer Advocate. All communications regarding this filing should be directed to:

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Sincerely,

/s/ Suzan M. Stewart

Suzan M. Stewart  
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cc: Iowa Utilities Board  
Iowa Office of Consumer Advocate  
Illinois Commerce Commission  
South Dakota Public Utilities Commission

MIDAMERICAN ENERGY COMPANY

Technical Report for  
Delineation of Transmission  
and Local Distribution  
Facilities

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Issued on June 7, 2011

## Introduction

In its Order No. 888, in the context of determining how to classify electrical facilities as distribution and transmission for rate-making purposes, the Federal Energy Regulatory Commission (“FERC”) recognized that a “bright line” between state and federal rate-making jurisdiction is difficult to draw.<sup>1</sup> To provide a consistent approach, it adopted a “seven-factor test”<sup>2</sup> with seven indicators of local distribution that are to be used to functionally delineate state and federal jurisdictional boundaries. FERC defers to determinations of state commissions applying the seven-factor test to classify transmission and local distribution facilities, provided the following seven indicators making up the seven-factor test are applied:<sup>3</sup>

1. Local distribution facilities are normally in close proximity to retail customers.
2. Local distribution facilities are primarily radial in character.
3. Power flows into local distribution systems; it rarely, if ever, flows out.
4. When power enters a local distribution system, it is not reconsigned or transported on to some other market.
5. Power entering a local distribution system is consumed in a comparatively restricted geographical area.
6. Meters are based at the transmission/local distribution interface to measure flows into the local distribution system.
7. Local distribution systems will be of reduced voltage.<sup>4</sup>

In 1998, MidAmerican prepared a Technical Report for Delineation of Transmission and Local Distribution Facilities using the seven factor test to delineate MidAmerican facilities into transmission and local distribution (“1998 Report”). Upon application of the test, all facilities at 69 kV and below were determined to have local distribution characteristics, along with several radial 161 kV lines, several relatively short urban-center 161 kV lines and two urban-center 345-161 kV transformers. The delineation of substations was determined from the classification of line and transformer facilities connecting to each substation. All other MidAmerican facilities above 100 kV were determined to not have local distribution characteristics and therefore classified as transmission. Both the Iowa Utilities Board and the Illinois Commerce Commission recommended MidAmerican’s delineation to FERC. In turn, FERC deferred to the action of the state commissions.<sup>5</sup>

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<sup>1</sup> *Promoting Wholesale Competition through Open Access Non-discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities*, Order No. 888, 75 FERC ¶ 61,080 (1996), pp. 435-436

<sup>2</sup> *Id.* at pp. 401-402

<sup>3</sup> *Id.* at pp. 437-438

<sup>4</sup> *Id.* at pp. 401-402

<sup>5</sup> *Re: MidAmerican Energy Company*, Docket No. SPU-98-12, Order Recommending Delineation of Transmission and Local Distribution Facilities, 193 P.U.R.4th 555, 1999 WL 632816 (Iowa U.B. 1999); *MidAmerican Energy Company*,

In approving MidAmerican's delineation, both the state commissions and FERC recognized that the delineation was subject to change. FERC stated that if any facilities, regardless of their original nominal classification, proved to be used to provide transmission service to wholesale purchasers, they could become reclassified. FERC also noted its deference would not affect a separate determination of what facilities must be under the operational control of a regional transmission organization. The Iowa Utilities Board also retained jurisdiction to recommend different delineations if there were changes in facts and circumstances.

On September 1, 2009, MidAmerican integrated its electric transmission system with the Midwest Independent Transmission System Operator, Inc. ("Midwest ISO"). The transmission system committed to the operation of the Midwest ISO consists of all networked transmission facilities above 100 kV and all networked transformers where the two highest voltages exceed 100 kV.<sup>6</sup> As a result of integration, MidAmerican began the process of reclassifying, for accounting purposes only, its facilities with voltages at or exceeding the Midwest ISO threshold. In 2009, in FERC Docket AC10-9, FERC approved the reclassification of the non-radial urban-center 161 kV lines and related substation facilities from distribution to transmission. In 2010, in FERC Docket AC10-142, FERC approved the reclassification of a number of 161 kV substations as combination transmission and local distribution substations, with the 161 kV portions of those substations being reclassified as transmission. The result of both of these filings is to align the accounting classification of the 161 kV facilities classified as transmission with the functional control classifications of the Midwest ISO.

Considerable changes have occurred in the operation of the MidAmerican electrical system and in the industry since 1998, including such changes as:

1. The development of regional transmission organizations.

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Docket No. 98-0816, 1999 WL 33915318 (Ill.C.C. 1999); *MidAmerican Energy Company*, Docket Nos. ER99-3887-000 and EL99-92-000, Order Approving Classifications, 90 FERC ¶ 61,105 (2000).

<sup>6</sup> Section I.P of the Agreement of Transmission Facilities Owners to Organize the Midwest Independent Transmission System Operator, Inc., a Delaware Non-Stock corporation; Midwest ISO FERC Electric Tariff First Revised Service Agreement No. 1

2. Substantial changes in generation affecting the MidAmerican transmission footprint including the construction of a number of new natural gas fired generating plants (including MidAmerican Greater Des Moines Energy Center), the addition of several coal plants (including MidAmerican's Walter Scott Unit No. 4), the construction of many new wind farms (with most at locations which have not previously had any local generation) and the construction of substantial new transmission lines.
3. MidAmerican's integration into the Midwest ISO, resulting in the former MidAmerican balancing authority area being integrated into the multi-state Midwest ISO balancing authority area.
4. The migration of many portions of the Mid-Continent Power Pool ("MAPP") into the Midwest ISO, the migration of the Nebraska entities to the Southwest Power Pool, and the termination of the MAPP regional transmission tariff.

This report applies the seven indicators to review the classification of 69 kV and 34.5 kV facilities considering current conditions. Since the 1998 Report, MidAmerican, as well as other utilities and municipals interconnected with MidAmerican, have participated in the Midwest ISO real time and day ahead energy markets. As a result, the generation across the market footprint is used to efficiently serve the load in the market footprint. As a result, the MidAmerican system sees increased transfers in support of the market. As a result, MidAmerican networked facilities at 69 kV and above serve a broader area.

### **System Description**

At the end of 2010, MidAmerican served a total of 726,872 electric retail customers with 638,091 of those customers located in Iowa, 84,336 in Illinois and 4,445 in South Dakota. MidAmerican owns and operates electric system facilities at nominal voltage of 345 kV, 161 kV, 69 kV, 34.5 kV, 13.8 kV, 13.2 kV and 12.47 kV and below. In some cases in this report, facilities at 13.8 kV, 13.2 kV, and 12.47 kV are collectively referred to as "13 kV facilities". There are approximately 1,180 miles of 345 kV lines, 1,439 miles of 161 kV lines, 1,904 miles of 69 kV lines and 86 miles of 34.5 kV lines comprising the MidAmerican electrical system. MidAmerican's facilities are located predominately in the state of Iowa. In Iowa, MidAmerican has approximately 1,093 miles of 345 kV lines; 1,316 miles of 161 kV lines; 1,758 miles of 69 kV lines; and 86 miles of 34.5 kV lines. In Illinois, MidAmerican has approximately 63 miles of

345 kV lines, 123 miles of 161 kV lines, and 129 miles of 69 kV lines. In South Dakota, MidAmerican has approximately 17 miles of 69 kV lines. In Missouri, MidAmerican has approximately 24 miles of 345 kV lines.

MidAmerican has 345-161 kV substations, 161 kV-lower voltage substations, 69 kV-lower voltage substations, as well of a number of substations with other voltages.

### **Seven Factor Test Analysis**

This analysis is of MidAmerican's 345 kV, 161 kV, 69 kV and 34.5 kV and below facilities. The seven factors are used in determining whether these facilities are considered local distribution versus transmission.

#### **Factor 1: Local distribution facilities are normally in close proximity to retail customers.**

MidAmerican uses facilities with a single phase rating of 7,200 volts, 7,620 volts or 7,967 volts and a three phase rating of 12,470, 13,200 and 13,800 volts nominal to serve retail customer load. Also, there are small pockets of 2,400 volt (single phase) and 4,160 volt (three phase) nominal rated facilities which serve some retail customer load. These primary facilities connect to transformers which supply utilization voltage (120-240 volt, 120-208 volt or 277-480 volt) to the customers. The low side of these transformers feed cables which typically run from the street to the customer's switchgear or breaker panel. These cables are often 50 feet to 200 feet long with an estimated average length of approximately 120 feet. This system layout means that these facilities are on average within an estimated 120 feet of the retail customer. Since these facilities directly serve retail customers through service transformers, the primary facilities from 13.8 kV and below are local distribution facilities and are in close proximity to the retail customer.

There are relatively few 34.5 kV facilities on the MidAmerican system: 86 miles of 34.5 kV lines between only sixteen substations with 161 to 69 to 34.5 kV, 69 to 34.5 kV, 34.5 to 13 kV, or 34.5 to 4 kV transformations. (This is excluding wind farms where 34.5 kV collector systems are used between wind turbine service transformers and step-up transformers to transmission voltages. These collector circuits are considered generation facilities.) The 34.5 kV facilities make up a small portion of the MidAmerican system as a result of upgrades of 34.5 kV facilities to higher voltages or retirements due to the need to meet new system conditions such as increasing load while meeting system planning criteria. The remaining 34.5 kV facilities are in rural areas so the 34.5 kV lines are relatively long. Appendix 1, Page 1 shows that the average length of 34.5 kV lines is approximately 6.6 miles. A 34.5 kV line between two substations that have 34.5-13 kV transformation will have sections (between two poles) that are electrically very close to retail customers near the substation, while other sections will be a significant distance

from the substation/retail customers. The estimated average electrical distance between the 34.5 kV line sections in this case is 1.7 miles. If the 34.5 kV line connects to one substation that has a 34.5-13 kV transformation and the other end to a 34.5 kV switching station with no 34.5-13 kV transformation, the estimated average electrical distance is 3.3 miles.

The 69 kV system consists of substations with 161-69 kV transformation, 69 kV lines between such substations and 69-13 kV substations. There are approximately 1,375 miles of networked 69 kV lines. In this report, the term “networked” refers to lines that are ultimately connected to substations or other lines in such a way that power at any given time can flow in different directions on the lines depending on load levels, system conditions and generation dispatch. Appendix 2, Pages 1-7 shows that the average line length of networked 69 kV between substations containing 69 kV facilities is approximately 4.9 miles; therefore, the estimated average electrical distance from the 69 kV facilities and the retail customer is 1.2 to 2.4 miles.

The 161 kV system consists of substations with 345-161 kV transformation, 161 kV lines between such substations and 161-13 kV substations. There are approximately 1,411 miles of networked 161 kV lines. Appendix 2, Pages 8-11 shows that the average line length of networked 161 kV between substations containing 161 kV facilities is approximately 8.7 miles; therefore, the estimated average electrical distance from the 161 kV facilities and the retail customer is 2.2 to 4.4 miles.

The 345 kV system consists of 345 kV lines and substations. There are approximately 1,173 miles of networked 345 kV lines. Appendix 2, Page 12 shows that the average line length of networked 345 kV between substations containing 345 kV facilities is approximately 27.9 miles; therefore, the estimated average electrical distance from the 345 kV facilities and the retail customer is 7 to 14 miles.



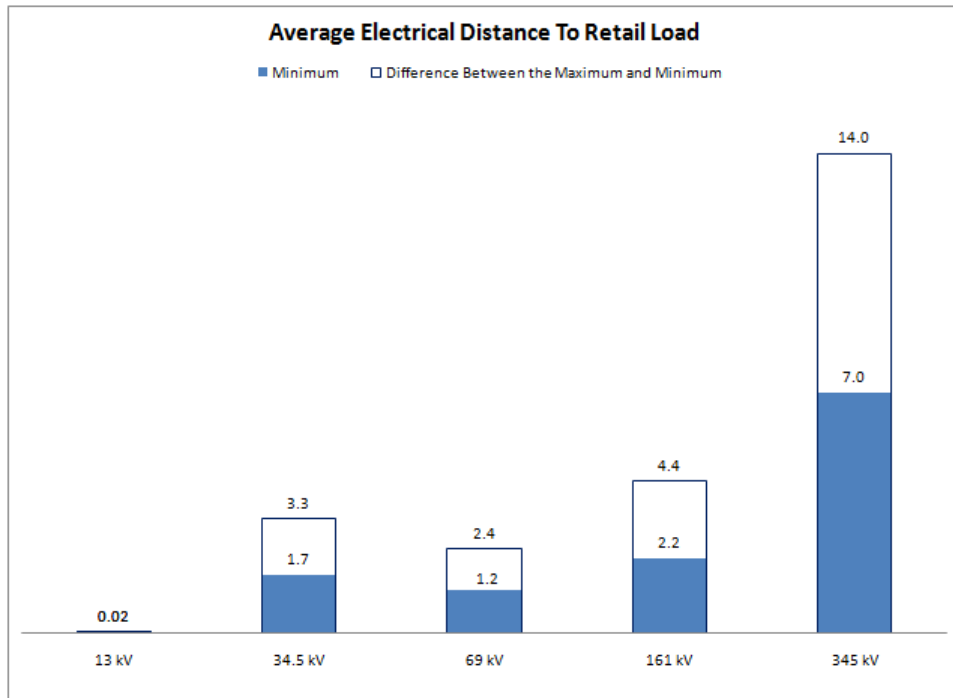


Figure 1: Average Electrical Distance to Retail Load

Figure 1 shows the average electrical distances from the 13 kV, 34.5 kV, 69 kV, 161 kV and 345 kV to retail load. The estimated average electrical distances of 1.7 to 3.3 miles for 34.5 kV, 1.2 to 2.4 miles for 69 kV, 2.2 to 4.4 miles for 161 kV and 7 to 14 miles for 345 kV are substantially greater than the estimated average distance of 120 feet from the retail customer to the primary local distribution facility at 13 kV and below. As compared to the 13 kV and below, the 34.5 kV and above facilities are not in close proximity to the retail customers.

If this factor alone is considered, MidAmerican 34.5 kV and above facilities would be categorized as transmission while 13 kV and below facilities would be categorized as local distribution.

**Factor 2: Local distribution facilities are primarily radial in character.**

MidAmerican operates approximately 26,650 miles of single phase primary lines and 9,350 miles of three phase primary lines at 13 kV and below. It is estimated that 99 percent of these lines are operated radially, with only a few facilities in large downtown areas operated networked. In this context, the term “radial” refers to lines that are ultimately connected to a single source of power such that power flows in one direction from the source to the load. Given that nearly all 13 kV and below facilities are operated radially, MidAmerican 13 kV and below facilities are considered to be operated radially in this report and therefore, considered local distribution facilities.

MidAmerican has approximately 86 miles (all) of its 34.5 kV lines, 529 miles of 69 kV lines, 29 miles of 161 kV lines and 7 miles of 345 kV lines operated radially (see Appendix 1) and are used to support 345 kV, 161 kV, 69 kV or 34.5 kV to 13 kV or lower local distribution substations. These radial 34.5 kV and above lines feed local distribution substations that serve retail customer load and do not support the bulk electric system. If only Factor 2 is considered, they would be categorized as local distribution facilities.

The approximately 1,375 miles of MidAmerican's networked 69 kV lines may serve 69-13 kV substations and may also support the bulk electric system as they provide parallel paths for power flow across the system. The approximately 1,411 miles and 1,173 miles of MidAmerican's networked 161 kV and 345 kV lines serve 345-161 kV, 161-69 kV and 161-13 kV substations and provide paths for power to flow across the system. These facilities are not radial in character and if only Factor 2 is considered, they would be categorized as transmission.

If Factor 2 alone is considered, all MidAmerican 69 kV and above networked facilities would be categorized as transmission, and all 345 kV, 161 kV and 69 kV radial facilities and all 34.5 kV and below facilities would be categorized as local distribution.

### **Factor 3: Power flows into local distribution systems; it rarely, if ever, flows out.**

In the 1998 Report analysis, the MidAmerican 69 kV system was tested against this factor by monitoring flows on MidAmerican's 161-69 kV transformers under system normal conditions, and single contingency conditions on the greater than 100 kV system. In this study, a similar test is applied given considerable changes in conditions on the MidAmerican system and in the industry as noted in the introduction.

A transmission line's participation in the flows from an outaged transmission line is measured by the incremental change in the non-outaged facility's flow. Based on the principle of superposition, incremental changes in the power flow on a transmission line due to an outage on another transmission line reflect power flowing across the transmission system.

To perform this test, a list of transmission system contingencies was prepared, which included all lines and transformers<sup>7</sup> operated at 34.5 kV and above in the MidAmerican area (includes lines operated at 34.5 kV and above owned by Cedar Falls and Atlantic), the ITC Midwest area (includes lines operated at 34.5 kV and above owned by Central Iowa Power Cooperative), the Muscatine Power & Water area, and the Iowa zone of the WAPA area (includes lines operated at 34.5 kV and above owned by Corn Belt Power Cooperative). Power flow software was then used to identify the outage distribution factor for each MidAmerican line operated at 34.5 kV or

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<sup>7</sup> A transformer was included in the contingency analysis only if it contained two windings operated at voltages greater than 34.5 kV.

higher during each outage of a line or transformer included in this contingency set. The outage distribution factor is defined as the percentage of flow from the outaged facility that appears as additional flow on the monitored facility during the contingency condition. For example if a 161 kV line was carrying 200 MW in the base case of all transmission lines in service and the 69 kV facility in question experiences an increase in loading of 10 MW for the outage of that 161 kV line, the outage distribution factor of the 69 kV line for this outage would be  $10/200$ , or 5%. The outage distribution factor for a given line will vary based on its configuration (radial or networked) and its electrical proximity to the outaged element.

In this analysis, a total of 545 MidAmerican lines operated at 34.5 kV and above were monitored, and a total of 2,247 contingencies were evaluated. Appendix 3 shows the maximum outage distribution factor for each networked MidAmerican line operated at 69 kV and higher (note there are no networked MidAmerican lines operated at 34.5 kV). Appendix 4 shows the maximum outage distribution factor for each radial MidAmerican line operated at 34.5 kV and higher. Table 1 provides a summary of the results.

Table 1. Summary of Outage Distribution Factors on MidAmerican high voltage lines

Description	Average Outage Distribution Factor
MidAmerican Networked 69 kV lines (263 lines)	55.04%
MidAmerican Networked 161 kV lines (154 lines)	66.43%
MidAmerican Networked 345 kV lines (39 lines)	61.49%
MidAmerican Radial 34.5 kV lines (10 lines)	0%
MidAmerican Radial 69 kV lines (72 lines)	0%
MidAmerican Radial 161 kV lines (6 lines)	0%
MidAmerican Radial 345 kV lines (1 line)	0%

The networked facilities operated at 69 kV and higher are shown to play a significant role in transporting power during contingency conditions, while the 69 kV and above facilities operated radially and the 34.5 kV and below (operated radially) play no role in transporting power during contingency conditions. Table 1 supports the conclusion that the networked facilities operated at 69 kV and higher perform a transmission function while the 69 kV and above operated radially and 34.5 kV and below lines perform only a local distribution function. During transmission outages, the flow from the outaged element is diverted to other transmission facilities and the original power transport across the system is maintained. A local distribution facility is not impacted by outages on transmission facilities. Figure 2 graphically displays the average maximum outage distribution factor for MidAmerican networked facilities by voltage range.

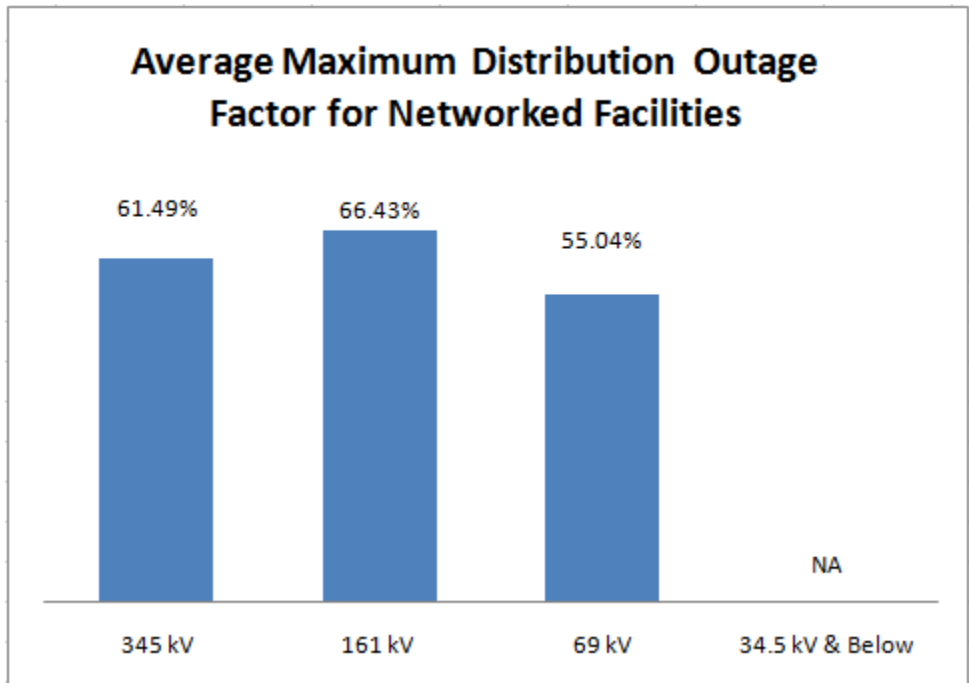


Figure 2: Average Maximum Outage Distribution Factor by Voltage Level for Networked Facilities

If this factor alone is considered, the MidAmerican 345 kV, 161 kV, and 69 kV networked facilities would be categorized as transmission and the 345 kV, 161 kV, 69 kV and 34.5 kV and below facilities operated radially would be categorized as local distribution.

**Factor 4: When power enters a local distribution system, it is not reconsigned or transported on to some other market.**

Since the 1998 Report, MidAmerican, as well as other utilities and municipals interconnected with MidAmerican, have joined the Midwest ISO. This allows load and generation from these entities to participate with other loads and generation in the multi-state market of the Midwest ISO. As a result of this market interaction, the MidAmerican system sees increased transfers as it supports market flow.

In Factor 3 it was demonstrated that flows on MidAmerican's networked facilities participate in the transportation of power. This fact can be further evaluated by considering flows on MidAmerican's tie lines. A review of the 2010 series of Midwest Reliability Organization ("MRO") power flow models shows a total of 116 tie-lines from the MidAmerican area to adjacent areas, of which 70 are tie-lines operated at 69 kV. Of the 70 tie-lines operated at 69 kV, 39 are networked 69 kV lines owned or partially owned by MidAmerican. The remaining 69 kV tie-lines are either owned by others or are operated radially. Of the 46 tie-lines operated at voltages greater than or equal to 100 kV, 31 are networked facilities owned or partially owned by MidAmerican; the remaining such tie-lines are owned by others. Of the 31 MidAmerican tie-lines operated at voltages greater than 100 kV, 19 are operated at 161 kV and 12 are operated at 345 kV.

When considering power transfers between markets and across the MidAmerican area in a power flow program, the sum of the tie-line flows will tend to net out such power transfers between markets. For example, if there is a 1,000 MW transfer from the west to the east across the MidAmerican area, the tie-line flow into the MidAmerican area in the west will be on the order of +1,000 MW and the tie-line flow into the MidAmerican area in the east will be on the order of -1,000 MW. When the tie-line flows into the MidAmerican system are summed up and therefore netted out, then the power transfer into the MidAmerican area is estimated as being on the order of 0 MW, which does not accurately capture the power transfers between markets. The sum of tie-line flow absolute values will tend to overestimate power transfers between markets and across the MidAmerican area. Using the previous example at a 1,000 MW transfer from the west to the east across the MidAmerican area, power flowing into the MidAmerican system on tie-lines in the west has an absolute value of +1,000 MW. The power flowing into of the MidAmerican system on tie-lines in the east has an absolute value on the order of +1,000 MW so the sum of the absolute value of flows on the tie-lines is on the order of +2,000. Therefore the average of the net and the absolute values is more appropriate when considering power transfers between markets and across the MidAmerican area

Appendix 5 provides the flows on the 39 MidAmerican networked tie-lines operated at 69 kV, 19 MidAmerican networked tie-lines operated at 161 kV and 12 MidAmerican networked tie-lines operated at 345 kV in four power flow models of the 2011 seasons (spring light load, summer peak, summer off-peak and winter peak) representing a range of load levels. Tables 2-4 summarize the results in Appendix 5 for net tie-line power flow and absolute tie-line power flow for tie lines operated at 69 kV, 161 kV and 345 kV respectively. The last column of Tables 2-4 provides the averages of the net and absolute values.

Table 2. Summary of Seasonal Flows on MidAmerican 69 kV tie lines

<b>Model</b>	<b>Total Interchange on 39 MidAmerican Networked Tie Lines Operated at 69 kV</b>		
	<b>Net (MW)</b>	<b>Absolute Value (MW)</b>	<b>Average of Net and Absolute Value (MW)</b>
2011 Spring Light Load	63.3	280.1	171.7
2011 Summer Peak	-61.0	497.0	218.0
2011 Summer off-peak	15.8	370.4	193.1
2011 Winter peak	16.2	487.8	252.0

Table 2 illustrates that as an aggregate group, the 69 kV facilities play an important role in transporting power to other markets. There is substantial flow on the 69 kV networked tie lines, supporting the designation of the 69 kV networked facilities as transmission.

Table 3. Summary of Seasonal Flows on MidAmerican 161 kV tie lines

<b>Model</b>	<b>Total Interchange on 19 MidAmerican Networked Tie Lines Operated at 161 kV</b>		
	<b>Net (MW)</b>	<b>Absolute Value (MW)</b>	<b>Average of Net and Absolute Value (MW)</b>
2011 Spring Light Load	187.3	471.9	329.6
2011 Summer Peak	-60.2	937.6	438.7
2011 Summer off-peak	45.8	782.8	414.3
2011 Winter peak	-88.5	732.5	322.0

Table 3 illustrates that as an aggregate group, the 161 kV facilities play an important role in transporting power to other markets. There is substantial flow on the 161 kV networked tie lines, supporting the designation of the 161 kV networked facilities as transmission.

Table 4. Summary of Seasonal Flows on MidAmerican 345 kV tie lines

Model	Total Interchange on 12 MidAmerican Networked Tie Lines Operated at 345 kV		
	Net (MW)	Absolute Value (MW)	Average of Net and Absolute Value (MW)
2011 Spring Light Load	-499.2	1713.6	607.2
2011 Summer Peak	21.6	2800.6	1411.1
2011 Summer off-peak	-263.3	2642.9	1189.8
2011 Winter peak	-174.4	2786.6	1306.1

Table 4 illustrates that as an aggregate group, the 345 kV facilities play an important role in transporting power to other markets. There is substantial flow on the 345 kV networked tie lines, supporting the designation of the 345 kV networked facilities as transmission.

If this factor alone is considered, the MidAmerican 69 kV and above networked facilities would be categorized as transmission, while the 69 kV and above facilities operated radially and the 34.5 kV and below facilities would be categorized as local distribution.

**Factor 5: Power entering a local distribution system is consumed in a comparatively restricted geographical area.**

Factors 3 and 4 support the contention that power entering the networked portion of the MidAmerican 69 kV and above system is not wholly consumed in a comparatively restricted geographical area. During contingencies some of the power originally flowing on higher voltage facilities is transported across the 69 kV and above network and back to the higher voltage system (Factor 3), while some of it is transported to other systems (Factor 4). As a parallel path to higher voltage lines, the MidAmerican networked 69 kV and above system provides an alternate route to transmit power, and these facilities are not utilized solely for the consumption of power by end-users in comparatively restricted geographical areas. As a system which transports power to other systems, the MidAmerican networked 69 kV and above facilities are not solely for the consumption of power by end users in comparatively restricted geographical areas.

If this factor alone is considered, the MidAmerican 69 kV and above networked facilities would be categorized as transmission while the 69 kV and above facilities operated radially and the 34.5 kV and below facilities would be categorized as local distribution.

**Factor 6: Meters are based at the transmission/local distribution interface to measure flows into the local distribution system**

Supervisory Control and Data Acquisition (“SCADA”) equipment has been installed throughout the MidAmerican system at various system voltage levels and locations to monitor electric system power flows on a near real-time basis. Other parameters are collected, including reactive power and voltage quantities. The SCADA information is transmitted from various locations and collected at one location, MidAmerican’s Des Moines Control Center. SCADA quantities are used to monitor power flows into 34.5 kV and below transformers since 161 kV and 69 kV line flows are measured at the substation busses that feed the transformers that step down to 34.5 kV and below. Revenue accuracy metering is located at ownership boundaries with wholesale customers and with other interconnected utilities.

If this factor alone is considered, the MidAmerican 69 kV and above facilities would be categorized as transmission while the 34.5 kV and below facilities would be categorized as local distribution.

### **Factor 7: Local distribution systems will be of reduced voltage**

Most of the facilities 69 kV and above are networked. Operation of a networked system is different from the operation of a radial system. In a networked system, it is generally true that facilities continue to be energized when a breaker or switch opens; while in a radial system, it is generally true that facilities are de-energized when a breaker or switch opens. Therefore, more time is spent restoring service to customers served from radial facilities than networked facilities. In this manner, radial 345 kV, 161 kV and 69 kV facilities operate similarly to 13 kV and below facilities. The operation of the networked 345 kV, 161 kV and 69 kV facilities differs from the operation of radial 345 kV, 161 kV and 69 kV and 34.5 kV and below facilities. Further, the 34.5 kV and below facilities are a transformation away from 69 kV and higher voltage facilities.

Therefore, 345 kV, 161 kV and 69 kV radial facilities are operated differently and 34.5 kV facilities are of reduced voltage and are operated differently as compared to networked 69 kV and higher voltage facilities. If this factor alone is considered, the MidAmerican networked 69 kV and above facilities would be categorized as transmission while the 345 kV, 161 kV, 69 kV and 34.5 kV (all) and below facilities that are operated radially would be categorized as local distribution.

### **7-Factor Test Conclusions**

The above seven factors are used for determining whether MidAmerican’s 345 kV, 161 kV, 69 kV, 34.5 kV, 13 kV and below facilities should be considered local distribution or transmission. Each factor does not necessarily have equal weight when determining which facilities are local distribution and transmission. However, if the factors predominately indicate that sections of MidAmerican’s system are local distribution (or transmission), then these sections can logically



be concluded to be local distribution (or transmission). Table 5 shows a summary of the results of the seven factor test.

Table 5: Summary of Seven Factor Test

<b>Voltage</b>	<b>Factor 1</b>	<b>Factor 2</b>	<b>Factor 3</b>	<b>Factor 4</b>	<b>Factor 5</b>	<b>Factor 6</b>	<b>Factor 7</b>
13 kV & Below	D	D	D	D	D	D	D
34.5 kV	T	D	D	D	D	D	D
69 kV Radial	T	D	D	D	D	T	D
69 kV Networked	T	T	T	T	T	T	T
161 kV Radial	T	D	D	D	D	T	D
161 kV Networked	T	T	T	T	T	T	T
345 kV Radial	T	D	D	D	D	T	D
345 kV Networked	T	T	T	T	T	T	T

It is concluded that MidAmerican’s 69 kV and above networked facilities should be categorized as transmission while 69 kV and above facilities operated radially and 34.5 kV and below facilities should be categorized as local distribution.

### **Accounting Considerations**

The effect of MidAmerican’s two accounting reclassifications noted above (FERC Docket Nos. AC10-9 and AC10-142) is that the plant accounts associated with all of MidAmerican’s non-radial 161 kV and 345 kV lines (i.e., facilities that are presently subject to the functional control of the Midwest ISO) are accounted for in transmission accounts on MidAmerican’s books. As a result of the inclusion of these facilities in transmission plant accounts, MidAmerican recovers their costs in its transmission rates calculated pursuant to the Midwest ISO tariff. In order for amounts associated with MidAmerican’s re-delineated 69 kV facilities to receive similar accounting and ratemaking treatment, accounting changes are needed. A new set of mass plant accounts will be developed to reclassify 69 kV line plant amounts between transmission and distribution plant accounts, and accounting entries reflect these changes relative to existing plant. Unlike 161 kV and 345 kV transmission lines, 69 kV line facilities (poles, conductor, insulators, etc.) are not accounted for in discrete plant accounts for each line. Rather, the 69 kV line facilities are accounted for in mass plant accounts. Such mass plant accounts do not contain information concerning which particular facilities are located on which particular line.

Due to the unavailability of individual 69 kV line plant accounting data, the mass plant accounts are allocated on the basis of the ratio of 69 kV line miles classified as transmission to the plant account balance as determined in this report. Using this calculation, a set of 69 kV transmission mass plant accounts will be developed. There is a total of 1,905 miles of 69 kV lines. Of that total, 1,375 miles are networked 69 kV lines. Therefore, the percentage of networked 69 kV line miles is approximately 72% and the radial line miles are approximately 28%. The amounts of 69

kV line in each state will be allocated proportional to the total 34.5 kV and 69 kV line miles in that state.

Using the ratio of networked 69 kV line miles to total 69 kV line miles to allocate 69 kV line mass plant accounts is valid because the proportions of both 69 kV line investments and book values are comparable (on a dollars per mile basis) when radial and networked lines are compared. It is also appropriate to use a ratio of the total mass plant accounts in this manner because MidAmerican's 69 kV line design practices do not differentiate between whether the line being constructed or modified is radial or networked. Thus, the types of poles and conductor used on a line are determined by other factors, not whether the line is operated networked or radial.

New investments in 69 kV lines following the development of the second set of mass plant accounts will be accounted for based on the classification of the line being modified or constructed. New lines would be accounted for in either the transmission or distribution mass plant account depending on whether the line being constructed is networked or radial. Likewise, modifications to existing lines would be accounted for in this same manner.

### **Substation Delineations**

The 1998 Report utilized an approach for classifying substation facilities based on the classification of the transmission lines connecting to the substation. Under that approach, a 161 kV substation had to have at least three transmission lines connecting to it in order for the substation to be a candidate for a combination transmission and distribution substation<sup>8</sup>. As stated previously, accounting reclassifications were made in 2009 and 2010 to align 161 kV substation facilities with the facilities under the Midwest ISO's functional control.

Given that many of MidAmerican's 69 kV lines have been concluded to be performing a transmission function, it is necessary to establish procedures for classifying 69 kV substations connecting to such lines. There are approximately 100 substations at a voltage of 69 kV which are candidates for becoming combination substations based on the networked operation of the 69 kV lines connecting to the substation.

It is a significant effort to account for combination substations as opposed to substations classified as 100% distribution. This additional effort stems from the complexity of accounting to both transmission and distribution accounts for new capital projects at substations with both types of facilities. Adding to the complexity, field operations personnel performing work in combination substations must separately keep track of time and expenses incurred. As a result of these concerns, it is not practical to develop combination substations accounting information for each 69 kV substation which could qualify.

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<sup>8</sup> *Re MidAmerican Energy Company*, 193 P.U.R.4th 555, 1999 WL 632816 (Iowa U.B.)

A reasonable way to reduce the number of new combination substations required is to utilize the “three or more” approach that was originally applied to the 161 kV substations. Under this approach, a 69 kV substation is a candidate to become a combination substation only if at least three networked 69 kV lines or at least two networked 69 kV lines and one 69 kV capacitor connect to the substation. In the aggregate, using this approach will add approximately 20 additional combination substations to the existing total. In contrast, if every potential 69 kV substation (having at least 2 networked 69 kV lines connecting to the substation) were to be re-delineated as a combination substation without regard to the “three or more” rule, approximately 90 additional combination substations would be added to the total.

Due to the additional initial effort and the ongoing complexity of accounting for costs of many more combination substations, the “three or more” rule has been implemented in this re-delineation when determining which 69 kV substations to re-classify as combination substations. To the extent accounting procedures allow for more streamlined cost accounting approaches in the future, the utilization of the “three or more” rule may be changed.

The determination of which specific facilities in new combination and revised delineation combination substations are allocated to transmission accounts versus distribution accounts follows a similar approach as used in the 1998 study to delineate transmission and local distribution substation costs. Namely:

1. Transmission facilities include 161-69 kV transformers, 161-69 kV transformer breakers, networked 69 kV facilities including station dead-end structures, station bus, station bus supports and bus structures, 69 kV line breakers, 69 kV line switches, 69 kV switches used for isolation of line circuit breakers, line protective relays, 69 kV instrument transformers (used for line protective relaying and metering) and disturbance monitoring equipment. Transmission facilities also include shunt 69 kV capacitors. 345-161 kV transformers and associated equipment remain in transmission accounts.
2. Common facilities are those facilities serving a common purpose between transmission and local distribution. Such common facilities include substation land, rock, fence, control buildings, station batteries, station grounding systems, station service transformers and communications equipment. Common facilities in networked 69 kV substations are allocated to transmission and distribution accounts by pro-rating based on the original cost of the transmission and distribution facilities in the substation.
3. Distribution facilities are those facilities within networked 69 kV substations which are operated radial to the 69 kV networked system and include 69-13 kV transformers, 69-4 kV transformers, transformer 69 kV breakers and/or circuit switchers, transformer 69 kV switches, transformer protective relaying, transformer metering, 13 kV facilities and 4 kV facilities. In addition, the portion of the common facilities which are not allocated to transmission accounts will remain in distribution accounts.

### **Future Changes to Classifications**

Transmission and local distribution facility classifications are subject to change. Classifications may change as the system changes in its characteristics as has been observed since the 1998 Report.

STATE OF IOWA  
DEPARTMENT OF COMMERCE  
UTILITIES BOARD

IN RE:  MIDAMERICAN ENERGY COMPANY	DOCKET NO. SPU-2011-0005
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**ORDER RECOMMENDING DELINEATION AND TERMINATING DOCKET**

(Issued September 12, 2011)

**INTRODUCTION AND PROCEDURAL HISTORY**

On June 15, 2011, MidAmerican Energy Company (MidAmerican) filed with the Utilities Board (Board) an application for a Board order recommending to the Federal Energy Regulatory Commission (FERC) an updated delineation of transmission and local distribution facilities reflecting the reclassification of MidAmerican's non-radial 69 kV distribution facilities, as well as non-radial 161 kV facilities connecting to 69 kV facilities, from distribution to transmission. MidAmerican also asked that the Board authorize the reorganization of MidAmerican's electric transmission and distribution plant in a manner consistent with the redelineation.

Pursuant to FERC Order 888,<sup>1</sup> FERC will give deference to states' determinations as to which facilities are considered transmission (generally subject to FERC jurisdiction) and which are considered local distribution (generally subject to state jurisdiction), provided that the states apply the seven-factor test outlined in the

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<sup>1</sup> "Promoting Wholesale Competition, etc.," 61 Fed. Reg. 21,540 (May 10, 1996); FERC Stats. & Regs. ¶ 31,036 (1996).

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PAGE 2

FERC order to the utility's transmission and distribution facilities. The Board initially issued an order recommending delineation of MidAmerican's transmission and distribution facilities on April 30, 1999, in Docket No. SPU-98-12. However, in its recent application MidAmerican noted several factors have changed since issuance of the Board's prior delineation that have affected the flow of power across MidAmerican's facilities, including the integration of MidAmerican's transmission and generation systems with the Midwest Independent Transmission System Operator, Inc. (MISO). MidAmerican also cited regulatory and business changes that have occurred as indicators of a need to reconsider the delineation.

On June 27, 2011, the Consumer Advocate Division of the Department of Justice (Consumer Advocate) filed a response stating that MidAmerican failed to file a complete cost-benefit analysis of the reorganization, as required by 199 IAC 32.2(4). Consumer Advocate also asked that intervenors be allowed 40 days from the filing of any MidAmerican supplemental testimony to file responsive testimony.

On June 29, 2011, the Board issued an order docketing the case, establishing a procedural schedule, setting an intervention deadline, requiring additional information, setting a hearing for August 16, 2011, and denying Consumer Advocate's request that intervenors be allowed 40 days to file testimony. In denying Consumer Advocate's request, the Board noted that the 40-day period referred to in 199 IAC 32.9(1) is for testimony and exhibits that the Board might want to consider prior to deciding whether to issue a notice of hearing by the 50-day deadline. Because the Board had determined to hold a hearing, the 40-day deadline for filing

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testimony is no longer applicable to this proceeding. The Board's order also required MidAmerican to file a complete cost-benefit analysis as required by 199 IAC 32.2(4) within seven days from the date of the order. MidAmerican filed additional cost-benefit information in supplemental testimony filed on July 6, 2011.

On July 14, 2011, Deere & Co. (Deere) filed a petition to intervene in the proceeding. On July 15, 2011, petitions to intervene were filed by Ag Processing, Inc. (Ag Processing), the Midwest Municipal Transmission Group (MMTG) and the Iowa Association of Municipal Utilities (IAMU), Missouri Basin Municipal Power Agency d/b/a Missouri River Energy Services (MRES), and the City of Pella, Iowa (Pella). The Board granted the petitions to intervene by order issued July 22, 2011.

In its June 29, 2011, docketing order, the Board encouraged any intervenors to file prefiled testimony pursuant to the schedule contained in the order. The Board noted that prefiled testimony is useful to the Board, and other parties, in narrowing and focusing the issues and preparing for cross-examination at the hearing, particularly because limited hearing time is available. However, the Board recognized that failure to file testimony does not preclude intervenors from presenting testimony and exhibits at a hearing involving a reorganization proposal. 199 IAC 32.9(1). The Board said that prefiled direct testimony and exhibits may be supplemented or expanded at hearing to accommodate information that was not available or ready in testimony and exhibit form at the time of the prefiled testimony deadline.

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On July 21, 2011, Consumer Advocate filed a statement indicating it would not be filing testimony at that time, but Consumer Advocate listed three areas where it believed MidAmerican should provide responsive testimony. The three areas cited by Consumer Advocate were the impact of MidAmerican's MISO membership on the FERC transmission planning processes, whether the proposed reclassification would expand the scope of the planning processes to include 69 kV facilities, and whether the reclassified transmission facilities should be removed from MidAmerican's rate base prior to or upon the expiration of the current revenue sharing agreement. Prefiled testimony was submitted on July 21, 2011, by Deere; this testimony was supplemented on August 9, 2011. MidAmerican filed reply testimony on July 28, 2011, which, among other things, responded to the issues and questions identified by Consumer Advocate.

On August 5, 2011, Pella filed with the Board a motion to respond to the reply testimony of Dehn Stevens, one of MidAmerican's witnesses. In support of its motion, Pella said it wanted to respond to Mr. Stevens' reply testimony regarding a FERC decision in order to ensure a complete and accurate record in MidAmerican's reorganization and delineation proceeding. There were no objections to the motion and the Board granted the motion by order issued August 9, 2011.

On August 9, 2011, Consumer Advocate filed a second response to MidAmerican's proposal. Consumer Advocate said that MidAmerican in its reply testimony had clarified and addressed issues identified by Consumer Advocate and that MidAmerican's proposed redelineation of assets was generally consistent with



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what Consumer Advocate had previously recommended for networked 69 kV transmission facilities.

A hearing was held on August 16, 2011. On August 18, 2011, MidAmerican filed an exhibit that was requested at hearing. The late-filed exhibit analyzed the Iowa revenue requirement impacts associated with the transaction, broken down by retail and wholesale customers. (Tr. 67-68).

All parties had the opportunity to file post-hearing briefs. Briefs were filed by MidAmerican, Consumer Advocate, Pella, and Ag Processing on August 23, 2011.

On August 26, 2011, MidAmerican filed a motion to strike portions of page 5 and page 6 of the post-hearing brief submitted by Ag Processing. Ag Processing filed a resistance to the motion on August 30, 2011. The Board denied MidAmerican's motion by order issued September 2, 2011.

### **SUMMARY OF MIDAMERICAN'S PROPOSAL**

MidAmerican's original delineation of its transmission and distribution assets was approved by the Board in Docket No. SPU-98-12 and accepted by FERC in Docket No. ER99-3887. These FERC and Board-approved classifications are currently used to determine which facilities are included in MISO's FERC formula transmission rate template. The delineations were made prior to MidAmerican joining MISO as a full member in 2009.

MidAmerican proposed to reclassify all of MidAmerican's non-radial 69 kV distribution facilities as well as its non-radial 161 kV facilities connecting to 69 kV

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facilities from "distribution" to "transmission." MidAmerican said several factors had changed since the initial delineation, including MISO's development and MidAmerican's full membership in MISO. MidAmerican said MISO utilizes a regional point-to-point transmission tariff, day-ahead and real time energy markets, secured transmission constrained dispatch respecting transmission constraints and locational marginal pricing, and ancillary services markets. MidAmerican noted that congestion is handled differently now, through centralized dispatch, rather than on a sub-region to sub-region basis; also, a centralized system of offers and bids has replaced the old method of bilateral contracts. MidAmerican also pointed out that Iowa had added significant natural gas, coal, and wind generation since its 1998 delineation; the new generation has impacted power flows across MidAmerican's transmission system.

MidAmerican said that in all respects the facilities subject to the proposed reorganization would remain available to provide transmission service in Iowa. The only change is that if the reorganization is allowed to go forward, the costs of those facilities will be recovered from transmission users through FERC-approved tariff rates; the net book value of Iowa jurisdictional assets subject to the reclassification is \$116,552,620. MidAmerican said the gross value of the Iowa assets which are subject to the proposed reclassification is \$214,347,242, which represents approximately 9.8 percent of the original cost of MidAmerican's facilities presently accounted for in distribution accounts.

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### REORGANIZATION STATUTE AND STATUTORY FACTORS

Iowa Code § 476.77(1) provides that a reorganization shall not take place if the Board disapproves. The reorganization statutes and 199 IAC 32.2(2) defines reorganization as including the direct or indirect sale, lease, or other disposition of assets with a value of \$10 million or more and used in the delivery of utility services. The transfer of functional control of assets or the transfer of assets from Board to federal jurisdiction is a disposition subject to the reorganization statutes and rules, even though ownership of the asset remains with the utility. The Board has previously held that the indirect transfer of assets used in the delivery of utility services is a reorganization subject to Board review. See, IES Utilities Inc. and Interstate Power Company, "Order Terminating Docket," Docket No. SPU-01-8 (11/30/2001). In this case, the net book value of the Iowa jurisdictional assets that MidAmerican proposes to reclassify is \$116,552,620. (Tr. 24-25; Ex. 5 (DEM-1)).

Iowa Code § 476.77(3) lists the following factors that the Board may consider in its review of a proposal for reorganization:

- a. Whether the board will have reasonable access to books, records, documents, and other information relating to the public utility or any of its affiliates.
- b. Whether the public utility's ability to attract capital on reasonable terms, including the maintenance of a reasonable capital structure, is impaired.
- c. Whether the ability of the public utility to provide safe, reasonable, and adequate service is impaired.
- d. Whether ratepayers are detrimentally affected.

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- e. Whether the public interest is detrimentally affected.

Pursuant to Iowa Code § 476.77(2), the proposed reorganization shall be deemed to have been approved by operation of law unless disapproved by the Board. The statute also provides that the Board shall not disapprove a proposal for reorganization without providing for a hearing. The statute provides that a notice of hearing must be issued no later than 50 days after the proposal for reorganization has been filed.

### **BOARD DISCUSSION**

MidAmerican's proposed reorganization can be viewed as the logical step after the reorganization proceeding a little over two years ago, when it joined MISO and transferred to MISO functional control of transmission assets rated 100 kV and above. The Board allowed the reorganization to go forward in an order issued July 27, 2009, in Docket No. SPU-2009-0003. MidAmerican's prior transmission/distribution delineation was approved in Docket No. SPU-98-12, before MidAmerican joined MISO.

In 2010, the Board permitted a reorganization to go forward that allowed MidAmerican to reclassify certain networked 161 kV Iowa substation components from "high voltage distribution" to "transmission" accounts. Part of the rationale for the reclassification was that MISO's Transmission Owners' Agreement requires utilities to place all networked transmission voltage facilities (over 100 kV) under MISO's functional control. These assets had been under the functional control of

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MISO since MidAmerican became a full MISO member in 2009 and performed a transmission function, even though they were previously classified as distribution. Changes in FERC policy also suggested redelineation was appropriate.

MidAmerican Energy Company, "Order Canceling Hearing and Terminating Docket," Docket No. SPU-2010-0007 (WRU-2010-0007-0156) (07/29/2010).

There are five statutory factors in § 476.77(3) that the Board may consider in a reorganization proceeding. Each factor will be addressed separately.

**1. Books and Records**

The proposed reorganization will have no impact on the Board's access to MidAmerican's books and records. MidAmerican's written accounting policies will not change and it will continue to use the FERC Uniform System of Accounts. No physical assets are being removed from Iowa and there is no change in the location of MidAmerican's books and records. (Tr. 87-89). MidAmerican pledged at the hearing that the Board will have full access to MidAmerican's MISO-related documents. (Tr. 54). The Board's decision in this case is based, in part, on MidAmerican's commitment that the Board will have full access to MidAmerican's MISO-related documents, both now and in the future.

**2. Ability to Attract Capital**

The proposed reorganization will have little or no impact on MidAmerican's ability to attract capital or financial integrity. The proposed reorganization is a redelineation of existing assets from distribution to transmission and does not require any financing or a significant financial outlay. Also, the proposed reorganization does

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not have a quantifiable impact on MidAmerican's balance sheet and income statement. (Tr. 90-91).

### **3. Safe, Reasonable, and Adequate Service**

MidAmerican expects the proposed reorganization to maintain or enhance its ability to provide safe, reasonable, and adequate service, and no party challenged or contested this criteria. No party expressed concern about the proposed redelineation negatively impacting MidAmerican's ability to provide reliable service. The only change for the redelineated facilities is that they will become subject to MISO's functional control and the costs of the redelineated facilities will be recovered from users through FERC-tariffed rates. This transfer of functional control to MISO will facilitate coordination of transmission operations and planning through the MISO processes over a wider region and enhance overall system reliability for Iowa customers, one of the benefits of the proposed reorganization. From a system operations perspective, the ability of MISO to redispatch generation in order to maintain security of the 69 kV system will result in improved operating conditions for such facilities, particularly since MISO also has functional control of the 69 kV and above facilities belonging to ITC Midwest LLC (ITC Midwest). MISO's ability to quickly redispatch generation in order to maintain system security improves system operating conditions and can be invaluable during major transmission system events, such as storms.

In addition, in response to an issue raised by Consumer Advocate, MidAmerican noted that any local distribution facilities that are reclassified as

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transmission will fall under the scope of both MISO's transmission planning process and MidAmerican's local transmission planning process, meaning that there will be additional opportunities for stakeholders to participate in the transmission planning process. MidAmerican pointed out the various opportunities available to stakeholders to participate in both local planning and MISO regional planning. These opportunities are detailed in Attachment FF and Attachment FF-MidAmerican of the MISO tariff. Participation by stakeholders in the planning process should result in better-planned transmission, further enhancing system reliability. MidAmerican's commitment to stakeholder involvement in the transmission planning process is an important factor in the Board's decision regarding the reorganization.

**a. FERC Seven-Factor Test**

A sub-issue related to the proposed delineation is whether MidAmerican's proposal meets FERC's seven-factor test. In Order 888, FERC adopted seven factors to be considered in determining whether any specific set of facilities constitutes local distribution or transmission. Because of changes cited by MidAmerican, such as its membership in MISO, MidAmerican reevaluated the methods and overall conclusions of its previous study and concluded that MidAmerican's non-radial 69 kV distribution facilities, as well as non-radial 161 kV facilities connecting to 69 kV facilities, should be reclassified from distribution to transmission. It is important to note that under FERC's guidelines, no single factor is determinative or more important than other factors; each of the seven factors has weight in the process.

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The first factor is that local distribution facilities are normally in close proximity to retail customers. MidAmerican estimated the average electrical distance to retail load for facilities of different voltages and found that, compared to 13.8 kV facilities, its 34.5 kV and above facilities are not in close proximity to retail load; MidAmerican concluded that this factor supported its proposed reclassification of non-radial 69 kV distribution facilities to transmission.

The second factor is that local distribution facilities are primarily radial in character. MidAmerican estimated that 99 percent of its 13.8 kV and below lines are operated radially (the only exceptions are in downtown areas) as well as all of its 34.5 kV lines. MidAmerican said that over 72 percent of the 69 kV lines are networked and provide parallel paths for power flow across the system, supporting classification of the 69 kV system as transmission.

The third factor is consideration of the way a facility is used. Typically, power flows into local distribution systems and rarely, if ever, flows out, while transmission systems may have flows in both directions. Further, incremental changes in the power flow on a transmission line due to an outage on another transmission line reflect power flowing across the transmission system; distribution facilities are less likely to serve as alternative transmission paths. For MidAmerican's 34.5 kV, 69 kV, 161 kV, and 345 kV networked lines, the average maximum outage distribution factors is greater than 50 percent; based on this factor, these facilities would be considered transmission. (Ex. DAS-1, Appendix 4).



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The fourth factor to consider is that when power enters a local distribution system, it is not recognized or transported on to some other market, as it is when it enters a transmission system. MidAmerican and many other interconnected Midwest utilities have joined MISO, allowing participation with other loads and generation in a multi-state market. Averaging the net and absolute value of flows on networked tie lines gives an indication of power transfers between markets and across MidAmerican's service area. Based on this factor, MidAmerican's 69 kV and above facilities would be considered transmission.

The fifth factor is that power entering a local distribution system is consumed in a comparatively restricted geographical area, while power on a transmission system is more likely to be used in a larger area. This factor, like the third and fourth factors, supports a classification of 69 kV and above networked facilities as transmission because the power from these facilities is not typically consumed in a comparatively restricted geographical area.

The sixth factor is that meters are often located at the local transmission/distribution interface to measure flows into the local distribution system. MidAmerican has installed Supervisory Control And Data Acquisition (SCADA) equipment throughout its system at various system voltages and locations. SCADA quantities are used to monitor power flows into 34.5 kV and below transformers, while 161 kV and 69 kV line flows are measured at the substation buses that feed the transformers that step down to 34.5 kV and below. Revenue accuracy metering is located at ownership boundaries with wholesale customers and other interconnected

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utilities. This factor supports classification of 69 kV and above facilities as transmission.

The seventh factor is that local distribution facilities will usually be of reduced voltage. Facilities of 34.5 kV and lower are of reduced voltage and operated differently as compared to networked 69 kV and higher voltage facilities. Looking at this factor, MidAmerican's networked 69 kV and above facilities would be considered transmission.

Application of the seven-factor test supports the general reclassification of MidAmerican's facilities as the company has proposed. Consumer Advocate had no disagreement with MidAmerican's technical analysis and supported the redelineation. No party objected to the technical analysis submitted by MidAmerican with respect to the seven factors, with one exception. Pella argued that the three-line test used in MidAmerican's study to determine what portions of substations should be reclassified to transmission accounts was not applicable in all circumstances and a different test should be used. This issue will be addressed later.

Several factors have occurred since MidAmerican's first delineation that supports the reclassification. Prior to MidAmerican joining MISO, all of its transmission transactions were made on a bilateral basis with each transaction requiring a separate contract between a generation buyer and seller. Now that MidAmerican is a MISO member, its facilities are offered into service under a regional transmission tariff and a centralized system of offers and bids has replaced the bilateral transaction system. New generation, particularly wind generation in Iowa,

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has resulted in energy flows from local generation to local load, replacing the traditional energy flows from large central-state power generating units at Iowa's borders to load located in the center of the state. The wind generation has also led to the addition of lower voltage 161-69 kV substations, which cause more power to flow across the 69 kV facilities, especially during outages of higher-voltage facilities.

Other factors supporting redelineation include the classification of ITC Midwest's transmission system consistent with MidAmerican's proposal and FERC's decision that 69 kV facilities operated by Pella were transmission. All these changes support the conclusions contained in MidAmerican's technical report, and the Board will recommend to FERC that MidAmerican's system be redelineated consistent with that report.

MidAmerican's approach to reclassification was reasonable and applied fairly. If assets qualify as transmission assets, they should be so classified.

**b. Three or More Rule**

MidAmerican proposed to classify substation facilities on the basis of the classifications of facilities connecting to the substations. MidAmerican operates approximately 90 substations that connect to at least two networked 69 kV facilities and, thus, would be candidates for reclassification from local distribution to transmission using the seven-factor test. (Tr. 19). MidAmerican used the "three or more" approach (described below) that was employed in the 1998 Technical Report supporting MidAmerican's initial delineation to evaluate whether portions of 69 kV substations connecting to non-radial 69 kV lines should be reclassified.

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Under the three or more approach, a 69 kV substation is considered a combination substation if at least three networked 69 kV lines or at least two networked lines and one 69 kV capacitor connect to the substation. (Tr. 26-27). The components of combination substations are then re-allocated between local distribution and transmission accounts. (Tr. 26-27, 51, 72). This approach resulted in the proposed reclassification of 31 additional combination substations. (Tr. 27). MidAmerican's use of the three or more test is founded both in engineering judgment and administrative efficiency and is based on the fact that such substations provide transmission support for MidAmerican.

Substation reclassification requires review of detailed accounting for each facility, including recalculation of the reclassified costs of each component and the re-allocation of common costs such as land, rock, and fence. (Tr. 27-28). Also, new capital projects for the combination substations and field personnel costs need to be allocated between transmission and distribution. The three or more methodology strikes a balance between including facilities with incremental transmission benefits and limiting accounting reporting burdens. Furthermore, the methodology is not cast in stone but is subject to change should accounting procedures allow simplification of the record keeping associated with the approach or should industry trends or MISO developments show that future modifications are necessary. (Tr. 26-27).

Pella criticized use of the three or more test because it lacks the functional character of the seven-factor test and does not examine the use of facilities to transmit power for non-local uses and to serve multiple systems' transmission needs.

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While Pella opposed application of the three or more test, Pella was primarily concerned that the Board not apply the test to Pella's facilities, over which Pella notes the Board does not have jurisdiction. (Pella Initial Brief, pp. 13-14).

MidAmerican's testimony is grounded on an engineering analysis of what facilities support MidAmerican's transmission system, not any other utility's transmission system. MidAmerican characterizes its multi-voltage substations as combination substations and has designed a method to allocate the costs of these substations in transmission or distribution accounts. Since not every substation is designed the same, MidAmerican's delineation of the substations using the three or more test is based both on an engineering analysis and an administrative or accounting analysis. The Board notes that the cost impact of applying the three or more test, as opposed to other tests, is minimal because relatively few facilities are impacted.

The Board finds that the analysis provided by MidAmerican supports application of the three or more test to MidAmerican's facilities, but this finding relates to MidAmerican only and has no precedential value with respect to the classification of any other utility's facilities. As noted by Pella, the Board in any event does not have jurisdiction with respect to classification of Pella's facilities.

#### **4. Ratepayer Interest**

MidAmerican argued that its proposed reorganization would produce both quantifiable and non-quantifiable benefits for its ratepayers and that the proposed redelineation is one small enhancement of MidAmerican's integration with the MISO.

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MidAmerican said that being in the MISO market has enhanced its off-system revenues and produced operational benefits. (Tr. 103). MidAmerican said that the more electrical facilities that are under MISO's functional control, the more opportunities for operational benefits to MidAmerican (and other Iowa utilities in MISO).

MidAmerican pointed out that during the term of its current revenue sharing arrangement and revenue freeze, retail rates will not be impacted by the reorganization. After the revenue freeze expires, transmission costs included in Iowa retail rates cannot change until the Board approves new retail rates and rate treatment of the redelineated assets are addressed in a rate proceeding. (Tr. 97-98, 100-01). MidAmerican committed to retention of Board authority to determine appropriate rate treatment for the transmission assets owned by MidAmerican that are voluntarily committed to MISO's control pursuant to these reorganization proceedings. (Tr. 47-48, 114). This is an important basis for the Board's decision and addresses Deere's concern, expressed in its prefiled testimony, that MidAmerican would seek to unbundle transmission assets from Iowa-jurisdictional rate base in its next rate case.

MidAmerican provided a revenue requirement analysis to assess the possible impact of the reorganization on Iowa retail customers. (Ex. 8). A similar analysis in a different format was provided as a late-filed exhibit. MidAmerican's analysis shows that the redelineation reduces the revenue requirement for Iowa retail customers by \$0.9 million due to a lower Iowa jurisdictional rate base and net incremental

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transmission revenues received by MidAmerican (even though retail customers pay for 95 percent of the cost of transmission facilities). (Tr. 93, 95-96).

Finally, MidAmerican said that there are significant non-quantifiable benefits that result from MISO having functional control over the redelineated facilities. By placing more assets under the MISO control, there should be an increase in overall system reliability and coordination of transmission operations and transmission planning across a larger area should be facilitated. (Tr. 31-32, 40-42).

Consumer Advocate noted that MidAmerican's cost-benefit analysis using the revenue sharing arrangement as the basis for calculation shows a modest positive impact to MidAmerican's Iowa retail electric imputed returns for 2010. (Tr. 94-95; Ex. 8). Consumer Advocate said MidAmerican's analysis assumes the continuation of the Iowa retail revenue freeze; however, this freeze will expire at the end of 2013. (Tr. 94, 100).

Consumer Advocate pointed out that MidAmerican has indicated that it will not reflect the impact of the higher return on equity allowed for transmission assets in its revenue requirement calculation because of its belief that the revenue freeze agreement precludes any changes to transmission rates. Therefore, Consumer Advocate concluded that retail rates cannot be impacted for the duration of the current revenue freeze. (Tr. 94, 97-98).

Consumer Advocate agreed with MidAmerican that its rates will not automatically change at the end of the revenue freeze because MidAmerican will have to obtain Board approval of any retail rate change in Iowa. (Tr. 101-02).

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Consumer Advocate noted that MidAmerican has not yet decided whether it will request recovery of transmission costs using the MISO return on equity or the Iowa jurisdictional total company return on equity. (Tr. 106).

Ag Processing said the redelineation will have an impact on retail rates and MidAmerican has not provided documentation of projected ratepayer impacts after the revenue sharing agreement has expired. Ag Processing noted that MidAmerican said at hearing that it had not made projections on future impacts longer than 18 months. (Tr. 109-10).

Ag Processing said that MidAmerican's late-filed exhibit did not reflect the higher rate of return permitted by FERC on transmission assets but merely reflected what it had previously filed, the removal of \$8,146,000 plant out of Iowa rate base and other assumptions using 2010 values. (Tr. 90). Ag Processing said that while MidAmerican would experience an increase of \$140,000 in wholesale transmission revenue, the net result is a loss of \$148,000 per year in Iowa operating income and a gross transmission revenue requirement increase of over \$36 million. (Tr. 108; Ex. DAS-4). Ag Processing also argued that the redelineation would increase MidAmerican's overall annual revenue requirement by \$8,064,531.

Ag Processing recommended that the Board dismiss MidAmerican's application for reorganization without prejudice because MidAmerican did not provide a forward-looking cost-benefit analysis. Ag Processing argued such an analysis would show a negative impact on the customers since \$200 million in assets would be included in a FERC tariff with a higher rate of return. If the Board does not



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disapprove this application, Ag Processing said the Board should impose conditions to protect MidAmerican's customers, such as requiring that MidAmerican cannot include in its Iowa retail rates a return on the redelineated assets greater than the present 8.469 percent return until 2018 or five years after its first rate case after the expiration of the current revenue sharing agreement, whichever time is longer. (Ag Processing Initial Brief, p. 7).

In determining whether an organization has a negative impact on ratepayers, the Board considers both quantifiable and non-quantifiable benefits. The non-quantifiable benefits are important and are discussed in greater detail in the public interest section, below. Issues related to ratepayer interest and public interest often overlap. The nonquantifiable benefits not only will have a positive impact on MidAmerican ratepayers, but also a positive impact on most Iowa electric consumers, regardless of their utility. The nonquantifiable benefits alone could support a finding that the public interests and ratepayer interest are not negatively impacted by the reorganization.

With respect to quantifiable benefits, MidAmerican discussed the impact on its transmission revenues if the redelineation did not occur. Because of recent FERC decisions, MidAmerican said it would lose about \$1.45 million in revenues per year without the redelineation, because MidAmerican would be paying revenue credits to Pella and potentially other municipal utilities for use of their transmission assets but will not be able to charge transmission rates for the use of MidAmerican's similar assets. (Tr. 36-37). Because wholesale revenues reduce MidAmerican's overall

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transmission system revenue requirement, lower wholesale transmission revenues would cause retail customers to pay higher costs.

If the redelineation is allowed to proceed, MidAmerican anticipated a net annual revenue increase. The net revenue increase projected by MidAmerican is \$140,000. (Tr. 35; Ex. DAS-2).

MidAmerican also provided information on the impact of the proposed reorganization on each state's jurisdictional rate base and operating income. MidAmerican provides electric service in three states, Iowa, Illinois, and South Dakota. MidAmerican said there would be an impact on each state's jurisdictional rate base due to the manner in which distribution assets are allocated compared to transmission assets. MidAmerican said that distribution assets are allocated based on the location of the actual assets, while transmission assets are allocated based on the average and excess method. The average and excess method used by MidAmerican takes a three-year average of coincident peak demand, non-coincident peak demand, and overall customer sales. (Tr. 89-90). MidAmerican said the Iowa impact of the redelineation is a decrease in Iowa electric rate base by over \$8 million; net operating income would be reduced by \$148,000 based on year 2010 data. (Tr. 90, 93; Ex. TBS-1).

Finally, MidAmerican used these figures to make pro forma adjustments to rate base and operating income and recalculated the impact this would have on MidAmerican's rate of return using the template in its revenue sharing compliance filing. (Tr. 94-95). MidAmerican found there was only a small impact on

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MidAmerican's overall earned return, increasing overall return by one basis point.  
(Ex. TBS-1, p. 1).

Consumer Advocate said that after getting a clarification from MidAmerican that the retail portion of its transmission costs will continue to be based on the state approved costs included in the last rate case for each of its retail states through the duration of the revenue freeze, Consumer Advocate does not dispute MidAmerican's cost-benefit analysis and rate impact conclusions. MidAmerican also clarified for Consumer Advocate that retail transmission rates will not automatically change upon the expiration of the revenue sharing arrangement in Iowa and that the Board in a future rate case will ultimately determine MidAmerican's rates and the treatment of transmission facilities in such rates. MidAmerican also indicated to Consumer Advocate that MidAmerican had not made any decision about what it might propose in this regard as part of a future rate case.

Consumer Advocate expressed a concern regarding costs associated with exiting MISO or MISO's cost assignment process for regional transmission projects. By committing more assets to MISO, Consumer Advocate said there is the potential for these costs to increase. According to Consumer Advocate, MidAmerican needs to educate stakeholders about future transmission projects that will impact Iowa transmission costs. The Board recognizes MidAmerican's commitment to seek to protect its customers from unnecessary or unreasonable transmission costs and this commitment is expressly made a condition of the Board's order. (Tr. 47-48).

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MidAmerican submitted a late-filed exhibit showing the total Iowa jurisdictional revenue requirement prior to the proposed redelineation for wholesale and retail customers and the impacts on the revenue requirements after the proposed redelineation. MidAmerican's exhibit shows a \$0.9 million benefit to Iowa retail customers.

Ag Processing argued in brief that because MidAmerican failed to show future rate impacts on retail customers and all indications in the record are that the retail customers will be negatively impacted by the reorganization once the revenue sharing agreement has expired, the proposed redelineation should be denied or, at minimum, conditions should be placed on this reorganization. For example, Ag Processing said that MidAmerican failed to show the impact of the higher return on equity of 12.38 percent that would be included in the FERC tariffed transmission rates.

Ag Processing attempted to show the impact on the revenue requirement if one were to reflect the higher return on equity of 12.38 percent. First, Ag Processing used the value of transmission assets for Iowa from MidAmerican witness Stevens' direct testimony (i.e., \$214,347,242). Next, Ag Processing removed \$8,146,000 to reflect the allocation adjustment for Iowa, producing a new rate base of \$206,201,242. To this value, Ag Processing applied the company-wide rate of return of 8.469 percent, resulting in a revenue requirement of \$17,463,183. To the same rate base, Ag Processing then applied the FERC rate of return of 12.38 percent to

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produce a revenue requirement of \$25,527,714, or an additional \$8,064,531 in MidAmerican's revenue requirement.

In its August 26, 2011, motion to strike portions of Ag Processing's brief related to Ag Processing's revenue requirement calculations, MidAmerican said that there were errors in Ag Processing's calculations; MidAmerican filed what it said were corrected calculations.

First, MidAmerican explained that Ag Processing used the wrong rate base because it reflected gross plant, not net. MidAmerican said that the rate base should reflect net plant in determining the impact on rates to account for the effect of depreciation. MidAmerican stated that the rate base number should be \$116,552,620, not the \$214,347,242 used by Ag Processing. To this rate base, MidAmerican applied the same rate of return of 8.469 percent as suggested by Ag Processing, producing a return on those assets as distribution facilities of \$9,870,841.

MidAmerican said Ag Processing's second error was using 12.38 percent as the rate of return to apply to the rate base after redelineation. By using that rate, MidAmerican said that Ag Processing was effectively assuming that the rate base was financed with 100 percent common equity. MidAmerican argued that the overall rate of return, reflecting a mix of equity and debt, of 8.942 percent should be used. MidAmerican said this results in a return on the assets as transmission facilities of \$9,693,720, a difference of minus \$177,121. After reflecting the tax effect, MidAmerican said that using these calculations, redelineation results in a \$303,134

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Iowa revenue requirement reduction. According to MidAmerican, this shows that there would not be a negative impact on its customers.

As noted by Ag Processing, it was only providing a rough estimate, not a precise revenue requirement calculation. However, the estimate does not reflect standard Iowa ratemaking practices. The Board is the administrative body with ratemaking expertise and MidAmerican's calculations more closely match the Board's ratemaking principles in setting rates. Those calculations show only a small impact on the company's revenue requirement.

The quantifiable impact on customers is minimal, particularly when one considers that there is no potential impact (other than perhaps a small positive impact on revenue sharing calculations) until MidAmerican's first retail rate case after the existing revenue freeze expires. Because FERC allows a higher return on transmission assets than the Board has provided, there might be a small increase in rates in the longer term which may be attributed to this reorganization. However, this potential future impact on rates is offset by the non-quantifiable benefits discussed below. The proposed reorganization, when considering both quantifiable and nonquantifiable benefits, can be expected to have a positive impact on ratepayers and the service they receive.

The Board has consistently considered nonquantifiable benefits when evaluating a proposed reorganization. MidAmerican Energy Company, "Order Terminating Docket," Docket No. SPU-2009-0003 (06/27/2009); Interstate Power and Light Company and ITC Midwest LLC, "Order Terminating Docket and

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Recommending Delineation of Transmission and Local Distribution Facilities," Docket No. SPU-07-11 (09/20/2007). The record does not support imposing the types of conditions suggested by Ag Processing.

## **5. Public Interest**

In its "Order Terminating Docket" issued on July 2, 1990, in Docket No. SPU-90-5 (Iowa Resources Inc. and Midwest Energy Company), the Board explained its interpretation of the public interest criterion:

The Board believes the "public interest" includes a broader set of concerns than ratepayer interests. Specifically, the Board will consider the impact of the merger on the state as a whole.

Subrule 199 IAC 32.4(4)"c" provides that this factor considers the effect of the reorganization on the public at large and the economy of the state and the communities where the utility is located.

MidAmerican said that the reorganization and redelineation would provide benefits to the MISO electrical system, which includes most transmission facilities located in Iowa, by permitting consistency in the operation of the 69 kV facilities. Most of the non-MidAmerican 69 kV lines located in Iowa are owned by ITC Midwest and are already subject to MISO's functional control. With MISO in functional control of most generation and transmission in the state down to the 69 kV level, there should be a faster response time to improve operating conditions on the 69 kV system by redispatching generation under the control of MISO. Also, if the facilities are redelineated, this means that stakeholders will be permitted to participate in the

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MISO stakeholder process for future development of these facilities and other connections to the transmission system. (Tr. 40-42).

Consumer Advocate agreed that MidAmerican's proposal will positively impact the state by providing consistency in transmission operations. Consumer Advocate pointed out that ITC Midwest's similar facilities are already delineated as transmission and other municipal utilities owning 69 kV facilities within MidAmerican's system are likely to follow Pella's lead and include their 69 kV transmission facilities under the MISO transmission system rate.

The Board agrees that having nearly all 69 kV facilities in Iowa (with a few exceptions) under the functional control of MISO should provide consistency in electric system operations and improve transmission and generation dispatching. Both utilities in Iowa that own transmission (MidAmerican and ITC Midwest) would participate in one transmission planning process and abide by MISO's coordinated system planning rules. This should benefit Iowans generally as new generation interconnections and requests for transmission services will be subject to one set of rules.

Based on the record before the Board, the proposed reorganization will not negatively impact ratepayers or the public interest. The benefits of MidAmerican's MISO membership were detailed in the Board's July 27, 2009, order in Docket No. SPU-2009-0003. These benefits outweigh any small future impact on Iowa retail rates, which will not impact current retail rates because of MidAmerican's existing retail revenue freeze. MidAmerican's commitments to protect ratepayers from



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unnecessary or unreasonable transmission costs through its active participation in transmission planning forums and possible through appropriate regulatory or judicial proceedings and MidAmerican's decision to retain Board authority to determine appropriate rate treatment for the transmission assets owned by MidAmerican that are voluntarily committed to MISO's control pursuant to these reorganization proceedings are expressly accepted by the Board and made a part of this order. (Tr. 47-48, 114).

#### **CHANGES TO THE PROPOSAL**

The Board understands that to date no material conditions or changes to MidAmerican's proposal have been imposed by any other state or federal agency reviewing this reorganization. The Board will reach its conclusions based upon the reorganization proposal submitted to it and the record as it stands at this time. Any material changes in the proposed reorganization may change the basis for the conclusions the Board has reached and may require submission of a revised proposal. Therefore, if there are any material changes to the proposed reorganization prior to final closing, MidAmerican will be required to file a copy of those changes with the Board, including an analysis of the impact of the changes. The Board will then determine whether a new proposal for reorganization must be filed.

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### **CONCLUSION**

Based upon the testimony and evidence filed pursuant to Iowa Code §§ 476.76 and 476.77 (2011) and 199 IAC 32, the Board finds that MidAmerican has established the proposed reorganization is not contrary to the interests of ratepayers and the public interest. The Board also finds the other statutory factors are satisfied. Therefore, the reorganization proposed by MidAmerican will be permitted to take place by operation of law and this docket will be terminated. The Board will recommend to FERC the change to the transmission and distribution delineation requested by MidAmerican.

### **ORDERING CLAUSES**

#### **IT IS THEREFORE ORDERED:**

1. Docket No. SPU-2011-0005 is terminated. The application for reorganization filed by MidAmerican Energy Company on June 15, 2011, is not disapproved.
2. MidAmerican's delineation of transmission and distribution facilities as set forth in this docket is recommended by the Board to FERC at this time pursuant to Order 888, but the Board specifically reserves the right to recommend different delineations if changes in facts and circumstances so warrant.
3. MidAmerican Energy Company shall promptly file with the Board any material changes to the proposed reorganization that occur prior to final closing or

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consummation of the reorganization. Any filing shall include an analysis of the impact of any changes.

4. Motions and objections not previously granted or sustained are denied or overruled. Any argument not specifically addressed in this order is rejected either as not supported by the evidence or as not being of sufficient persuasiveness to warrant comment.

**UTILITIES BOARD**

/s/ Elizabeth S. Jacobs

/s/ Darrell Hanson

ATTEST:

/s/ Joan Conrad  
Executive Secretary

Dated at Des Moines, Iowa, this 12<sup>th</sup> day of September 2011.

**UNITED STATES OF AMERICA**  
**BEFORE THE**  
**FEDERAL ENERGY REGULATORY COMMISSION**

**MidAmerican Energy Company**                    )     **Docket No. EL12-\_\_\_\_\_**

**NOTICE OF PETITION FOR DECLARATORY ORDER**

Take notice that on April 20, 2012, MidAmerican Energy Company ("MidAmerican") filed a petition for declaratory order approving proposed re-delineation and re-classification of its electric facilities between transmission and local distribution.

Any person desiring to intervene or to protest this filing must file in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. §§ 385.211 and 385.214. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a notice of intervention or motion to intervene, as appropriate. The Respondent's answer and all interventions, or protests must be filed on or before the comment date. The Respondent's answer, motions to intervene, and protests must be served on the Complainants.

The Commission encourages electronic submission of protests and interventions in lieu of paper using the "eFiling" link at <http://www.ferc.gov>. Persons unable to file electronically should submit an original and 14 copies of the protest or intervention to the Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426.

This filing is accessible on-line at <http://www.ferc.gov>, using the "eLibrary" link and is available for review in the Commission's Public Reference Room in Washington, D.C. There is an "eSubscription" link on the web site that enables subscribers to receive email notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please email [FERCOnlineSupport@ferc.gov](mailto:FERCOnlineSupport@ferc.gov), or call (866) 208-3676 (toll free). For TTY, call (202) 502-8659.

Comment Date: 5:00 pm Eastern Time on (insert date).

Kimberly D. Bose  
Secretary