BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF SOUTH DAKOTA

IN RE:		
MIDAMERICAN ENERGY COMPANY	**)**	
	)	
Proposed general increase in electric rates.	**)**	**DOCKET NO. EL14-____**
	)	
	)	

DIRECT TESTIMONY
OF
DEAN A. CRIST

Q. Please state your name and business address.

A. My name is Dean A. Crist. My business address is 666 Grand Ave., Des Moines, Iowa 50309.

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

A. I am Vice President of Regulation for MidAmerican Energy Company ("MidAmerican" or "Company").

Q. Please describe your education and business experience.

A. I received a Bachelor of Science degree in Electrical Engineering from Iowa State University in 1978. From 1978 to 1983, I worked for Stanley Consultants, Inc., in Muscatine, Iowa, as a Lead Engineer or Technical Manager on various power supply, transmission planning, and financial studies. From 1983 to 1987, I held several positions of increasing responsibility at R. W. Beck & Associates in Phoenix, Arizona, achieving the title of Supervisor of the Transmission, Power Supply, and System Planning Department. My work at R. W. Beck included transmission planning, power supply, and power contract analyses.

In 1987, I joined Iowa Power and Light Company ("Iowa Power"), a predecessor of MidAmerican, as a Senior Electrical Supply Planner. In 1988, I was promoted to Director of Generation Marketing and Interconnections with responsibility for relationships with Iowa Power's interconnected utilities and bulk power marketing. In May 1990, I was promoted to Manager, Electric Energy Supply and Marketing where I managed Iowa Power's system operations and had responsibility for day-to-day operation of Iowa Power's generation and transmission system as well as energy scheduling and accounting. In addition, I was responsible for power and energy transactions with other utilities, bulk power marketing, transmission service agreements and interconnection agreements.

In August 1992, I was named Manager of Interutility Marketing for Midwest Power Systems Inc. (a successor to Iowa Power and a predecessor of MidAmerican). In this position, I was responsible for bulk power marketing, transmission service agreements and interconnection agreements. In August 1996, I was named Manager of Bulk Power Services for MidAmerican. The responsibilities of this position involved overseeing the economic dispatch of MidAmerican's generating units and the associated energy scheduling, trading and accounting activities. In April 1999, I was named Vice President - Generation with responsibility for the financial and operating performance of MidAmerican's regulated generating assets. From July 1, 2000 through December 31, 2001, I served as Senior Vice President overseeing all MidAmerican generation and delivery operations. From January 1, 2002 through March 31, 2006, I was Vice President – Regulatory Projects with specific responsibility for developing financially and operationally sound strategies to address regulatory and legislative actions and developing strategies for electric and gas rates that produce an adequate return on investment consistent with cost, environmental, and legislative and regulatory mandates.

On April 1, 2006, I was promoted to my current position with oversight of regulatory matters, legislative affairs and energy efficiency.

Purpose of Testimony

Q. What is the purpose of your direct testimony?

A. The purpose of my testimony is to provide an overview of current MidAmerican electric rates in South Dakota, to describe MidAmerican's rate application and to summarize the reasons for the request. I also introduce other MidAmerican witnesses.

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

A. Yes. I am sponsoring the following exhibit:

- Exhibit DAC 1.1 Schedule 1 Average Retail Price per kWh

Overview of Current Electric Rates

Q. Please provide an overview of the operations of MidAmerican.

A. MidAmerican is a multijurisdictional utility engaged in generating, transmitting and distributing electricity in portions of South Dakota, Iowa and Illinois and in distributing natural gas in portions of South Dakota, Iowa, Illinois and Nebraska.

Q. Please describe MidAmerican's South Dakota electric service territory.

A. MidAmerican has 4,440 electric customers in South Dakota as of the end of 2013. These customers are located in the vicinities of Dakota Dunes, North Sioux City and several smaller communities in southeastern South Dakota.

Q. Please provide an overview of MidAmerican's current South Dakota electric rates.

A. MidAmerican’s base electric rates were last increased in South Dakota in 1995, nearly 19 years ago. This has resulted in long-term rate stability for our customers.

Based on the Edison Electric Institute (“EEI”) 2014 winter typical bill and average rate report, MidAmerican’s overall average South Dakota retail electric rates, including the base rates and the energy adjustment clause, are the lowest nationally among rate-regulated utilities at an average of approximately 5.6 cents per kilowatt-hour. Based on the EEI report, MidAmerican’s residential rates, 7.2 cents per kilowatt-hour, are also the lowest nationally, while industrial rates, 4.4 cents per kilowatt-hour, are the second lowest in the nation. Exhibit DAC 1.1 Schedule 1 provides a comparison of MidAmerican’s South Dakota electric rates to the national and regional average for investor-owned utilities in addition to rates of specific utilities. As you can see, MidAmerican compares very favorably and we intend to continue to be a low-cost provider after the rate increase and well into the future. In fact, if the Commission approves MidAmerican’s rate increase request, MidAmerican’s South Dakota electric rates will be the second lowest in the nation compared to the rates of other rate-regulated utilities at this time.

This long-term rate stability has been beneficial to our customers as they plan their budgets and as larger customers look at plant expansions and locating new facilities in our service territory. All of this enhances economic development and job creation. It also has led to high customer satisfaction.

Q. Briefly describe customer benefits during this long-term rate stability period.

A. Rate stability has resulted in many customer benefits, including:

1. From 1995 through 2012, MidAmerican placed into service the Greater Des Moines Energy Center[1]in 2004, Walter Scott Jr. Energy Center Unit 4[2] in 2007, and over 2,200 MW of wind generation without increasing rates. These generation assets have been depreciated for several years before being reflected in rates. For example, the asset balance for the Greater Des Moines Energy Center in the revenue requirement calculated in this filing has been reduced by approximately 10 years of depreciation.

2. The substantial added wind generation has improved MidAmerican's flexibility to deal with increased environmental regulation of fossil fuel generation as discussed later in my testimony.

3. MidAmerican's desire to provide long-term rate stability has encouraged MidAmerican to pursue and achieve cost reductions and operational efficiencies while benefitting customers, resulting in a balanced outcome for stakeholders and the Company.

4. MidAmerican has maintained stable rates despite incurring significant costs to protect assets and to address customer service issues resulting from significant weather-related and flooding events.

Q. What evidence do you have that supports your claim of a high level of customer satisfaction?

A. The results of multiple recent customer satisfaction surveys indicate that customer satisfaction with MidAmerican remains high. On February 12, 2014, J.D. Power and Associates announced the results of its 2014 electric utility business customer satisfaction study, and for the second time in three years, MidAmerican ranked highest in the Midwest Region-Large Segment. In research conducted by Market Strategies International ("MSI"), MidAmerican

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[1] 485 MW combined cycle unit southeast of Des Moines, Iowa. (summer rating)

[2] 534 MW supercritical coal fueled unit near Council Bluffs, Iowa. (summer rating, MEC share only - 59.66%)

consistently ranks among the top utilities in the MSI benchmark. In June 2014, 93% of residential customers surveyed gave MidAmerican a positive score on "overall customer satisfaction," resulting in a ranking of second place out of 104 utilities. In that same study, 95% of commercial customers surveyed gave MidAmerican a positive score on that same measure, netting a ranking of second out of 94 utilities.

Proposed Rate Relief

Q. What rate relief is MidAmerican requesting?

A. MidAmerican is requesting an increase in annual revenues of $1.6 million, or approximately an increase of 13.8%.

Q. Are there steps customers can take to cope with the rate increase?

A. Yes, there are. We encourage all customers to look at the many ways to reduce energy usage and manage their bills offered through our energy efficiency programs. MidAmerican began offering energy efficiency programs in South Dakota in 2009. Today, MidAmerican conducts energy efficiency programs in South Dakota pursuant to MidAmerican's Revised Energy Efficiency Plan filing for South Dakota, as approved by the Commission on November 27, 2012, in Docket No. GE12-005. Currently, MidAmerican offers seven different energy efficiency programs to South Dakota customers. Five are combination electric/gas programs and two are electric only programs. The programs included are Residential Equipment, Residential Audit, Residential Load Management, Appliance Recycling, Nonresidential Equipment, Nonresidential Custom and Small Commercial Audit.

Additionally, we encourage customers to contact our customer satisfaction group to receive advice on ways to manage energy costs, such as budget billing and possible assistance to those that qualify.

<u>Factors Necessitating Rate Relief</u>

Q. Please describe why MidAmerican is requesting an increase in customer rates.

A. Current base electric rates are based on 1995 business-related expenses and need to be updated for such components as wages and benefit costs, costs to maintain and operate generation and delivery facilities and investments in generation, transmission and distribution. I mentioned above construction of the Walter Scott, Jr. Energy Center Unit 4, Greater Des Moines Energy Center and the wind generation projects**.** In addition, MidAmerican has undertaken the construction of scrubbers and other environmental improvements to its existing coal-fired generators, Neal Energy Center Units 3 and 4, Walter Scott, Jr. Energy Center 3 and the Ottumwa Generating Station ("OGS"). OGS is a jointly-owned generating unit with Interstate Power and Light Company as the plant operator.

Q. Can you provide examples of how these components of the costs of electric service you mention have changed since the mid-1990s?

A. Yes. For example, below is a list of changes in dollars and percentages from 1995 to 2013 by selected business categories:

- Generation plant - $37 million (+711%)

- Our South Dakota electric service territory has seen growth which has resulted in the construction of distribution plant, such as the new Dakota Dunes distribution substation and hundreds of extensions to new homes and premises in South Dakota. Delivery structures and stations – $10 million (+201%)
- Generation operation and maintenance expense (excluding fuel) - $1.9 million (+147%)

Q. You mention above MidAmerican's investment in wind generation as well as in environmental controls on coal-fired plants. Why has MidAmerican pursued a diversified generation approach?

A. We believe it is in the customers' best interest to have a portfolio of generation that is not tied to a single source of fuel and that can be built while providing rate stability. There is tremendous customer benefit especially in constructing non-carbon generating facilities such as the wind facilities described above to meet environmental requirements as described later in my direct testimony. In addition, South Dakota customers have directly benefited from lower energy costs through the electric Energy Cost Adjustment clause ("ECA") due to adding an essentially zero-cost energy source to the mix. This customer benefit first occured when the wind facilities were put into service, which is well before the time that (up to 10 years prior for the first MidAmerican wind facilities) the facilities will be reflected in rates as a part of rate base in this rate case.

Q. Please further describe the extent of MidAmerican's investment in wind generation facilities constructed during this time of rate stability.

A. MidAmerican is number one in the nation for ownership of wind generation among rate regulated utilities. Through 2012, over 2,200 MW were constructed under various Iowa Utilities Board ("Iowa Board") approvals[3]. In August 2013, the Iowa Board approved construction of an additional 1,050 MW of wind generation in Iowa in Docket No. RPU-2013-0003. Approximately 44 MW of the wind generation capacity approved in 2013 was placed in service in that year, with approximately half of the remaining approved wind projects to be completed in 2014 and the other half in 2015.

Q. Did MidAmerican install these wind power facilities to meet mandated Iowa renewable portfolio standards?

A. No. The wind power facilities constructed were justified based on considerable customer benefits, including benefits to South Dakota customers. They were not required to meet any renewable energy standards.

Q. Is MidAmerican requesting the same return on equity on these wind power facilities as approved in Iowa?

A. No. In the Iowa proceedings referenced in my footnote 3, the Board established the costs of those facilities, including a rate of return on equity, when they are reflected in Iowa retail rates. MidAmerican is not requesting the same return on equity for wind power facilities as established by the Iowa Board. Instead,

[3] Iowa Utilities Board Docket Nos. RPU-03-1, RPU-04-3, RPU-05-4, RPU-07-02, RPU-08-2, RPU-08-4 and RPU-2009-0003. In its approval process the Iowa Utilities Board makes a determination of whether an investment is reasonable when compared to other alternatives and also establishes the costs and ratemaking principles to apply when the investment is included in Iowa rates.

MidAmerican requests the Commission apply the same return on equity as is granted other rate base items approved as a result of this case.

Q. You indicated that some wind generation facilities will not be in service until later in 2014 and 2015. Yet, the testimony of Company witness Mary Jo Anderson reflects the costs of these projects in rate base. Why has MidAmerican included all of the 2014 and 2015 wind projects in rate base in this case?

A. We believe these costs are known and measurable. As mentioned, MidAmerican has received Iowa Board approval to construct 1,050 MW of wind power facilities in the 2013-2015 time period. We know the locations and all projects are being constructed under fixed price turbine supply and balance of plant contracts and are under construction. From our considerable experience in constructing, operating and owning thousands of megawatts of wind turbines, we are also confident of the cost.

Q. You testify that you are including the costs of this new plant in the proposed rate base. Are you excluding any generation related costs?

A. Yes. MidAmerican expects to retire certain of its smaller coal-fired generators in the near future. Those costs are removed from the proposed revenue requirement in order to provide symmetry to the inclusion of all of the new wind projects through 2015 in rate base and also to reflect the plant investment that will be in use after final rates resulting from this case take effect. MidAmerican has removed from rate base costs associated with four coal-fueled facilities located near Council Bluffs (Walter Scott Energy Center Units

1 and 2) and near Sioux City, Iowa (Neal Energy Center Units 1 and 2) even though these units may not be retired until 2015 or 2016. These units are being retired due to the federal Mercury and Air Toxics air quality standards.

This balanced approach addresses these significant generation changes upfront, all at once, without a need for a future rate case.

Q. You mention above that MidAmerican has made substantial investments in environmental improvements to its coal-fired generation. Please further describe these costs.

A. Just in the last few years, environmental compliance related investments have exceeded $400 million (total company). The Company has acquired, installed and operated scrubber and baghouse units and other required environmental equipment at Louisa Generating Station, Walter Scott Jr. Energy Center Unit 3 and Neal Energy Center Units 3 and 4. Interstate Power and Light Company is adding similar equipment by December 23, 2014 to OGS, in which MidAmerican owns a 52% share. All of this is required to meet environmental regulations.

Q. How do these investments position the Company to meet the Environmental Protection Agency's ("EPA") proposed regulations for existing units?

A. MidAmerican appears to be relatively well positioned to meet the proposed requirements based on these environmental investments at existing plants, wind generation being constructed, unit retirements as described above and energy efficiency savings described in more detail earlier in my testimony. However, the final cost of complying with the EPA's proposal will depend on whether there are any substantial changes between the elements of the proposed and final requirements, as well as how states implement the rule.

<u>Adjustment Clauses</u>

Q. Are there any other aspects of the rate relief request you would like to address?

A. Yes, MidAmerican is requesting changes to its ECA and is proposing establishment of a Transmission Cost Recovery ("TCR") clause.

Q. Please generally describe MidAmerican's proposed treatment of energy related costs and revenues in this application.

A. MidAmerican is proposing to change the existing retail ECA in this application. As described by MidAmerican witness Debra L. Kutsunis, the ECA presently in effect is designed to remove the fuel and purchased power costs related to South Dakota jurisdictional sales from base rates and recover such costs through the ECA. Additionally, we propose to include consumable chemical costs used in environmental control equipment and, for the benefit of customers, apply pre-tax-level federal production tax credits ("PTCs") related to the wind facilities and 90 percent of renewable energy credit ("REC") sales to offset some of these costs. It is my understanding that these changes will align MidAmerican's new ECA with similar adjustments of other South Dakota electric utilities.

The PTC is a federal tax credit that currently amounts to approximately $0.023 per kilowatt-hour produced (after tax value). A REC represents one megawatt-hour of renewable energy attributes, i.e. property rights to the environmental, social, and other non-power qualities, of renewable electricity generation. A REC can be sold separately from the underlying physical electricity associated with a renewable-based generation source.

Q. Why is it appropriate to include PTCs and RECs in the ECA?

A. MidAmerican views PTCs and REC revenues as customer benefits. The most direct way of providing customers with these benefits is to flow the PTCs and REC revenues for all wind facilities included in rate base through the ECA. Consistent with the treatment of RECs in rates of other South Dakota utilities, MidAmerican proposes to flow 90 percent of REC revenues through the ECA, retaining the additional 10 percent as an incentive. As discussed further in the testimony of MidAmerican witness Kutsunis, levels of these credits and revenues will fluctuate significantly and including them in an adjustment clause will help ensure customers receive appropriate levels of benefits.

Q. Please generally describe MidAmerican's proposed treatment of transmission related costs and revenues in this rate case.

A. The TCR clause is described in greater detail by Company witnesses Dehn Stevens and Debra Kutsunis. Transmission-related costs and revenues fall into three distinct categories: (1) costs and revenues related to facilities constructed by MidAmerican to serve its retail load; (2) transmission service-related administrative costs assessed by the Midcontinent Independent System Operator, Inc. ("MISO"); and (3) regional transmission service costs assessed by MISO related to transmission facilities built in whole or in substantial part to serve regional needs. In this case, a transmission cost adjustment is proposed that will remove from base rates and allow automatic adjustment for recovery of MISO transmission costs incurred to provide retail service, which are those included in categories (2) and (3) above. The costs and revenues associated with MidAmerican's transmission investment for retail load will remain a component of base rates, including any additional costs associated with new investment or upgrades to transmission facilities used to serve retail load. The costs and revenues associated with MidAmerican's investment in regional transmission facilities will not be included in base rates.

MidAmerican is in the process of implementing transmission adjustment mechanisms in each of its retail jurisdictions.[4] The TCR clause proposed in this case follows the model to be used in the state of Iowa. As Company witness Stevens explains in supporting the TCR clause, as a matter of regulatory policy, MidAmerican believes it is appropriate to use the same tracker in states with adjacent and closely-connected service territories. Mr. Stevens further explains in his testimony why it is appropriate to retain retail load transmission costs and revenues as a component of base rates and also explains why it is appropriate to not include regional transmission investments in base rates. He also provides a detailed explanation of the operation of the TCR clause in his testimony. Ms. Kutsunis supports the TCR clause tariff.

[4] The Iowa Board approved a comparable TCA clause for MidAmerican in its general rate case Docket No. RPU-2013-0004. In late 2013, MidAmerican filed a general rate case with the Illinois Commerce Commission, docketed as Docket No. 14-0066. The state of Illinois has retail access. An uncontested part of that rate case is Rider TS, which segregates all transmission costs incurred by MidAmerican into a single charge that is required to be paid in order to purchase bundled retail service from MidAmerican.

Q. Why is it appropriate to include the TCR clause as a component of MidAmerican electric rates at this time?

A. MidAmerican believes the legislature's enactment of SDCL 49-34A-25.1-25.4 and the Commission's actions to adopt adjustment clauses for new or modified transmission facilities appropriately reflect the recent growth in demand for transmission facilities and cost incurrence by electric utilities. The Midwest has experienced many years of relatively minimal additions to the transmission grid while at the same time experiencing large growth in wind generation, additions of thermal generation, and modest load growth, resulting in a pent-up demand for transmission. As a result, a number of significant regionally cost-allocated projects have been approved through the MISO planning process. MidAmerican begins incurring its share of costs for the regionally-allocated facilities as soon as the utilities constructing such facilities are able to include the costs of such projects in MISO rates, which in many cases is prior to the facilities actually being in operation. These costs are the product of rates designed by MISO and costs to construct incurred by other MISO members, and thus are beyond the control of MidAmerican management and are subject to variation in level. MISO also imposes a number of other transmission-related costs on MidAmerican, including administrative costs and regulatory costs. A TCR is needed to ensure timely recovery of these costs that are not within MidAmerican's control.

Q. With the adjustment clauses mentioned above, does MidAmerican still have an incentive to operate as efficiently as possible?

A. Absolutely. First, let me emphasize that I do not see MidAmerican changing the way it has approached the business of providing reasonable cost, reliable electricity to its customers just because adjustment clauses are being used.

Second, factors beyond MidAmerican's control influence these costs.

Third, MidAmerican is not assured that these clauses will remain as structured in this case in the future.

Fourth, and perhaps most importantly, MidAmerican needs to remain a low cost provider for the economy of its service area to grow and jobs to be increased. If MidAmerican's service area does well economically, MidAmerican will do well financially. MidAmerican has the lowest average retail rates in the nation when compared to other investor-owned utilities and has every intention of remaining a low cost provider even after this rate case. In fact, if the Commission approves MidAmerican's rate increase request, MidAmerican's South Dakota electric rates will be the second lowest in the nation when compared to the rates of other rate-regulated utilities at this time.

Summary of Testimony in Support of the Filing

Q. Please identify the other witnesses presenting testimony in support of the Company's filing.

A. The following witnesses will also be providing testimony on behalf of MidAmerican:

Rick R. Tunning is Manager – Corporate Accounting for MidAmerican. His testimony supports the overall revenue requirement, the test year operating income, the capital structure, and related pro forma adjustments.

Mary Jo Anderson is Senior Technical Accountant – Property Accounting for MidAmerican. Her testimony supports plant balances, rate base adjustments and plant-related pro forma adjustments.

Dr. James Vander Weide is President of Financial Strategy Associates, a firm that provides strategic and financial consulting services to clients in the electric, gas, insurance, telecommunications, and water industries. His testimony supports the determination of an appropriate allowed return on equity.

Charles B. Rea is Manager, Regulatory Strategic Analysis for MidAmerican. In his testimony, Mr. Rea supports the weather normalization pro forma adjustment, cost of service model and rate calculations and development of rate components.

Debra L. Kutsunis is Manager, Regulated Pricing for MidAmerican. Her testimony provides a detailed description of the TCR, changes to the ECA, tariff terms and conditions, rate case expense and cash working capital.

Dehn A. Stevens is Manager, Transmission Services for MidAmerican. His testimony provides a detailed description of the costs and revenues associated with the MidAmerican transmission system and supports the transmission costs included in the TCR.

Q. Does that conclude your prepared direct testimony?

A. Yes, it does.