



MidAmerican Energy Company  
401 Douglas Street  
P.O. Box 778  
Sioux City, Iowa 51102  
(712) 277-7587 Telephone  
(712) 252-7396 Fax  
E-mail: [smstewart@midamerican.com](mailto:smstewart@midamerican.com)

Suzan M. Stewart  
Managing Senior Attorney

December 17, 2014

**FILED ELECTRONICALLY**

Ms. Patricia Van Gerpen  
Executive Director  
South Dakota Public Utilities Commission  
500 East Capitol Avenue  
Pierre, SD 57501

Re: 18 CFR 292.302  
Supplemental Filing

Dear Ms. Van Gerpen:

On June 27, 2014, MidAmerican Energy Company made its compliance filing pursuant to the above-captioned requirement of the regulations of the Federal Energy Regulatory Commission implementing the Public Utility Regulatory Policies Act. Enclosed herewith is a supplemental report which updates the avoided costs using a market dispatch approach which dispatches MidAmerican generating units against a market price simulating the Midcontinent Independent System Operator, Inc. market. Prior compliance filings calculated avoided costs based on MidAmerican generating costs alone. This supplemental filing also reflects current projections as of the above date.

Sincerely,

*/s/ Suzan M. Stewart*

Suzan M. Stewart  
Managing Senior Attorney

Encl.

**MidAmerican Energy Company**  
**Supplemental Informational Compliance Filing**  
**With the South Dakota Public Utilities Board as required by**  
**18 CFR 292.302**

**December 15, 2014**

MidAmerican Energy Company made its 2014 biennial filing on June 30, 2014 pursuant to 18 CFR 292.302. The purpose of this supplemental compliance filing is to re-state avoided energy cost information using a market-dispatch approach which dispatches MidAmerican generating units against a market price simulating the Midcontinent Independent System Operator, Inc. (MISO) market and then allocating the lowest production cost fuel resources to meet the retail energy requirement. Prior compliance filings calculated avoided energy costs based on MidAmerican generating units dispatched against MidAmerican retail energy requirements. This supplemental filing also reflects current projections as of the above date.

**18 CFR 292.302 (b) (1) The estimated avoided cost on the electric utility's system, solely with respect to the energy component, for various levels of purchases from qualifying facilities. Such levels of purchases shall be stated in blocks of not more than 100 megawatts for systems with peak demands of 1,000 megawatts or more. The avoided costs shall be stated on a cents per kilowatt-hour basis, during daily and seasonal peak and off-peak periods, by year, for the current calendar year and each of the next five years.**

Avoided energy costs for various levels of purchase from qualifying facilities based on MidAmerican's generating costs were estimated based on dispatching MidAmerican generating units against a market price simulating the MISO market, using a production costing model, PROMOD IV. The MidAmerican generating units selected to run in the particular hour are summarized by fuel type and the corresponding production cost, and then stacked hourly from lowest incremental production cost to highest incremental production cost (wind, nuclear, coal and natural gas) up the dispatch quantity required to meet the MidAmerican hourly retail energy requirement. The resulting average annual production costs of the fuel type expected to meet the retail energy need are provided. Tables of the resulting avoided energy costs by block for the 0 megawatt level through the 200 megawatt level for 2015 through 2020 are shown on Exhibit A, attached hereto and made a part hereof.

Five levels of purchases were evaluated: 0 megawatts, 50 megawatts, 100 megawatts, 150 megawatts and 200 megawatts. Avoided energy costs for 50 MW through 200 MW were calculated as the difference in energy costs between the specified level of purchase and no purchase. Avoided energy costs for levels of purchases below 50 MW were calculated using linear interpolation between the 0 MW and 50 MW values. MidAmerican's costs were based on current and committed generating units and forecasts of fuel and variable operation and maintenance costs through 2020. MidAmerican is expecting to retire four coal-fired generating units in 2015 and 2016 and add Wind projects

VIII (1,051 MW nameplate) and, depending upon final approvals, Wind IX (161 MW nameplate) in December 2015 along with a 484 MW intermediate resource equivalent arrangement in January 2020.

The avoided energy cost calculations were made for the summer and winter seasons for each year. The summer season is June through September, with all other months in each year in the winter season. The on-peak periods are weekdays from hour ending 7:00 A.M. to 10:00 P.M. All other hours are off-peak.

The forecast firm peak demand and system net requirements for regulated native load customers used in the calculation of avoided energy costs are shown in the following table.

Year	Firm Summer Peak (MW)	Firm Winter Peak (MW)	System Net Requirements (MWh)
2015	4,611	3,799	25,271,000
2016	4,829	3,979	26,637,300
2017	4,944	4,074	27,416,100
2018	4,990	4,111	28,046,800
2019	5,040	4,153	28,402,300
2020	5,091	4,195	28,677,300

Purchases of firm capacity and energy during the six-year period from 2015 through 2020 are a result of a power purchase contract for the output of a 112.5 MW (nameplate) wind farm expiring November 2019 and two behind the MISO meter purchase contracts; a 20 MW (nameplate) wind farm and a 6 MW (nameplate) methane landfill producer:

Year	July Accredited (MW)	Annual Energy (MWh)
2015	21	333,800
2016	21	343,600
2017	21	341,700
2018	21	341,400
2019	21	320,300
2020	10	118,300

MidAmerican is currently constructing and expected to put into service in 2014 (558 MW) of wind generation and an additional 654 MW in December of 2015. Six new wind sites are being developed or planned; Vienna II 45 MW in-service December 2013; Wellsburg 140 MW with a projected in-service date of December 2014; Macksburg 122 MW with a projected in-service date of December 2014; Lundgren 251 MW with a projected in-service date of December 2014; Highland 502 MW with a projected in-service

date of December 2015; and Adams County 152 MW with a projected in-service date of December 2015. All MW listed in this paragraph for wind sites are nameplate capacity. The Wind IX projects of 161 MW are subject to final IUB approval. MidAmerican expects to retire 119 MW of coal-fired generating capability in April 2015 (WSEC 1 and WSEC 2) and 401 MW of coal-fired generating capability in April 2016 (Neal 1 and Neal 2). A 484 MW intermediate resource equivalent arrangement is projected in January 2020. These additions and retirements were included in the 2015-2020 avoided energy cost forecast.

**18 CFR 292.302 (b)(2) The electric utility's plan for the addition of capacity by amount and type, for purchases of firm energy and capacity, and for capacity retirements for each year during the succeeding 10 years.**

<b>Year</b>	<b>Coal Unit Capacity Additions (MW)</b>	<b>Natural Gas Fired Unit Capacity Additions (MW)</b>	<b>Wind Project Capacity Additions (MW)</b>	<b>Coal Unit Capacity Retirements (MW)</b>
<b>2015</b>	25.9	-	-	119.3
<b>2016</b>	-	-	-	400.8
<b>2017</b>	-	-	-	-
<b>2018</b>	-	14.5	-	-
<b>2019</b>	-	14.5	112.0	-
<b>2020</b>	-	484.0	-	-
<b>2021</b>	-	-	-	-
<b>2022</b>	-	-	-	-
<b>2023</b>	-	-	-	-
<b>2024</b>	-	-	-	-

- MW Capacity Ratings are MISO ICAP Ratings. Capacity is reflected in the calendar year of the first summer after the change occurs and reflects the value of firm transmission service MidAmerican is expected to receive.
- There are no new units planned other than the Wind Projects in 2014 and 2015.
- 2019 Wind Capacity assumes a MISO Applied Capacity Rating of 13.3%.
- The additions shown in 2015-2020 represent turbine upgrades to existing generating units, net of environmental compliance excluding the new wind facilities The 2020 natural gas addition is a projected intermediate resource equivalent.

**18 CFR 292.302 (b)(3) The estimated capacity costs at completion of the planned capacity additions and planning capacity from purchases, on the basis of dollars per kilowatt, and the associated energy costs of each unit, expressed in cents per kilowatt-hour. These costs shall be expressed in terms of individual generating units and of individual planned firm purchases.**

MidAmerican continually reviews its capacity needs. This review includes the forecast of load growth, demand side management programs, renewable capacity availability, a review

of new regional capacity additions and Federal Energy Regulatory Commission (FERC) orders including those relative to transmission ownership and economic costs.

MidAmerican has used the economic carrying charges on a new combustion turbine to calculate its long-term avoidable capacity cost. Using this methodology, the annual cost in 2014 is \$85.83/kW. The installed cost of the combustion turbine unit with a summer capacity of 178 MW (210 MW nominal capacity rating) is \$867/kW based on the summer capacity rating and expressed in 2014 dollars. The determination by MISO in its annual calculation of the Cost of New Entry (CONE) filed with the FERC is the basis for the avoided cost calculation.<sup>1</sup>

The calculation of economic carrying charges and annual revenue requirements is based upon a weighted-average capital cost of 7.5%, an after tax discount rate of 6.47%, a 15 year tax life, tax-depreciation basis of 100%, book life of 30 years, and fixed operation and maintenance cost of \$8.58/kW/year in 2014 escalating at 2.0% per year. The present value of revenue requirements for the new combustion turbine is estimated to be \$1,479.74/kW installed in 2014.

The capacity prices in 2014 and 2015 are based on opportunity market prices within MISO. The Independent Market Monitor (IMM) for MISO calculated those prices for the MISO 2014-2015 Planning Resource Auction based on PJM Interconnection, L.L.C.'s Reliability Pricing Model (RPM), a capacity-market model designed to create long-term pricing signals based on making capacity commitments three years ahead. The 2014-2015 Base Residual Auction (BRA) cleared 147,974.4 MW of capacity at the RTO Resource Clearing Price of \$125.99/MW-day. Based on a MW-weighted average of the BRA (\$125.99/MW-day) and three incremental auctions of \$0.03/MW-day, \$25.00/MW-day and \$25.51/MW-day, an opportunity cost of \$25.06/MW-day and an adjustment downward to reflect a delivery cost from MISO to PJM, MidAmerican has assigned a market value of capacity of \$52.15/kW in 2014. Using the 2014-2015 IMM methodology, the rate for 2015 was determined to be \$56.58/kW.

The avoidable new generation capacity costs are as follows.

Year	Avoidable New Generating Capacity Costs (\$/kW/yr.)
2015	\$ 56.58
2016	\$ 89.30
2017	\$ 91.09
2018	\$ 92.91

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<sup>1</sup>The capacity price for a combustion turbine is based on MISO's CONE for the Local Resource Zone 3 (LRZ 3) in the September 3, 2013 letter to the FERC regarding "Filing of Midcontinent Independent System Operator, Inc. Regarding LRZ CONE Calculation; FERC Docket No. ER13-2310-000." The capacity price for LRZ 3 is \$704.50 in 2014 dollars. That capacity price was converted to a summer-based capacity price.

2019	\$ 94.77
2020	\$ 97.00

**MidAmerican Energy Company**  
**Avoided Energy Costs for Various Levels of Purchase from Qualifying Facilities**  
**Dollars Per MWH**

Year	2015						
	MW	Summer			Winter		
		Peak	Off-Peak	Season	Peak	Off-Peak	Season
	0	\$ 24.42	\$ 17.70	\$ 20.89	\$ 19.54	\$ 16.48	\$ 17.90
	10	24.33	17.70	20.85	19.48	16.42	17.84
	20	24.23	17.69	20.80	19.42	16.36	17.78
	30	24.14	17.69	20.75	19.37	16.30	17.72
	40	24.04	17.69	20.71	19.31	16.24	17.66
	50	23.95	17.68	20.66	19.26	16.18	17.61
	100	23.42	17.55	20.34	18.97	15.96	17.36
	150	22.96	17.46	20.07	18.61	15.75	17.08
	200	22.60	17.37	19.85	18.31	15.46	16.78

Year	2016						
	MW	Summer			Winter		
		Peak	Off-Peak	Season	Peak	Off-Peak	Season
	0	\$ 31.80	\$ 21.01	\$ 26.08	\$ 23.87	\$ 19.20	\$ 21.36
	10	31.74	21.00	26.05	23.77	19.14	21.28
	20	31.67	20.99	26.01	23.67	19.09	21.20
	30	31.61	20.98	25.97	23.57	19.03	21.12
	40	31.54	20.97	25.94	23.46	18.97	21.05
	50	31.48	20.96	25.90	23.36	18.92	20.97
	100	31.03	20.83	25.62	22.95	18.66	20.64
	150	30.82	20.70	25.46	22.46	18.33	20.24
	200	30.33	20.57	25.16	22.04	18.06	19.89

**MidAmerican Energy Company**  
**Avoided Energy Costs for Various Levels of Purchase from Qualifying Facilities**  
**Dollars Per MWH**

Year	2017						
	MW	Summer			Winter		
		Peak	Off-Peak	Season	Peak	Off-Peak	Season
	0	\$ 33.68	\$ 22.08	\$ 27.47	\$ 26.47	\$ 20.67	\$ 23.36
	10	33.62	22.07	27.43	26.39	20.61	23.29
	20	33.56	22.05	27.39	26.31	20.55	23.22
	30	33.50	22.03	27.36	26.22	20.49	23.15
	40	33.44	22.02	27.32	26.14	20.43	23.08
	50	33.38	22.00	27.29	26.05	20.37	23.00
	100	33.13	21.85	27.09	25.49	19.95	22.52
	150	32.81	21.81	26.92	24.95	19.53	22.04
	200	32.42	21.73	26.69	24.41	19.18	21.61

Year	2018						
	MW	Summer			Winter		
		Peak	Off-Peak	Season	Peak	Off-Peak	Season
	0	\$ 35.12	\$ 23.45	\$ 28.81	\$ 27.77	\$ 22.18	\$ 24.80
	10	35.05	23.44	28.77	27.69	22.11	24.73
	20	34.97	23.43	28.73	27.61	22.04	24.65
	30	34.89	23.42	28.69	27.54	21.96	24.58
	40	34.81	23.41	28.64	27.46	21.89	24.50
	50	34.73	23.40	28.60	27.38	21.82	24.43
	100	34.32	23.30	28.36	26.89	21.51	24.03
	150	34.10	23.12	28.16	26.48	21.16	23.66
	200	33.84	22.98	27.97	25.88	20.73	23.15

**MidAmerican Energy Company**  
**Avoided Energy Costs for Various Levels of Purchase from Qualifying Facilities**  
**Dollars Per MWH**

Year	2019						
	MW	Summer			Winter		
		Peak	Off-Peak	Season	Peak	Off-Peak	Season
	0	\$ 40.71	\$ 26.44	\$ 32.99	\$ 28.10	\$ 21.91	\$ 24.81
	10	40.54	26.35	32.86	28.04	21.84	24.75
	20	40.37	26.26	32.74	27.97	21.78	24.68
	30	40.19	26.17	32.61	27.90	21.71	24.61
	40	40.02	26.08	32.48	27.83	21.65	24.55
	50	39.85	26.00	32.35	27.76	21.58	24.48
	100	39.04	25.72	31.83	27.34	21.24	24.10
	150	38.21	25.48	31.32	26.98	20.86	23.73
	200	37.24	25.18	30.72	26.51	20.53	23.34

Year	2020						
	MW	Summer			Winter		
		Peak	Off-Peak	Season	Peak	Off-Peak	Season
	0	\$ 38.31	\$ 26.91	\$ 32.33	\$ 29.12	\$ 22.73	\$ 25.70
	10	38.18	26.85	32.24	29.04	22.66	25.62
	20	38.05	26.78	32.14	28.96	22.59	25.55
	30	37.93	26.72	32.05	28.89	22.52	25.47
	40	37.80	26.66	31.96	28.81	22.44	25.40
	50	37.67	26.60	31.86	28.73	22.37	25.33
	100	37.15	26.31	31.46	28.34	22.05	24.97
	150	36.69	25.85	31.00	27.88	21.66	24.55
	200	36.02	25.54	30.52	27.50	21.38	24.22