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Suzan M. Stewart Managing Senior Attorney

June 29, 2015

Elizabeth A. Rolando, Chief Clerk Illinois Commerce Commission 527 East Capitol Avenue Springfield, Illinois 62796

Re: Filing required by 83 Ill. Adm. Code

430.50(a)(3) and (4)

Dear Ms. Rolando:

Pursuant to the above-referenced rule, MidAmerican Energy Company (MidAmerican) submits the following data.

1. <u>Section 430.50(a)(3)(A)</u>: Estimates of coal, oil and gas usage on a BTU per year basis for the next five years from the current year.

Estimates of coal, oil and gas usage for the next five years are provided in the following table.

Year	Coal (MMBtu)	Oil (MMBtu)	Gas (MMBtu)
2015	178,933,200	255,600	3,421,600
2016	159,534,200	268,300	3,442,000
2017	153,379,800	259,900	3,346,300
2018	155,776,300	252,400	3,316,700
2019	192,173,500	268,700	9,181,000
2020	192,058,500	235,000	15,378,900

2. <u>Section 430.50(a)(3)(B)</u>: Estimates of coal, oil, and gas usage on a Btu per year basis for the current year made five years ago pursuant to the requirements of the Illinois Commerce Commission.

Year	Coal (MMBtu)	Oil (MMBtu)	Gas (MMBtu)
2015	166,182,800	100	682,300

3. Section 430.50(a)(3)(C): Actual oil and gas usage on a Btu per month basis for

the twelve calendar months ending at least at the end of the first quarter of the current year.

Actual oil and gas usage for the twelve calendar months ending at the first quarter of 2015 is provided in the following table.

Month	Oil (MMBtu)	Gas (MMBtu)
April 2014	9,522	84,246
May 2014	56,847	472,697
June 2014	22,810	87,857
July 2014	6,840	115,260
August 2014	7,961	390,283
September 2014	13,716	92,520
October 2014	22,829	76,702
November 2014	40,154	191,361
December 2014	8,092	140,382
January 2015	19,715	74,779
February 2015	7,372	75,602
March 2015	21,559	98,790

4. <u>Section 430.50(a)(4)</u>: On June 30, 1983, and not less than every two years thereafter, each electric utility shall examine and update the data required under subparagraphs (a)(1) of this Section. This data shall be filed with the Illinois Commerce Commission and be made available to all qualifying facilities.

a. <u>Section 430.50(a)(1)(A) and (B):</u> Data described in 18 CFR 292.302 (b).

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 retired two coal-fired generating units in

2015 and is expecting to retire two coal-fired generating units in 2016. Additions to the MidAmerican generating resources include Wind projects VIII (1,051 MW nameplate) and Wind IX (161 MW nameplate) to be completed in phases by 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)	(MW)	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:

	July Accredited	Annual Energy
Year	(MW)	(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 put into service in 2014 (558 MW) of wind generation and is constructing an additional 654 MW to be completed in December of 2015. Six new wind sites were developed; Vienna II 45 MW in-service December 2013; Wellsburg 140 MW inservice December 2014; Macksburg 122 MW in-service December 2014; Lundgren 251 MW inservice 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. MidAmerican retired 119 MW of coal-fired generating capability in April 2015 (WSEC 1 and WSEC 2) and expects to retire 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.

All of MidAmerican's generating units are included in the avoided cost calculations. However, costs for certain of MidAmerican's generating units have not been allocated to Illinois in accordance with Docket Nos. 03-0496 and 06-0736.

b. Section 430.50(a)(1)(C): Anticipated cogeneration levels and anticipated avoidable capacity costs.

MidAmerican receives energy from one small power producer in Illinois under Rate 57. The following schedule shows historical and projected MWh energy purchases by MidAmerican.

Year	Producer 1
2010	21
2011	408
2012	525
2013	0
2014	0
Projection	200

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 2015 is \$84.19/kW. The installed cost of the combustion turbine unit with a net summer capacity of 172 MW (210 MW nominal capacity rating) is \$903/kW based on the summer capacity rating and expressed in 2015 dollars. The determination by the Midcontinent Independent System Operator, Inc. (MISO) in its annual calculation of the Cost of New Entry (CONE) filed with the (FERC) is the basis for the avoided cost calculation ¹.

The calculation of economic carrying charges and annual revenue requirements is

¹ The capacity price for a combustion turbine is based on MISO's CONE for the Local Resource Zone 3 (LRZ 3) in the September 8, 2014 letter to the FERC, Filing of MISO regarding LRZ CONE Calculation; FERC Docket No. ER-14-2808-000. The capacity price for LRZ 3 is \$705.50 in 2014 dollars. That capacity price was converted to a summer-based capacity price.

based upon a weighted-average capital cost of 7.0%, an after tax discount rate of 6.20%, a 15 year tax life, tax-depreciation basis of 100%, book life of 30 years and fixed operation and maintenance costs of \$8.95/kW/year in 2015 escalating at 2.25% per year. The present value of revenue requirements for the new combustion turbine is estimated to be \$1,537/kW installed in 2015.

Economic carrying charges for the new combustion turbine are calculated by the formula:

$$ECC_{t} = k x(r-i) x \frac{(1+r)^{n}}{(1+r)^{n} - (1+i)^{n}} x(1+i)^{(t-1)}$$

Where:

ECC_t = Economic carrying charge in year "t"

k = Present value rate of revenue requirement

n = Expected life of investment

i = Inflation rate

r = Discount rate

The capacity price in 2015 is based on opportunity market prices within MISO. The Independent Market Monitor (IMM) for MISO calculated this price for the MISO 2015-2016 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 2015-2016 Base Residual Auction (BRA) cleared 164,561.2 MW of capacity at the RTO Resource Clearing Price of \$136.00/MW-day. Based on a MW-weighted average of the BRA (\$136.00/MW-day) and three incremental auctions of \$43.00/MW-day, \$136.00/MW-day and \$163.20/MW-day, an opportunity cost of \$27.19/MW-day and an adjustment downward of \$7.79/MW-day to reflect a delivery cost from MISO to PJM, MidAmerican has assigned a market value of capacity of \$56.85/kW in 2015.

The avoidable new generation capacity costs are as follows.

Year	Avoidable New Generating Capacity Costs (\$/kW/yr.)
2015	\$ 56.85
2016	\$ 86.08
2017	\$ 88.02
2018	\$ 90.00
2019	\$ 92.03
2020	\$ 94.10

A copy of this letter is being made available to all qualifying facilities having a contract with MidAmerican for service under tariff Rate No. 57.

The original and four copies of this letter are enclosed. Please date-stamp one copy of the letter Page 5 of 6

as "received" or "filed" and return it to me in the enclosed preaddressed, postage paid envelope.

Sincerely,

/s/ Suzan M. Stewart

Encl.

cc: City of Rock Island