

MIDAMERICAN ENERGY COMPANY

Forecasted MISO Costs

Total Company Electric Operations
Year Ending December 31, 2020

Line No.	Billing Determinant	Forecast Jan-20	Forecast Feb-20	Forecast Mar-20	Forecast Apr-20	Forecast May-20	Forecast Jun-20	Forecast Jul-20	Forecast Aug-20	Forecast Sep-20	Forecast Oct-20	Forecast Nov-20	Forecast Dec-20	Total
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
1	Days in Month	31	29	31	30	31	30	31	31	30	31	30	31	
2	Monthly Peak Demand (MW)	4,050	3,928	3,586	3,342	4,081	4,761	5,078	4,876	4,558	3,558	3,671	3,878	
3	Schedule 10 Demand Charge Rate (\$/MW-Hr)	\$0.05650	\$0.07820	\$0.06950	\$0.08970	\$0.08150	\$0.06820	\$0.06380	\$0.06690	\$0.06900	\$0.07190	\$0.07860	\$0.07430	
4	Schedule 10 - Demand Charge Component	<u>\$170,226</u>	<u>\$213,767</u>	<u>\$185,450</u>	<u>\$215,855</u>	<u>\$247,451</u>	<u>\$233,780</u>	<u>\$241,057</u>	<u>\$242,683</u>	<u>\$226,441</u>	<u>\$190,331</u>	<u>\$207,752</u>	<u>\$214,399</u>	
5	Monthly Energy (MWHr)	2,602,208	2,306,740	2,287,938	2,189,847	2,157,395	2,224,489	2,674,285	2,608,926	2,425,763	2,284,473	2,068,392	2,443,377	
6	Schedule 10 Energy Charge Rate (\$/MW-Hr)	\$0.07470	\$0.09640	\$0.08530	\$0.11050	\$0.11860	\$0.09940	\$0.09070	\$0.09400	\$0.10350	\$0.10310	\$0.10350	\$0.09700	
7	Schedule 10 - Energy Charge Component	<u>\$194,385</u>	<u>\$222,370</u>	<u>\$195,161</u>	<u>\$241,978</u>	<u>\$255,867</u>	<u>\$221,114</u>	<u>\$242,558</u>	<u>\$245,239</u>	<u>\$251,066</u>	<u>\$235,529</u>	<u>\$214,079</u>	<u>\$237,008</u>	
8	Total Schedule 10 Charge	<u>\$364,611</u>	<u>\$436,137</u>	<u>\$380,611</u>	<u>\$457,833</u>	<u>\$503,318</u>	<u>\$454,895</u>	<u>\$483,615</u>	<u>\$487,922</u>	<u>\$477,508</u>	<u>\$425,861</u>	<u>\$421,830</u>	<u>\$451,407</u>	<u>\$5,345,547</u>

Sources

- Line 2 MidAmerican Demand Forecast
- Line 3 Projected MISO 2020 Schedule 10 Demand rate
- Line 4 = Line 1 x 24 hrs/day x Line 2 x Line 3
- Line 5 MidAmerican Energy Forecast
- Line 6 Projected MISO 2020 Schedule 10 Energy rate
- Line 7 = Line 5 x Line 6
- Line 8 = Line 4 + Line 7

MIDAMERICAN ENERGY COMPANY

Forecasted MISO Costs
Total Company Electric Operations
Year Ending December 31, 2020

Line No.	Billing Determinant (a)	Forecast Jan-20 (b)	Forecast Feb-20 (c)	Forecast Mar-20 (d)	Forecast Apr-20 (e)	Forecast May-20 (f)	Forecast Jun-20 (g)	Forecast Jul-20 (h)	Forecast Aug-20 (i)	Forecast Sep-20 (j)	Forecast Oct-20 (k)	Forecast Nov-20 (l)	Forecast Dec-20 (m)	Total (n)
1	Days in Month	31	29	31	30	31	30	31	31	30	31	30	31	
2	Monthly Peak Demand (MW)	4,050	3,928	3,586	3,342	4,081	4,761	5,078	4,876	4,558	3,558	3,671	3,878	
3	Schedule 10 FERC Rate (\$/MW-Hr)	\$0.0530	\$0.0530	\$0.0530	\$0.0530	\$0.0530	\$0.0530	\$0.0530	\$0.0530	\$0.0530	\$0.0530	\$0.0530	\$0.0530	
4	Schedule 10 - FERC Charge	<u>\$159,681</u>	<u>\$144,881</u>	<u>\$141,422</u>	<u>\$127,540</u>	<u>\$160,919</u>	<u>\$181,677</u>	<u>\$200,251</u>	<u>\$192,260</u>	<u>\$173,933</u>	<u>\$140,300</u>	<u>\$140,087</u>	<u>\$152,936</u>	<u>\$1,915,887</u>

Sources

- Line 2 MidAmerican Demand Forecast
- Line 3 MISO Posted Schedule 10-FERC Rate for 2020
- Line 4 = Line 1 x 24 hrs/day x Line 2 x Line 3

MIDAMERICAN ENERGY COMPANY

Forecasted MISO Costs
Total Company Electric Operations
Year Ending December 31, 2020

Line No.	Billing Determinant (a)	Forecast Jan-20 (b)	Forecast Feb-20 (c)	Forecast Mar-20 (d)	Forecast Apr-20 (e)	Forecast May-20 (f)	Forecast Jun-20 (g)	Forecast Jul-20 (h)	Forecast Aug-20 (i)	Forecast Sep-20 (j)	Forecast Oct-20 (k)	Forecast Nov-20 (l)	Forecast Dec-20 (m)	Total (n)
1	Days in Month	31	29	31	30	31	30	31	31	30	31	30	31	
2	Monthly Peak Demand (MW)	4,050	3,928	3,586	3,342	4,081	4,761	5,078	4,876	4,558	3,558	3,671	3,878	
3	Schedule 26 FERC Rate (\$/MW-Month)	\$7.7237	\$7.7237	\$7.7237	\$7.7237	\$7.7237	\$7.7237	\$7.7237	\$7.7237	\$7.7237	\$7.7237	\$7.7237	\$7.7237	
4	Schedule 26 - Charge	<u>\$31,277</u>	<u>\$30,335</u>	<u>\$27,701</u>	<u>\$25,814</u>	<u>\$31,520</u>	<u>\$36,772</u>	<u>\$39,224</u>	<u>\$37,659</u>	<u>\$35,205</u>	<u>\$27,481</u>	<u>\$28,354</u>	<u>\$29,956</u>	<u>\$381,299</u>

Sources

Line 2 MidAmerican Demand Forecast
Line 3 MISO Posted Sch. 26 Transmission Rate for January 2020
Line 4 = Line 2 x Line 3

MIDAMERICAN ENERGY COMPANY

Forecasted MISO Costs

Total Company Electric Operations
Year Ending December 31, 2020

Line No.	Billing Determinant (a)	Forecast Jan-20 (b)	Forecast Feb-20 (c)	Forecast Mar-20 (d)	Forecast Apr-20 (e)	Forecast May-20 (f)	Forecast Jun-20 (g)	Forecast Jul-20 (h)	Forecast Aug-20 (i)	Forecast Sep-20 (j)	Forecast Oct-20 (k)	Forecast Nov-20 (l)	Forecast Dec-20 (m)	Total (n)
1	Monthly Energy (MWhr)	2,602,208	2,306,740	2,287,938	2,189,847	2,157,395	2,224,489	2,674,285	2,608,926	2,425,763	2,284,473	2,068,392	2,443,377	28,273,833
2	Schedule 26-A MVP Usage Rate (\$/MW-Hr)	1.42	1.60	1.56	1.79	1.72	1.62	1.33	1.44	1.55	1.64	1.60	1.53	1.56
3	Schedule 26-A Charge	<u>\$3,700,494</u>	<u>\$3,694,446</u>	<u>\$3,576,384</u>	<u>\$3,917,357</u>	<u>\$3,716,549</u>	<u>\$3,599,814</u>	<u>\$3,560,364</u>	<u>\$3,758,348</u>	<u>\$3,770,884</u>	<u>\$3,754,143</u>	<u>\$3,317,955</u>	<u>\$3,749,199</u>	<u>\$44,115,938</u>

Sources

Line 1 MidAmerican Energy Forecast
Line 2 MEC Estimated MISO 2019 Schedule 26-A MUR rate
Line 3 = Line 1 x Line 2

MIDAMERICAN ENERGY COMPANY

Multi-Value Project A&G Credit
Total Company Electric Operations
Year Ending December 31, 2020

<u>Line No.</u>	<u>Description</u> (a)	<u>Value</u> (b)
1	Rate Template Attachment MM Annual Allocation Factor for Other Expense	\$ 4,310,065
2	MidAmerican Energy Ratio as a Percentage of Total MISO Energy	0.057987
3	Allocation of Other Expenses to MidAmerican	<u>\$ 249,927</u>

Sources

Line 1: MidAmerican's 2020 Attachment MM Rate Template

Line 2: Calculation of MidAmerican's 2020 energy forecast divided by total MISO energy

Line 3: Line 1 x Line 2

Month	2020				
January	2,602,208	31	2,309,951	(292,257)	2602208
February	2,306,740	28	2,156,337	(150,403)	2306740
March	2,287,938	31	1,963,630	(324,308)	2287938
April	2,189,847	30	1,958,574	(231,274)	2189847
May	2,157,395	31	2,071,909	(85,486)	2157395
June	2,224,489	30	2,424,529	200,040	2224489
July	2,674,285	31	2,544,327	(129,958)	2674285
August	2,608,926	31	2,535,660	(73,266)	2608926
September	2,425,763	30	2,275,244	(150,519)	2425763
October	2,284,473	31	1,931,109	(353,365)	2284473
November	2,068,392	30	2,077,516	9,124	2068392
December	2,443,377	31	2,243,832	(199,546)	2443377
Total	28,273,833		26,492,618	(1,781,215)	28273833
Average	2,356,153		2,207,718		

Source: MidAmerican 2020 Net Energy for Load Forecast

Month	2020
January	4,050
February	3,928
March	3,586
April	3,342
May	4,081
June	4,761
July	5,078
August	4,876
September	4,558
October	3,558
November	3,671
December	3,878
Annual Peak	5,078
Average	4,114

Source: MidAmerican 2020 Monthly Peak Demand Forecast

Month	MNAEW 2013 (MWh)	MNAEW 2014 (MWh)	MNAEW 2015 (MWh)	MNAEW 2016 (MWh)	MNAEW 2017 (MWh)	MNAEW 2018 (MWh)	MNAEW 2019 (MWh)	MNAEW 2020 (MWh)	Monthly Load	Monthly Revenue Requirement	MUR
Jan	43,602,595	46,323,357	44,129,493	42,692,158	42,769,239	45,629,759	44,131,669	44,546,948	9.1%	\$63,348,404	1.422059
Feb	38,954,242	41,228,964	41,237,990	38,464,462	35,876,755	38,697,633	39,184,779	39,553,508	8.1%	\$63,348,404	1.601587
Mar	41,024,875	41,736,099	39,735,293	36,765,373	39,161,023	40,199,609	40,148,388	40,526,185	8.3%	\$63,348,404	1.563147
Apr	36,898,326	35,919,469	35,144,595	34,585,069	34,664,351	37,261,301	35,082,351	35,412,476	7.3%	\$63,348,404	1.788872
May	38,497,650	38,125,731	37,266,277	36,503,871	36,971,953	40,593,142	36,429,894	36,772,700	7.5%	\$63,348,404	1.722702
Jun	40,531,882	41,774,134	40,481,714	42,436,406	41,375,261	42,876,556	38,780,936	39,145,864	8.0%	\$63,348,404	1.618266
Jul	45,735,613	42,894,585	45,263,223	46,616,864	46,115,979	46,357,692	47,139,103	47,582,681	9.8%	\$63,348,404	1.331333
Aug	45,437,483	45,472,253	43,642,164	47,604,083	42,433,075	46,315,496	43,564,511	43,974,453	9.0%	\$63,348,404	1.440573
Sep	39,923,426	39,963,374	38,390,975	40,544,359	40,104,812	39,212,697	40,371,346	40,751,241	8.4%	\$63,348,404	1.554515
Oct	38,918,059	38,926,517	37,722,199	36,675,815	37,191,524	37,495,547	38,189,443	38,548,806	7.9%	\$63,348,404	1.643330
Nov	39,271,395	39,262,750	40,118,268	36,192,214	36,294,359	37,705,586	39,122,836	39,490,982	8.1%	\$63,348,404	1.604123
Dec	44,250,348	44,226,568	42,111,459	39,521,093	42,899,177	42,324,817	40,899,704	41,284,570	8.5%	\$63,348,404	1.534433
Total	493,045,894	495,853,801	485,243,650	478,601,767	475,857,508	494,669,834	483,044,960	487,590,413		\$760,180,843	1.559056

2020 Growth is 0.941% based on 2019 actual and average of LRZ 1 -7 EnergyGrowth Rates with Energy Efficiency Adjustment
From MISO Independent Load Forecast Study - Table ES-2. LRZ Metered Load Growth Rates (2020-2039)

Transmission Owner	NERC ID	Schedule 26-A	Schedule 26-A	Schedule 26-A	Adjustments for Attachment O	
		Annual Rev. Req.	True-Up Adjustment	Net Annual Rev. Req. ¹	Annual Incentive Return Charge	Schedule 26-A Rev. Req. for Attach O Line 30a
Ameren Illinois Company	AMIL	\$ 11,247,693	\$ 143,950	\$ 11,391,643		\$ 11,247,693
Ameren Transmission Company of Illinois	ATXI	\$ 183,051,462	\$ 3,411,806	\$ 186,463,268		\$ 183,051,462
American Transmission Company	ATC	\$ 36,604,942	\$ 3,367,612	\$ 39,972,554		\$ 36,604,942
Cedar Falls Utilities	CFU	\$ 522,286	\$ 16,025	\$ 538,311		\$ 522,286
Central Minnesota Municipal Power Agency	UPLS	\$ 6,601,177	\$ 3,871,359	\$ 10,472,536		\$ 6,601,177
Dairyland Power Cooperative	DPC	\$ 3,138,870	\$ 269,864	\$ 3,408,734		\$ 3,138,870
Duke Energy Indiana	CIN	\$ 313,091	\$ -	\$ 313,091		\$ 313,091
Great River Energy	GRE	\$ 15,507,450	\$ (547,848)	\$ 14,959,602	\$ -	\$ 15,507,450
International Transmission Company	DECO	\$ 76,802,702	\$ 6,556,889	\$ 83,359,591		\$ 76,802,702
ITC Midwest	ITCM	\$ 113,205,946	\$ 4,976,185	\$ 118,182,131		\$ 113,205,946
Michigan Electric Transmission Company	CONS	\$ 55,605	\$ 4,601	\$ 60,206		\$ 55,605
MidAmerican Energy Company	MEC	\$ 56,967,658	\$ 2,830,328	\$ 59,797,986		\$ 56,967,658
Missouri Rivers Energy Services	MRET	\$ 4,699,990	\$ 446,641	\$ 5,146,631		\$ 4,699,990
Montana-Dakota Utilities	MDU	\$ 13,053,008	\$ 203,054	\$ 13,256,062		\$ 13,053,008
Northern Indiana Public Service Company	NIPS	\$ 71,124,824	\$ 3,665,154	\$ 74,789,978		\$ 71,124,824
NSP Companies	NSP	\$ 74,709,470	\$ (891,479)	\$ 73,817,991		\$ 74,709,470
Otter Tail Power Company	OTP	\$ 23,336,525	\$ 127,905	\$ 23,464,430		\$ 23,336,525
Pioneer Transmission, LLC	PION	\$ 26,082,762	\$ 8,274,205	\$ 34,356,967		\$ 26,082,762
Southern Minnesota Municipal Power Agency	SMP	\$ 5,498,666	\$ -	\$ 5,498,666		\$ 5,498,666
WPPI Energy	WPPT	\$ 930,465	\$ -	\$ 930,465		\$ 930,465
TOTALS		\$ 723,454,592	\$ 36,726,251	\$ 760,180,843	\$ -	\$ 723,454,592

Note(s)

¹ Per Attachment MM-GRE Note G - the MVP annual revenue requirement is the value to be used in Schedule 26A & 39. Per Attachment MM-GRE Note I - annual incentive return charge is not included in Attachment O-GRE Page 3, Line 30a.