

REBUTTAL TESTIMONY

of

**Mike Luth
Rate Analyst**

Rates Department
Financial Analysis Division
Illinois Commerce Commission

**Reconciliation of Revenues collected under Gas Adjustment
Charges with Actual Costs Prudently Incurred**

Mid American Energy Company

Docket No. 01-0703

Revised

October 22, 2002

OFFICIAL FILE

ICC DOCKET NO. 01-0703

ICC STAFF EXHIBIT NO. 6.00

WITNESS

10/21/02 P.W.

Witness Identification

- 1 Q. Please state your name and business address.
- 2 A. Mike Luth, Illinois Commerce Commission ("Commission"), 527 East Capitol
3 Avenue, Springfield, Illinois 62701.
- 4 Q. Are you the same Mike Luth who pre-filed direct testimony on behalf of the
5 Commission Staff, identified as ICC Staff Exhibit 3.00?
- 6 A. Yes, I am.

Introduction to Testimony

- 7 Q. What is the subject matter of your rebuttal testimony?
- 8 A. In my rebuttal testimony, I am replying to the rebuttal testimony of MidAmerican
9 Energy Company ("MEC" or the "Company") witnesses Todd J. Kremer (MEC
10 Exhibit 4) and Thomas A. Gesell (MEC Exhibit 5), which was pre-filed on
11 September 19, 2002. Both Mr. Kremer and Mr. Gesell objected to the
12 adjustment to Rider 8 Imbalance Charge revenues from Cordova Energy Center
13 ("Cordova") that I recommend in my direct testimony.
- 14 Q. Are you sponsoring any schedules as part of your testimony?
- 15 A. Yes, I am sponsoring the following schedules:
- Schedule 1 Analysis of Imbalance Charges Waived at Cordova
Energy Center
 - Schedule 2 Analysis of Gas Supply Cost per therm

16 Q. Please explain Schedule 1, Analysis of Imbalance Charges Waived at Cordova
17 Energy Center.

18 A. Schedule 1 is the successor to the Schedule 1 that I pre-filed in direct testimony.
19 It is in the same format as Schedule 1 presented in the rebuttal testimony pre-
20 filed by MEC witness Gesell. My rebuttal Schedule 1 adjusts the Schedule 1
21 attached to the rebuttal testimony of MEC witness Gesell.

22 Q. What adjustments are contained in Schedule 1 compared to the Schedule 1 pre-
23 filed by MEC witness Gesell in rebuttal testimony?

24 A. Schedule 1 has three changes to Mr. Gesell's schedule. Two changes correct a
25 formula that calculates the charges waived during periods that MEC considered
26 to be Force Majeure at Cordova, which is on the last page of both my rebuttal
27 Schedule 1 and Schedule 1 included in the rebuttal testimony of Mr. Gesell. The
28 calculation of the lines described as "Total Penalty Charged during events of
29 Force Majeure" and "Total Penalty Waived during events of Force Majeure" on
30 Mr. Gesell's Schedule 1 did not include the amounts from June 27th and June
31 29th (MEC Exhibit___(TAG-1), Schedule 1, page 6 of 6). The June 27th and June
32 29th amounts should be included in the calculation of Rider 8 charges billed and
33 Rider 8 charges waived, and the calculations are corrected on my rebuttal
34 Schedule 1.

35 The third change to MEC witness Gesell's rebuttal Schedule 1 is the inclusion of
36 July 29th Rider 8 charges. As noted by Mr. Gesell, the Company waived Rider 8

37 charges to Cordova on July 29th in the bill for July 2001 service, then later
38 determined that those charges should not have been waived, and re-billed
39 Cordova in August 2002 for the July 29th, 2001 Rider 8 charges. I have included
40 those charges in my rebuttal Schedule 1 detailing Rider 8 charges in the year
41 2001 because the charges are part of the 2001 Purchased Gas Adjustment
42 Clause("PGA") revenue and expense cycle. The amount that Cordova was billed
43 in August 2002 for imbalances subject to Rider 8 in July 2001 should be included
44 in the Factor O credit to MEC PGA customers at the conclusion of this docket.

45 Q. Did the Company accept the adjustment that you present on Schedule 1?

46 A. No, MEC did not accept the adjustment to increase Rider 8 imbalance charges
47 applicable to Cordova. MEC witness Kremer objects to the adjustment primarily
48 because of his belief that the Cordova gas imbalances provided benefits to PGA
49 customers. MEC witness Gesell objects to the adjustment because the Rider 8
50 charges were waived during the start-up of Cordova prior to June 15th, 2001.
51 After June 15th, 2001, Mr. Gesell explains that Rider 8 was waived during
52 Cordova equipment failures.

53 Q. Why are you not persuaded by the argument of MEC witness Kremer to withdraw
54 your adjustment?

55 A. Mr. Kremer bases his argument that Cordova imbalances provided benefits to
56 MEC PGA customers upon his analysis of market prices on a few of the dates
57 that Rider 8 charges were waived. Mr. Kremer's analysis indicates that MEC

58 PGA customers obtained benefits from Cordova imbalances totaling \$12,513.88
59 (MEC Exhibit 4, page 4, line 82 through page 5, line 97). Mr. Kremer's rebuttal
60 testimony lacks an explanation of how \$12,513.88 in benefits outweighs
61 \$469,028 in waived Rider 8 charges that would have reduced costs recoverable
62 from PGA customers. Furthermore, Mr. Kremer's analysis is incomplete, since it
63 is based upon a review of market index prices on only 7 dates out of 114 dates
64 when Rider 8 charges were waived. Additionally, Mr. Kremer is inconsistent in
65 his analysis, using different market proxies on different dates for the buy and sell
66 prices of gas transported to a single customer at a single location.

67 Q. Please explain Schedule 2, Analysis of Gas Supply Costs per therm.

68 A. Schedule 2 compares the actual cost of gas per therm supplied to MEC PGA
69 customers during 2001 with the cost of gas that MEC purchased from Cordova
70 imbalances. As shown on Schedule 2, the overall cost of gas supplied to MEC
71 PGA customers was less expensive than the cost of gas that MEC purchased as
72 a result of Cordova cash-outs in the months of February, March, April, May, and
73 June when Rider 8 charges to Cordova were waived. Rider 8 charges to
74 Cordova were also waived in July and November when the cash-out rate paid for
75 imbalances was favorable compared to the overall cost of gas supplied to MEC
76 PGA customers. Overall, MEC paid more for Cordova imbalances than the
77 overall cost of gas during the months that Rider 8 charges were waived, as
78 shown on Schedule 2. Schedule 2 demonstrates that the "benefits" of Cordova
79 imbalances are questionable and perhaps non-existent.

80 Q. Why are you not persuaded by the arguments of MEC witness Gesell to
81 withdraw your adjustment?

82 A. Mr. Gesell argues that, during start-up, Cordova anticipated, and MEC
83 understood, that Cordova's rate of gas usage would be highly variable. Mr.
84 Gesell describes the agreement between Cordova and MEC that Cordova could
85 change its gas nominations at any time, if the nominations could confirmed by
86 the interstate pipeline (MEC Exhibit 5, page 3, lines 42 through 48). Mr. Gesell
87 also discusses the high degree of communication between MEC and Cordova to
88 enable efficient portfolio management (Id., lines 48 through 51, page 5, line 87
89 through page 6, line 125). Neither the agreement that Cordova could change its
90 nominations at any time, nor the high degree of communication between
91 Cordova and MEC concerning gas supply portfolio management, appears to be
92 relevant to imbalances reported in the billing from MEC to Cordova. Rider 8
93 imbalance charges apply to the imbalance between the volume actually delivered
94 to a customer and the volume actually used by the customer, and do not apply to
95 changes in nominations of gas to be delivered to the customer. Billings to
96 Cordova state the daily volumes that MEC accepted for delivery to Cordova, and
97 state the daily volumes that Cordova used. A change in nomination, confirmed
98 with the interstate pipeline, would affect the volume that MEC accepted for
99 delivery to Cordova. The billing to Cordova for volumes delivered to Cordova
100 should state the volume that was finally delivered to Cordova and account for all
101 confirmed changes in nominations.

102 Q. Does MEC have discretion to waive Rider 8 imbalance charges under certain
103 circumstances?

104 A. As first discussed in my direct testimony (ICC Staff Exhibit 3.0, page 4, lines 61-
105 78), and later in the rebuttal testimony of Mr. Gesell (MEC Exhibit 5, page 7, lines
106 145-159)¹, MEC has discretion to waive Rider 8 imbalance charges. The
107 relevant text of the Rider 8 tariff, presented in both my direct testimony and the
108 rebuttal testimony of Mr. Gesell, however, limits the discretion to waive Rider 8
109 charges for the first gas day that unanticipated and non-recurring problems with
110 natural gas fueled equipment initially occurred. In addition, the discretion to
111 waive Rider 8 is not automatic because the Company's decision to waive an
112 imbalance charge shall not be construed as giving the Customer the right to
113 continue to create an imbalance on the system. Given the limitations on the
114 waiver of Rider 8 imbalance charges, waiving charges on 114 dates for Cordova
115 is excessive.

116 Q. How does the discretion to waive Rider 8 imbalance charges apply to the testing
117 cycle during the Cordova start-up?

118 A. The limitations on the waiver of Rider 8 charges make the start-up period
119 ineligible for waiver of imbalance charges. Mr. Gesell describes how both
120 Cordova and MEC anticipated that the testing cycle would be unpredictable and

¹ MEC witness Gesell references the tariff sheet that is currently in effect, with an effective date of September 18th, 2002, which was filed in compliance with the Commission's Order at the conclusion of the recent MEC general gas rate Docket No. 01-0696. I reference the prior tariff sheet that was in effect at the time of preparing Staff's August 12th, 2002 direct testimony and at the time that the Rider 8 charges to Cordova were waived in 2001. There is no difference between the currently effective tariff sheet and the tariff sheet that was in effect during 2001 concerning MEC's discretion to waive Rider 8 imbalance charges.

121 require high volumes of gas (Id., page 8, line 192 through page 9, line 197).
122 Since Cordova and MEC expected that the Cordova testing cycle would be
123 unpredictable, it cannot be concluded that the resulting imbalances were
124 unanticipated and non-recurring. The waiver requirement that problems with
125 natural gas equipment be unanticipated and non-recurring was not met,
126 therefore, during the Cordova start-up. Furthermore, it is questionable as to
127 whether testing during start-up can be considered "problems" with natural gas
128 equipment. It is more appropriate to consider Rider 8 charges for imbalances
129 caused by testing during start-up as an expected expense, rather than an
130 unanticipated, non-recurring problem with natural gas equipment.

131 Q. How does the discretion to waive Rider 8 imbalance charges apply to outages
132 occurring after the testing cycle during the Cordova start-up was completed?

133 A. Outages caused by equipment problems at Cordova after start-up appear to be
134 more eligible for waiver of Rider 8 charges, but the charges waived by MEC
135 exceed the limitations on the waiver. MEC waived charges on two dates that
136 were separated by only one day in the months of June and July, with waivers
137 occurring on June 27th and 29th, and July 23rd and 25th. Even if the outages on
138 the second date were caused by the failure of another piece of equipment, the
139 limitation that waivers apply only to the first day that failure initially occurred
140 should be in force, particularly with the second limitation that the decision to
141 waive Rider 8 in one instance should not be construed as giving the customer
142 the right to continue causing imbalances. An imbalance only two days after a

143 previous imbalance where Rider 8 imbalance charges were waived should not be
144 eligible for a waiver based upon unanticipated and non-recurring problems with
145 natural gas equipment. The adjustment that I propose on Schedule 1 to reinstate
146 Rider 8 charges on imbalances therefore maintains the June 27th and July 23rd
147 waivers that MEC allowed for Cordova, as well as the November 13th waiver, but
148 rejects the waivers on June 29th and July 25th because the imbalances occurred
149 only two days after the June 27th and July 23rd waivers.

150 Q. Mr. Gesell terms your comparison of the special contract gas delivery rate for
151 Cordova with Rate 87, MEC's lowest base gas delivery rate, as "misleading"
152 (MEC Exhibit 5, page 13, line 292 through page 14, line 310). Was the
153 comparison misleading?

154 A. My comparison of the Cordova rate with Rate 87 was not misleading (ICC Staff
155 Exhibit 3.0, page 3, lines 40-45). The comparison shows that, when compared to
156 other MEC customers, Cordova would not be excessively charged for gas
157 delivery if Rider 8 imbalance charges were not waived. The more conservative
158 and more appropriate application of Rider 8 waiver provisions that I am
159 proposing is less than one-third of the more than \$1.5 million difference in the
160 amount that Cordova would have paid as a Rate 87 customer compared to its
161 contract rate. My comparison of the Cordova rate with Rate 87 shows that the
162 reinstatement of Rider 8 imbalance charges does not unfairly burden Cordova
163 with unreasonable gas delivery charges.

164 Q. How should your recommended amount of reinstated Rider 8 charges affect the
165 PGA reconciliation for the year ended December 31st, 2001?

166 A. The Commission should order MEC to refund the waived Rider 8 charges that do
167 not meet the waiver limitations, as detailed on Schedule 1, through Factor O of
168 the first monthly PGA filed after the Order in this docket.

169 Q. Does this conclude your rebuttal testimony?

170 A. Yes, it does.

MidAmerican Energy Company
Analysis of Imbalance Charges Waived at Cordova Energy Center
For the PGA Reconciliation year ended December 31st, 2001

Date	Volume to Customer (therms)	Therms Used	Daily Imbalance (in therms)	Free Tolerance volume	+/- 10% to +/- 30% Imbalance (therms)	+/- 10% to +/- 30% 1 Cent Charge	Greater than 30% Imbalance (therms)	Greater than 30% 10 Cent Charge	Total Daily Imbalance Waived	Total Monthly Imbalance Waived
2/1/2001	999	1,219	-220	100	120	\$1.20	0	\$0.00	\$1.20	\$1.20
2/2/2001	999	1,372	-373	100	200	\$2.00	73	\$7.30	\$9.30	\$9.30
2/3/2001	799	965	-166	80	76	\$0.76	0	\$0.00	\$0.76	\$0.76
2/4/2001	799	762	37	37	0	\$0.00	0	\$0.00	\$0.00	\$0.00
2/5/2001	799	1,077	-278	80	180	\$1.80	38	\$3.80	\$5.40	\$5.40
2/6/2001	999	1,087	-88	88	0	\$0.00	0	\$0.00	\$0.00	\$0.00
2/7/2001	999	904	95	95	0	\$0.00	0	\$0.00	\$0.00	\$0.00
2/8/2001	999	630	369	100	200	\$2.00	69	\$6.90	\$8.90	\$8.90
2/9/2001	999	1,016	-17	17	0	\$0.00	0	\$0.00	\$0.00	\$0.00
2/10/2001	999	1,270	-271	100	171	\$1.71	0	\$0.00	\$1.71	\$1.71
2/11/2001	999	1,189	-190	100	90	\$0.90	0	\$0.00	\$0.90	\$0.90
2/12/2001	999	864	115	115	15	\$0.15	0	\$0.00	\$0.15	\$0.15
2/13/2001	799	823	-24	24	0	\$0.00	0	\$0.00	\$0.00	\$0.00
2/14/2001	899	965	-56	56	0	\$0.00	0	\$0.00	\$0.00	\$0.00
2/15/2001	999	965	34	34	0	\$0.00	0	\$0.00	\$0.00	\$0.00
2/16/2001	1,249	1,148	101	101	0	\$0.00	0	\$0.00	\$0.00	\$0.00
2/17/2001	899	1,158	-259	90	169	\$1.69	0	\$0.00	\$1.69	\$1.69
2/18/2001	20,879	29,149	-8,270	2,088	4,176	\$41.76	2,006	\$200.60	\$242.36	\$242.36
2/19/2001	899	894	5	5	0	\$0.00	0	\$0.00	\$0.00	\$0.00
2/20/2001	899	1,209	-310	90	180	\$1.80	40	\$4.00	\$5.80	\$5.80
2/21/2001	1,249	1,219	30	30	0	\$0.00	0	\$0.00	\$0.00	\$0.00
2/22/2001	1,249	1,311	-62	62	0	\$0.00	0	\$0.00	\$0.00	\$0.00
2/23/2001	1,249	1,179	70	70	0	\$0.00	0	\$0.00	\$0.00	\$0.00
2/24/2001	1,249	1,006	243	125	118	\$1.18	0	\$0.00	\$1.18	\$1.18
2/25/2001	1,249	1,148	101	101	0	\$0.00	0	\$0.00	\$0.00	\$0.00
2/26/2001	1,249	996	253	125	128	\$1.28	0	\$0.00	\$1.28	\$1.28
2/27/2001	1,249	1,158	91	91	0	\$0.00	0	\$0.00	\$0.00	\$0.00
2/28/2001	1,848	711	1,137	185	369	\$3.69	583	\$58.30	\$61.99	\$61.99
						<u>\$51.72</u>		<u>\$280.90</u>		<u>\$342.62</u>

**MidAmerican Energy Company
 Analysis of Imbalance Charges Waived at Cordova Energy Center
 For the PGA Reconciliation year ended December 31st, 2001**

Date	Volume to Customer (therms)	Therms Used	Daily Imbalance (in therms)	+/- 10% Free Tolerance volume	+/- 10% to +/- 30% Imbalance (therms)	+/- 10% to +/- 30% 1 Cent Charge	Greater than 30% Imbalance (therms)	Greater than 30% 10 Cent Charge	Total Daily Imbalance Waived	Total Monthly Imbalance Waived
3/1/2001	999	835	164	100	64	\$0.64	0	\$0.00	\$0.64	
3/2/2001	1,598	601	997	160	319	\$3.19	518	\$51.80	\$54.99	
3/3/2001	999	764	235	100	135	\$1.35	0	\$0.00	\$1.35	
3/4/2001	999	723	276	100	176	\$1.76	0	\$0.00	\$1.76	
3/5/2001	999	5,253	-4,254	100	200	\$2.00	3,954	\$395.40	\$397.40	
3/6/2001	999	2,341	-1,342	100	200	\$2.00	1,042	\$104.20	\$106.20	
3/7/2001	799	947	-148	80	68	\$0.68	0	\$0.00	\$0.68	
3/8/2001	799	204	595	80	160	\$1.60	355	\$35.50	\$37.10	
3/9/2001	599	0	599	60	120	\$1.20	419	\$41.90	\$43.10	
3/10/2001	599	0	599	60	120	\$1.20	419	\$41.90	\$43.10	
3/11/2001	599	31	568	60	120	\$1.20	388	\$38.80	\$40.00	
3/12/2001	599	0	599	60	120	\$1.20	419	\$41.90	\$43.10	
3/13/2001	500	801	-101	50	51	\$0.51	0	\$0.00	\$0.51	
3/14/2001	100	397	-297	10	20	\$0.20	267	\$26.70	\$26.90	
3/15/2001	100	590	-490	10	20	\$0.20	460	\$46.00	\$46.20	
3/16/2001	500	641	-141	50	91	\$0.91	0	\$0.00	\$0.91	
3/17/2001	500	631	-131	50	81	\$0.81	0	\$0.00	\$0.81	
3/18/2001	500	611	-111	50	61	\$0.61	0	\$0.00	\$0.61	
3/19/2001	500	702	-202	50	100	\$1.00	52	\$5.20	\$6.20	
3/20/2001	500	489	11	11	0	\$0.00	0	\$0.00	\$0.00	
3/21/2001	2,498	845	1,653	250	499	\$4.99	904	\$90.40	\$95.39	
3/22/2001	599	397	202	60	120	\$1.20	22	\$2.20	\$3.40	
3/23/2001	14,985	641	14,344	1,499	2,997	\$29.97	9,848	\$984.80	\$1,014.77	
3/24/2001	29,970	3,838	26,132	2,997	5,994	\$59.94	17,141	\$1,714.10	\$1,774.04	
3/25/2001	0	916	-916	0	0	\$0.00	916	\$91.60	\$91.60	
3/26/2001	0	784	-784	0	0	\$0.00	784	\$78.40	\$78.40	
3/27/2001	500	652	-152	50	100	\$1.00	2	\$0.20	\$1.20	
3/28/2001	749	590	159	75	84	\$0.84	0	\$0.00	\$0.84	
3/29/2001	500	448	52	50	2	\$0.02	0	\$0.00	\$0.02	
3/30/2001	29,970	764	29,206	2,997	5,994	\$59.94	20,215	\$2,021.50	\$2,081.44	
3/31/2001	19,980	3,380	16,600	1,998	3,996	\$39.96	10,606	\$1,060.60	\$1,100.56	
						<u>\$220.12</u>		<u>\$6,873.10</u>		<u>\$7,093.22</u>

MidAmerican Energy Company
Analysis of Imbalance Charges Waived at Cordova Energy Center
For the PGA Reconciliation year ended December 31st, 2001

Date	Volume to Customer (therms)	Therms Used	Daily Imbalance (in therms)	+/- 10% Free Tolerance volume	+/- 10% to +/- 30% Imbalance (therms)	+/- 10% to +/- 30% 1 Cent Charge	Greater than 30% Imbalance (therms)	Greater than 30% 10 Cent Charge	Total Daily Imbalance Waived	Total Monthly Imbalance Waived
4/1/2001	0	478	-478	0	0	\$0.00	478	\$47.80	\$47.80	
4/2/2001	0	549	-549	0	0	\$0.00	549	\$54.90	\$54.90	
4/3/2001	500	102	398	50	100	\$1.00	248	\$24.80	\$25.80	
4/4/2001	899	10	889	90	180	\$1.80	619	\$61.90	\$63.70	
4/5/2001	899	18,062	-17,163	90	180	\$1.80	16,893	\$1,689.30	\$1,691.10	
4/6/2001	899	51	848	90	180	\$1.80	578	\$57.80	\$59.60	
4/7/2001	400	71	329	40	80	\$0.80	209	\$20.90	\$21.70	
4/8/2001	400	51	349	40	80	\$0.80	229	\$22.90	\$23.70	
4/9/2001	49,950	1,261	48,689	4,995	9,990	\$99.90	33,704	\$3,370.40	\$3,470.30	
4/10/2001	49,451	35,087	14,364	4,945	9,419	\$94.19	0	\$0.00	\$94.19	
4/11/2001	59,241	1,149	58,092	5,924	11,848	\$118.48	40,320	\$4,032.00	\$4,150.48	
4/12/2001	59,241	244	58,997	5,924	11,848	\$118.48	41,225	\$4,122.50	\$4,240.98	
4/13/2001	59,940	23,798	36,142	5,994	11,988	\$119.88	18,160	\$1,816.00	\$1,935.88	
4/14/2001	59,940	28,425	31,515	5,994	11,988	\$119.88	13,533	\$1,353.30	\$1,473.18	
4/15/2001	59,940	40,914	19,026	5,994	11,988	\$119.88	1,044	\$104.40	\$224.28	
4/16/2001	59,940	468	59,472	5,994	11,988	\$119.88	41,490	\$4,149.00	\$4,268.88	
4/17/2001	999	692	307	100	200	\$2.00	7	\$0.70	\$2.70	
4/18/2001	500	386	114	50	64	\$0.64	0	\$0.00	\$0.64	
4/18/2001	0	214	-214	0	0	\$0.00	214	\$21.40	\$21.40	
4/20/2001	0	51	-51	0	0	\$0.00	51	\$5.10	\$5.10	
4/21/2001	0	71	-71	0	0	\$0.00	71	\$7.10	\$7.10	
4/22/2001	29,870	102	29,868	2,997	5,994	\$59.94	20,877	\$2,087.70	\$2,147.64	
4/23/2001	44,955	386	44,569	4,496	8,991	\$89.91	31,082	\$3,108.20	\$3,198.11	
4/24/2001	39,960	36,042	3,918	3,918	0	\$0.00	0	\$0.00	\$0.00	
4/25/2001	39,960	19,587	20,373	3,996	7,992	\$79.92	8,385	\$838.50	\$918.42	
4/26/2001	77,822	72,960	4,962	4,962	0	\$0.00	0	\$0.00	\$0.00	
4/27/2001	34,965	68,292	-33,327	3,497	6,993	\$69.93	22,837	\$2,283.70	\$2,353.83	
4/28/2001	0	20	-20	0	0	\$0.00	20	\$2.00	\$2.00	
4/29/2001	0	31	-31	0	0	\$0.00	31	\$3.10	\$3.10	
4/30/2001	0	20	-20	0	0	\$0.00	20	\$2.00	\$2.00	
						<u>\$1,220.91</u>		<u>\$29,287.40</u>		<u>\$30,508.31</u>

**MidAmerican Energy Company
 Analysis of Imbalance Charges Waived at Cordova Energy Center
 For the PGA Reconciliation year ended December 31st, 2001**

Date	Volume to Customer (therms)	Therms Used	Daily Imbalance (in therms)	+/- 10% Free Tolerance volume	+/- 10% to +/- 30% Imbalance (therms)	+/- 10% to +/- 30% 1 Cent Charge	Greater than 30% Imbalance (therms)	Greater than 30% 10 Cent Charge	Total Daily Imbalance Waived	Total Monthly Imbalance Waived
6/1/2001	599,400	3,410	595,990	59,940	119,880	\$1,198.80	416,170	\$41,617.00	\$42,815.80	
6/2/2001	0	41,349	-41,349	0	0	\$0.00	41,349	\$4,134.90	\$4,134.90	
6/3/2001	0	344,523	-344,523	0	0	\$0.00	344,523	\$34,452.30	\$34,452.30	
6/4/2001	0	74,484	-74,484	0	0	\$0.00	74,484	\$7,448.40	\$7,448.40	
6/5/2001	499,500	245,328	254,172	49,950	99,900	\$999.00	104,322	\$10,432.20	\$11,431.20	
6/6/2001	499,500	315,091	184,409	49,950	99,900	\$999.00	34,559	\$3,455.90	\$4,454.90	
6/7/2001	599,400	869,637	-270,237	59,940	119,880	\$1,198.80	90,417	\$9,041.70	\$10,240.50	
6/8/2001	399,600	510,433	-110,833	39,960	70,873	\$708.73	0	\$0.00	\$708.73	
6/9/2001	799,200	866,973	-67,773	67,773	0	\$0.00	0	\$0.00	\$0.00	
6/10/2001	799,200	869,859	-70,659	70,659	0	\$0.00	0	\$0.00	\$0.00	
6/11/2001	799,200	870,505	-71,305	71,305	0	\$0.00	0	\$0.00	\$0.00	
6/12/2001	799,200	524,009	275,191	79,920	159,840	\$1,598.40	35,431	\$3,543.10	\$5,141.50	
6/13/2001	649,350	818,339	-168,989	64,935	104,054	\$1,040.54	0	\$0.00	\$1,040.54	
6/14/2001	649,350	410,138	239,212	64,935	129,870	\$1,298.70	44,407	\$4,440.70	\$5,739.40	
6/15/2001	0	0	0	0	0	\$0.00	0	\$0.00	\$0.00	
6/16/2001	0	0	0	0	0	\$0.00	0	\$0.00	\$0.00	
6/17/2001	0	0	0	0	0	\$0.00	0	\$0.00	\$0.00	
6/18/2001	0	0	0	0	0	\$0.00	0	\$0.00	\$0.00	
6/19/2001	0	0	0	0	0	\$0.00	0	\$0.00	\$0.00	
						<u>\$9,041.97</u>		<u>\$118,566.20</u>		<u>\$127,608.17</u>

Grand Total of imbalances waived due to Cordova in Start-Up mode: \$437,872.30

MidAmerican Energy Company
Analysis of Imbalance Charges Waived at Cordova Energy Center
For the PGA Reconciliation year ended December 31st, 2001

Cordova Energy Center listing of Rider 8 actually charged during Equipment Outages

Date	Volume to Customer	Usage	Daily Imbalance	+/- 10%		+/- 10% to +/- 30% Imbalance Volume	+/- 10% to +/- 30% 1 Cent Charge	Greater than 30% Imbalance Volume	Greater than 30% 10 Cent Charge
				Free Tolerance Volume	Imbalance Volume				
6/27/2001	343,716	198,097	145,619	34,372		111,247	\$1,112.47	0	\$0.00
6/29/2001	317,572	217,279	100,293	31,757		68,536	\$685.36	0	\$0.00
7/23/2001	254,855	109,833	145,022	25,486		119,537	\$1,450.22	0	\$0.00
7/25/2001	172,417	56,080	116,337	17,242		99,095	\$1,163.37	0	\$0.00
7/29/2001	196,763	77,176	119,587	19,676		99,911	\$1,195.87	0	\$0.00
11/13/2001	171,129	7,976	163,153	17,113		146,040	\$1,460.40	0	\$0.00
Total Rider 8 Charged during Equipment Outages							\$7,067.69		\$0.00

July billing includes free tolerance volumes not subject to Rider 8, re-billed in August 2002 to correct Rider 8 applied to free tolerance volumes. Re-bill also fully charged Rider 8 for July 29th, which includes 10-cent per therm charge on imbalance volumes above 30% of volume to customer on that date.

Cordova Energy Center listing of Rider 8 charges waived due to Equipment Outages

Date	Volume to Customer	Usage	Daily Imbalance	+/- 10%		+/- 10% to +/- 30% Imbalance Volume	+/- 10% to +/- 30% 1 Cent Charge	Greater than 30% Imbalance Volume	Greater than 30% 10 Cent Charge	
				Free Tolerance Volume	Imbalance Volume					
6/27/2001	343,716	198,097	145,619	34,372		68,743	\$687.43	42,504	waive	
6/29/2001	317,572	217,279	100,293	31,757		63,515	\$635.15	5,021	\$502.10	
7/23/2001	254,855	109,833	145,022	25,486		50,971	\$509.71	68,565	waive	
7/25/2001	172,417	56,080	116,337	17,242		34,483	\$344.83	84,612	\$6,461.20	
7/29/2001	196,763	77,176	119,587	19,676		39,353	\$393.53	60,558	\$6,055.81	
11/13/2001	171,129	7,976	163,153	17,113		34,226	\$342.26	111,814	waive	
							\$2,912.91		\$13,019.11	
								plus:	\$2,912.91	1-cent Rider 8 Charge calculated

Total Rider 8 Charges calculated during Equipment Outages \$ 15,932.02
 Less: Rider 8 Charges billed during Equipment Outages (from table above) \$ (7,067.69)
Total Rider 8 Waived during Equipment Outages \$ 8,864.32

Total Rider 8 not subject to Waiver, includes Start-up through June 14th, 2001 \$ 446,736.62

MidAmerican Energy Company

Analysis of Gas Supply Costs per therm

For the PGA Reconciliation year ended December 31st, 2001

	Commodity Gas Cost ¹	Reverse: Prior Period Adjustments ¹	Adjusted Commodity Gas Cost	Non-commodity Gas Cost ¹	Combined Gas Cost	Divided by: Sales, in Therms ²	= Cost per Therm
January	\$ 15,193,129	\$ (1,060,602)	\$ 14,132,527	\$ 767,982	\$ 14,900,509	20,302,266	\$ 0.73393
February	\$ 9,700,348	\$ (495,284)	\$ 9,205,064	\$ 799,564	\$ 10,004,628	14,215,789	\$ 0.70377
March	\$ 967,348	\$ 4,668,713	\$ 5,636,061	\$ 812,919	\$ 6,448,980	14,095,144	\$ 0.45753
April	\$ 1,599,031	\$ (2,741)	\$ 1,596,290	\$ 407,369	\$ 2,003,659	7,902,851	\$ 0.25354
May	\$ 1,833,221	\$ (941,080)	\$ 892,141	\$ 400,677	\$ 1,292,818	3,180,254	\$ 0.40651
June	\$ 615,778	\$ (73,214)	\$ 542,564	\$ 403,929	\$ 946,493	2,704,012	\$ 0.35003
July	\$ 529,617	\$ 53,628	\$ 583,245	\$ 397,072	\$ 980,317	1,535,201	\$ 0.63856
August	\$ 374,511	\$ 177,703	\$ 552,214	\$ 390,258	\$ 942,472	1,541,141	\$ 0.61154
September	\$ 400,589	\$ 125,977	\$ 526,566	\$ 399,589	\$ 926,155	1,762,325	\$ 0.52553
October	\$ 935,853	\$ 269,345	\$ 1,205,198	\$ 411,660	\$ 1,616,858	3,271,066	\$ 0.49429
November	\$ 1,877,881	\$ 474,671	\$ 2,352,552	\$ 665,387	\$ 3,017,939	4,857,237	\$ 0.62133
December	\$ 662,007	\$ 19,467	\$ 681,474	\$ 688,569	\$ 1,370,043	7,318,886	\$ 0.18719
	\$ 34,689,313		\$ 37,905,896	\$ 6,544,975	\$ 44,450,871	82,686,172	

December had a substantial negative cost of gas withdrawn from storage, reducing gas costs, which is typically a positive number increasing gas costs.

November had a substantial positive cost of gas injected, increasing gas costs, which is typically a negative amount to isolate cost of gas used from purchases, reducing gas costs

¹ Source: Schedule III from monthly filing for Rider 5, Cost of Purchased Gas Adjustment (PGA)

² Source: MEC response to Staff data request GS-4(A)

Comparison of Cordova Gas Cash-outs

	Therms (Purchased) or Sold	PGA Costs	Cash-out Rate	Difference
February	7,893	\$ 0.70377	\$ 0.61817	\$ 676
March	(83,922)	\$ 0.45753	\$ 0.54392	\$ 7,250
April	(381,297)	\$ 0.25354	\$ 0.53817	\$ 108,530
May ¹	(4,086,237)	\$ 0.40651	\$ 1.726,071	\$ 64,958
June ¹	(792,855)	\$ 0.35003	\$ 313,798	\$ 36,273
July	(272,743)	\$ 0.63856	\$ 0.31344	\$ (88,674)
November	(81,031)	\$ 0.62133	\$ 0.23142	\$ (31,585)
				\$ 97,418

¹ May and June Cash-out rates paid to Cordova changed daily. Amount shown under Cash-out Rate represents the total amount paid to Cordova for cash-out of imbalances.