

DIRECT TESTIMONY  
OF  
MARK MAPLE  
ENGINEERING DEPARTMENT  
ENERGY DIVISION  
ILLINOIS COMMERCE COMMISSION

MT. CARMEL PUBLIC UTILITY CO.

PROPOSED GENERAL INCREASE IN  
ELECTRIC AND GAS RATES

DOCKET NO. 07-0357

SEPTEMBER 20, 2007

1 Q. Please state your name and business address.

2 A. My name is Mark Maple and my business address is: Illinois Commerce  
3 Commission, 527 East Capitol Avenue, Springfield, Illinois 62701.

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

5 A. I am employed by the Illinois Commerce Commission ("Commission") as a  
6 Gas Engineer in the Engineering Department of the Energy Division.

7 Q. Please state your educational background.

8 A. I hold a Bachelor of Science degree in Mechanical Engineering and a  
9 minor in Mathematics from Southern Illinois University - Carbondale. I  
10 also received a Master's degree in Business Administration from the  
11 University of Illinois at Springfield. Finally, I am a registered Professional  
12 Engineer Intern in the State of Illinois.

13 Q. What are your duties and responsibilities as a Gas Engineer in the  
14 Engineering Department?

15 A. My primary responsibilities and duties are in the performance of studies  
16 and analyses dealing with the day-to-day, and long-term, operations and

17 planning of the gas utilities serving Illinois. For example, I review  
18 purchased gas adjustment clause reconciliations, rate base additions,  
19 levels of natural gas used for working capital, and utilities' applications for  
20 Certificates of Public Convenience and Necessity. I also perform utility  
21 gas meter test shop audits.

22 Q. What is the purpose of this proceeding?

23 A. On May 4, 2007, Mt. Carmel Public Utility Company ("Mt. Carmel" or the  
24 "Company") filed tariffs that requested Commission approval to increase  
25 its bundled rates for both electric and gas service. The purpose of this  
26 proceeding is to investigate Mt. Carmel's request for a general increase in  
27 its rates pursuant to its filed tariffs.

28 Q. What is your assignment within this proceeding?

29 A. I was assigned to review the reasonableness of the Company's requested  
30 level of working capital associated with its propane gas in storage.

31 Q. Are you sponsoring any schedules or exhibits with your direct testimony?

32 A. Yes, I prepared the following schedule that is being filed with my direct  
33 testimony:

34 Schedule 4.01 G Mt. Carmel Propane Working Capital Adjustment

35 Q. Please summarize the recommendations you are making in this  
36 proceeding?

37 A. Based on my analysis showing that the Company's test year amount of  
38 propane in storage should be lowered due to known and measureable  
39 changes, I recommend that the Commission reduce Mt. Carmel's working  
40 capital allowance for propane in storage by \$4,014. I also recommend  
41 that the Commission order Mt. Carmel to perform a study to determine the  
42 appropriate level of propane storage.

43 **Propane in Storage**

44 Q. How does Mt. Carmel make use of propane in its system?

45 A. Most gas utilities operate some type of peaking facility. The main  
46 purpose of these peaking facilities is to provide a reserve supply of  
47 gas on days when it is extremely cold or gas is in short supply. In  
48 the event that a utility is unable to purchase or ship enough gas to  
49 meet its system needs, it can draw upon these reserves to satisfy  
50 demand and prevent curtailments.

51 It is common in the gas industry for utilities to use other alternative  
52 fuels to serve peak day demand, such as liquefied natural gas or

53 propane. These fuels can be blended into the gas stream to  
54 supplement the incoming supplies. Mt. Carmel maintains this type  
55 of a propane facility to help meet extreme winter demand.

56 Q. Why does Mt. Carmel maintain an inventory of propane?

57 A. In order to be ready for winter demand, the propane storage should  
58 be filled during the warmer months when supplies are theoretically  
59 cheaper and easily available. Also, there are some years when Mt.  
60 Carmel does not use any propane due to the lack of extreme winter  
61 weather. It would be very rare for the Company to use all of its  
62 propane in a given winter, and even if this occurred, Mt. Carmel  
63 would likely replenish its supply as quickly as possible. For these  
64 reasons, the Company maintains a certain inventory of propane  
65 during the entire year.

66 Q. What was the value of the propane stored during the test year?

67 A. The thirteen month average used by the Company was \$77,005,  
68 according to Mt. Carmel's Schedule B-9.1 Gas.

69 Q. Did the monthly value of propane change at any time during the  
70 test year?

71 A. Yes. In December 2006, Mt. Carmel used 7,691 gallons of

72 propane to test the system to ensure it was working properly (Staff  
73 Data Request ENG 1.06). This amounted to a \$4,348 reduction to  
74 December's inventory value.

75 Q. Has Mt. Carmel replenished the propane that it used in December  
76 2006?

77 A. No. According to the Company's response to Staff Data Request  
78 ENG 2.01, as of June 2007, the Company had not replenished any  
79 of the used propane. The value of propane in storage remains at  
80 \$72,991.

81 Q. Do you believe that Mt. Carmel should replenish the volumes it  
82 used in December 2006?

83 A. No. The Company is currently maintaining approximately 9 days of  
84 propane supplies, which I believe could be excessive. Mt. Carmel  
85 currently maintains about 129,000 gallons of propane in storage.  
86 At no time from 2000-2007 did storage even dip below 90,000  
87 gallons. In fact, there was only one month in the last six years that  
88 the Company actually used the propane facility for anything other  
89 than routine testing (Staff Data Request ENG 1.06). Therefore, the  
90 Company should not increase the amount of stored propane that it  
91 currently has in stock.

92 Q. What is the ideal volume of propane that Mt. Carmel should have in  
93 storage?

94 A. Mt. Carmel does not seem to have studied this issue in the past,  
95 and thus cannot justify a particular number. When asked the  
96 question "...justify why (Mt. Carmel) needs to carry the current  
97 volume of propane." in Staff Data Request ENG 1.05, the Company  
98 responded that the propane volumes are "...not precisely related to  
99 any specific ongoing volume requirement...." Rather than use  
100 guesswork or the capacity of the propane tanks to dictate the  
101 amount of prudent storage, I recommend that the Commission  
102 order Mt. Carmel perform a study to determine the appropriate  
103 level of propane storage. The results of such a study could be  
104 used in a future rate case or annual prudence review to make a  
105 permanent change in the value of propane that the Company  
106 maintains.

107 Q. What is your recommendation?

108 A. I recommend that the Commission reduce Mt. Carmel's working  
109 capital allowance for propane in storage by \$4,014 to reflect the  
110 known and measurable change associated with the inventory  
111 reduction from testing the propane facility. I also recommend that  
112 the Commission order Mt. Carmel to perform a study to determine

113 the appropriate level of propane storage. Mt. Carmel should  
114 provide this study to the Director of the Energy Division within 90  
115 days of the Commission order in this proceeding.

116 Q. Does this conclude your direct testimony?

117 A. Yes, it does.

**Mt. Carmel Public Utility Co.**  
**Gas**  
**Propane Working Capital Adjustment**  
**For the test year ended December 31, 2006**

Line No.	Description (a)	Amount (b)
1	Propane Value Dec. 2006 - June 2007 per Staff	\$ 72,991
2	2005 Propane Value per Company	<u>77,339</u>
3	Difference	(4,348)
4	Effect of test year adjustment	(334)
5	Staff proposed Adjustment	<u>\$ (4,014)</u>

Source:

Line 1: Company response to Staff Data Request ENG 2.01

Line 2: Mt. Carmel Schedule B-9.1, Line 14, Column B

Line 3: Line 1 - Line 2

Line 4: 2006 Propane value - 2005 Propane value (77,005-77,339)