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BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Duke)	
Energy Ohio to Adjust and Set its Gas and)	
Electric Recovery Rate for SmartGrid)	Case No. 09-543-GE-UNC
Deployment Under Riders AU and)	
Rider DR-IM)	
In the Matter of the Application of)	
Duke Energy Ohio for Tariff Approval)	Case No. 09-544- ^{GE} EL-ATA
In the Matter of the Application of)	
Duke Energy Ohio to Change its)	Case No. 09-545-GE-AAM
Accounting Methods)	

PREPARED TESTIMONY

OF

PETER K. BAKER

Date submitted: November 2, 2009

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1 1. Q. Please state your name and business address.

2 A. My name is Peter Baker. My address is 180 E. Broad Street, Columbus, Ohio
3 43215-3793.

4

5 2. Q. By whom are you employed?

6 A. I am employed by the Public Utilities Commission of Ohio.

7

8 3. Q. What is your present position with the Public Utilities Commission of Ohio
9 and what are your duties?

10 A. I am a section chief in the Reliability and Service Analysis Division of the
11 Service Monitoring and Enforcement Department. My section analyzes
12 reliability and service quality performance, and enforces reliability, service
13 quality, and consumer protection rules for electric, gas, and water utilities.
14 This includes analyzing and assessing the electric reliability and maintenance
15 performance of electric distribution utilities. My section also reviews the
16 general terms and conditions in the tariffs of electric, gas, and water utilities to
17 ensure compliance with consumer protection rules.

18

19 4. Q. Would you briefly state your educational background and work history?

20 A. I have bachelor's degrees in Psychology (1967) and Philosophy (1971) from
21 the University of Oklahoma, and a 1987 bachelor's degree in Business
22 Administration (with major in Accounting) from Franklin University. From
23 1972 to 1986, I was employed by Dowell Division of Dow Chemical

24 Company (an oil field service operation later called Dowell Schlumberger)
25 where I functioned as clerk/dispatcher and administrative assistant. In 1987, I
26 joined the PUCO, where I worked as an analyst and coordinator in the
27 Performance Analysis Division of the Utilities Department. In December of
28 1994, I was promoted to Administrator in the Consumer Services Department
29 (now called the Service Monitoring and Enforcement Department), and
30 assigned to the Compliance Division (now the Facilities and Operations Field
31 Division). In that organization, I enforced electric, gas, and telephone service
32 quality, customer service, and consumer protection rules. In 1997, I was
33 transferred to the Service Quality and Analysis Division (now called the
34 Reliability and Service Analysis Division), and in 2000, I was promoted to my
35 current position and duties.

36
37 5. Q. What is the subject matter of your testimony in this case?

38 A. My testimony concerns certain objections and a request for clarification that
39 Duke Energy Ohio (Duke) made in the Reply Comments that it filed in this
40 case. The objections I will address appear on Page 4 (Items 3 and 4) of
41 Duke's Reply Comments, and concern: (1) the amount of allowable inventory
42 for uninstalled gas modules¹; and (2) whether gas meter replacement costs
43 should be recovered through Rider AU. Duke's clarification request appears
44 on pages 11 and 12 and concerns the collection of momentary interruption
45 data.

¹ "Gas module" is the term Duke uses to describe the automatic meter reading (AMR) devices that it installs on gas meters to transmit the meter reading data via radio signal to a communication box, which re-transmits the data to Duke's back office operations.

46

47 6. Q. What was Duke's objection concerning gas module inventory?

48 A. In the Comments it filed in this case, Staff noted that Duke had purchased
49 about twice as many gas modules as it installed during 2008. Staff concluded
50 that such a large quantity (23,573) of uninstalled modules constitutes an
51 excessive amount of inventory and therefore recommended that the cost of
52 only 2,994 (or 12.7 %) of those uninstalled modules be recovered through
53 Rider AU. Duke objected that this amount of inventory was insufficient and
54 asserted that a three-month supply is more reasonable.

55

56 7. Q. Does Staff agree with Duke's assertion that a three-month inventory is a more
57 reasonable level of inventory?

58 A. Yes. Staff agrees with Duke's position, which is consistent with a
59 recommendation Staff made concerning the inventory of automatic meter
60 reading (AMR) devices in a similar rider case for East Ohio Gas Company.²

61

62 8. Q. What was Duke's objection concerning replacement of certain gas meters?

63 A. Duke included in its rider AU application the cost of replacing gas meters that
64 are incompatible with the gas modules it is installing. Staff recommended an
65 adjustment to exclude the cost of such replacement gas meters as well as the
66 associated contractor labor on the grounds that these meters are incompatible
67 due to their advanced age and obsolescence. Duke objected to that

² See page 7-8 of the Staff Comments and Recommendations filed in Case No. 09-0038-GA-UNC In the Matter of the Application of the East Ohio Gas Company dba Dominion East Ohio to Adjust its Automated Meter Reading Cost Recovery Charge and Related Matters, April 10, 2009.

adjustment, arguing that since the meter replacements were necessary to complete the gas module installations, it should be allowed to recover these costs through Ruder AU.

9. Q. How old are Duke's incompatible meters?

A. Nearly all of Duke's incompatible meters were manufactured before 1969, which means they are over 40 years old.³

10. Q. Why did Staff recommend an adjustment to exclude the cost of replacing gas meters that are incompatible with the gas modules?

A. Such replacements are not required for gas meters that were manufactured during the last forty years. Staff believes that Duke should have been routinely replacing its old and obsolete gas meters as part of its normal maintenance operations, and therefore should recover the costs of such replacements through the normal rate making process instead of through an accelerated cost-recovery rider.

11. Q. Has Staff taken this position in other cases?

A. Yes. In the last base rate cases for Columbia Gas of Ohio, Inc.⁴ and for East Ohio Gas Company,⁵ Staff recommended that the cost of replacing

³ See Duke's response to Staff Data Request 8-2.

⁴ See page 30 of the Staff Report of Investigation filed on August 21, 2008 in Case No. 08-0072-GA-AIR. In the Matter of the Application of Columbia Gas of Ohio, Inc. for Authority to Amend Filed Tariffs to Increase the Rates and Charges for Gas Distribution Service.

incompatible gas meters not be recovered through special riders for AMR devices.

12. Q. Did the applicants in either of these rate cases object to that recommendation?

A. No, they did not object.

13. Q. What was Duke's objection to the same recommendation when it was made in Duke's base rate case?

A. With respect to gas meter replacement, Duke stated that non-recovery, through Rider AU, of gas meter replacement costs "would not prevent the Company from timely recovering its Utility of the Future costs relating to gas service, because the Company generally does not intend to replace gas meters under the Utility of the Future program."⁶

14. Q. Does Staff have other issues concerning Duke's inclusion in Rider AU of costs for gas meters purchased to replace incompatible meters?

A. Yes. During 2008, Duke purchased 12,770 meters, and included their cost in the Rider AU application. As stated above, staff believes that these replacement meters should have been purchased in the normal course of business and should not be eligible for accelerated recovery. Duke installed 3,535 of these meters to replace old obsolete incompatible meters, leaving

⁵ See page 43 of the Staff Report of Investigation filed on May 23, 2008 in Case No. 07-0829-GA-AIR. In the Matter of the Application of The East Ohio Gas Company d/b/a Dominion East Ohio for Authority to Increase Rates for its Gas Distribution Service.

⁶ See pages 10 and 11 of Duke Energy Ohio, Inc.'s Objections to Staff Report of Investigation and Summary of Major Issues, filed on January 22, 2008 in Case No. 07-589-GA-AIR.

9,235 meters in inventory. Staff estimates the cost of these remaining
uninstalled meters at \$837,507 and again asserts that these costs should not be
included in Rider AU.

15. Q. What did the Company seek to clarify concerning the collection of momentary
interruption data?

A. Duke wants Staff to clarify its recommendation “to conduct a study to identify
any incremental cost, additional time, and impact on Rider IM, of compiling
and processing the momentary interruption data that its smart meters detect on
a daily basis.”

16. Q. Why is Staff interested in momentary interruptions in the context of installing
electric smart meters?

A. The Commission in two previous orders⁷ directed Staff to monitor the ability
of electric utilities to accurately measure and report the momentary
interruption frequency index (MAIFI)⁸ and to make recommendations with
respect to momentary interruptions and their impact on customers.⁹ The
Commission also stated: “it would be imprudent for the electric utilities to
make investments to improve MAIFI accuracy without taking the time to

⁷ FN7 Entry on Rehearing, pg 10 and Finding and order pg. 14, 06-653-EL ORD In the Matter of the Commission’s Review of Chapters 4901:1-9, 4901:1-10, 4901:1-21, 4901:1-22, 4901:1-23, 4901:1-24, and 4901:1-25 of the Ohio Administrative Code.

⁸ MAIFI = the total number of customer momentary interruptions divided by the total number of customers served.

⁹ Id. Entry on Rehearing, pg 10 and Finding and order pg. 14,

128 consider integrating such improvements with other potential programs such as
129 an automated metering infrastructure and/or distribution automation.”¹⁰ Staff
130 is aware that electric smart meters are capable of detecting momentary
131 interruptions. During its investigation in this case, Staff asked Duke to what
132 extent it was planning to collect momentary interruption data its smart
133 meters detect in order to compute MAIFI performance. Duke responded that
134 it had not made plans for accumulating this data. Staff therefore
135 recommended that Duke conduct the study.

136
137 17. Q. Can you clarify what Staff expects Duke to include in the study?

138 A. Yes. The study should identify the additional steps required to record and
139 time-stamp the occurrence and specific customers affected by each
140 momentary interruption detected by each smart meter, and to record such
141 information in a database for analysis and future development of MAIFI
142 performance data as it pertains to individual distribution circuits or across
143 Duke’s Ohio distribution system.

144
145 18. Q. Does Staff have in mind a specific methodology for computing MAIFI?

146 A. Although Staff is aware of different methodologies for computing MAIFI, it
147 believes the decision on a particular methodology should be reserved for a
148 future rule making. In the meantime, Staff believes Duke should plan on

¹⁰ Id. Entry on Rehearing, pg 10

149 collecting sufficient data to utilize any of the IEEE¹¹ recognized MAIFI
150 methodologies.

151

152 19. Q. What are the main results Staff expects to see in the study?

153 A. Staff expects the study results to contain the following components:

- 154 • Duke's overall plan for accumulating the momentary interruption data;
- 155 • A description of each action step included in the plan;
- 156 • A schedule for implementing the action steps;
- 157 • The estimated incremental costs (capital and O&M) for such
- 158 implementation and the timing of such costs; and
- 159 • The estimated dollar impact of such incremental costs on Rider IM.

160

161 20. Q. How does Staff expect to see the study results reported?

162 A. Staff recommends that Duke file the study and in this docket within 60 days
163 following the Commission's order this proceeding.

164

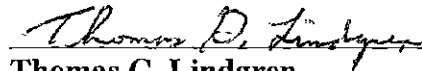
165 21. Q. Does this conclude your testimony?

166 A. Yes it does.

¹¹ The IEEE is the Institute of Electrical and Electronics Engineers

CERTIFICATE OF SERVICE

I hereby certify that a true copy of the foregoing **Testimony of Pete Baker**, submitted on behalf of the Staff of the Public Utilities Commission of Ohio, was served by regular U.S. mail, postage prepaid, or hand-delivered, upon the following parties of record, this 2nd day of November, 2009.


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