

BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Duke)
Energy Ohio, Inc. to Adjust Rider DR-IM)
and Rider AU for 2013 SmartGrid Costs.)

Case No. 14-1051-GE-RDR

SUPPLEMENTAL DIRECT TESTIMONY OF

JOSEPH R. THOMAS

ON BEHALF OF

DUKE ENERGY OHIO, INC.

January 7, 2015

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I. INTRODUCTION

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Joseph R. Thomas, and my business address is 400 South Tryon Street,
3 Charlotte, North Carolina, 28201.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by Duke Energy Business Services LLC, an affiliate of Duke Energy
6 Ohio, Inc. (Duke Energy Ohio or Company), as Director of Technical Solutions Support,
7 Grid Modernization.

8 **Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATION AND PROFESSIONAL
9 EXPERIENCE.**

10 A. I hold a degree in Management Information Systems from Miami University. I began
11 working full time for Duke on September 1, 2010. I have been assigned to positions of
12 increasing importance specific to Advanced Metering Infrastructure (AMI) technologies
13 and Meter Data Management. My duties include management and supervision of staff
14 responsible for business support of AMI technologies (back-end systems) as well as
15 technical roadmaps for AMI/Meter Data Management (MDM).

16 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PUBLIC UTILITIES
17 COMMISSION OF OHIO?**

18 A. No.

19 **Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL DIRECT TESTIMONY
20 IN THIS PROCEEDING?**

21 A. The purpose of my supplemental direct testimony is to respond to some of the points
22 raised in the comments and reply comments filed by the Office of the Ohio Consumers'

1 Counsel (OCC) that were filed on October 17, 2014 and December 31, 2014.
2 Specifically, I will provide information in an effort to dispel the confusion that seems to
3 exist with respect to the number of estimated bills that have been rendered by Duke
4 Energy Ohio during SmartGrid deployment.

II. DISCUSSION

5 **Q. PLEASE EXPLAIN, FOR AN AMI METER, WHAT AN ESTIMATED BILL IS**
6 **AND WHAT CAUSES SOME BILLS TO BE ESTIMATED.**

7 A. An estimated bill occurs when sufficient actual usage is not available at the time of
8 monthly billing. The primary cause of an estimated bill is missing usage data; generally
9 due to the advanced meter not communicating its usage readings. This may occur for
10 various reasons, but the primary issues are equipment failures, weather related problems,
11 and external influences (foliage, blocked communications, customer interference).

12 **Q. DOES DUKE ENERGY OHIO ESTIMATE BOTH GAS AND ELECTRIC BILLS?**

13 A. Yes

14 **Q. WHAT WAS THE COMPANY'S EXPERIENCE WITH ESTIMATING BILLS**
15 **PRIOR TO THE DEPLOYMENT OF ADVANCED METERS?**

16 A. Prior to the deployment of advanced meters, estimates were created due to defective
17 meters or the meter reader not being able to obtain a walk by read. With a very high
18 percentage of Ohio meters being located indoors, lack of access to read meters resulted in
19 a high number of estimated bills.

1 **Q. PLEASE DISCUSS WHAT THE COMPANY IS CURRENTLY DOING TO**
2 **REDUCE THE NUMBER OF BILLS THAT ARE ESTIMATED.**

3 A. As previously mentioned, the main driver of estimated bills is missing usage data from
4 non-communicating advanced meters. Therefore, the primary method of reducing
5 estimated bills is by ensuring the advanced meters are communicating and, if not,
6 ensuring issues preventing communication are resolved. This is done via continual
7 process improvement which results in timely replacement of failed equipment and
8 identification of communication problems. Also, the overall advanced electric and gas
9 meter installations are constantly reviewed for potential improvements via technology
10 changes or better equipment placement. These items work together to increase the
11 meter's successful communication rates, directly lowering the number of estimated bills.

12 **Q. HOW DOES THE COMPANY'S EXPERIENCE COMPARE WITH OTHER**
13 **ELECTRIC UTILITIES NATIONALLY?**

14 A. There do not appear to be any documented national averages related to percentage of
15 estimated bill for AMI, but we continue to show high read percentages (>99%) for our
16 certified AMI footprint. The read percentage indicates that not only are bill estimates
17 much less common in an AMI footprint, but that estimates from AMI meters are more
18 accurate.

19 **Q. HAS THE COMPANY REDUCED THE NUMBER OF ESTIMATED BILLS AS A**
20 **RESULT OF DEPLOYING ADVANCED METERS?**

21 A. Yes, OCC Witness Williams outlines in his testimony that the Company had 19,566
22 estimates from advanced meters in 2013 out of a total of 10,263,274 advanced meters.

1 That is an estimated rate of 0.19% for advanced meters. This is a vast improvement from
2 2008 where the Company had approximately 8.8% meter estimates.
3 The Company continues to seek ways to reduce the volume of estimates in the future via
4 several methods; including but not limited to: RF Mesh mitigation, meter and telecom
5 investigations, and alternative metering solutions.

III. CONCLUSION

6 **Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

7 **A. Yes.**