

BEFORE THE  
PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Filing by Ohio Edison )  
Company, The Cleveland Electric )  
Illuminating Company, and The Toledo )  
Edison Company for a Distribution Platform )  
Modernization Plan )  
)

Case No. 17-2436-EL-UNC

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**DIRECT TESTIMONY OF**

**BRANDON S. MCMILLEN**

**ON BEHALF OF**

**OHIO EDISON COMPANY  
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY  
THE TOLEDO EDISON COMPANY**

December 1, 2017

1 **INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME, POSITION, AND BUSINESS ADDRESS.**

3 A. My name is Brandon S. McMillen and I am an Analyst in the Rates and Regulatory Affairs  
4 Department – Ohio of FirstEnergy Service Company. My business address is 76 South  
5 Main Street, Akron, Ohio 44308.

6 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND**  
7 **PROFESSIONAL EXPERIENCE.**

8 A. I received a Bachelor of Science degree in Mathematics from University of Mount Union  
9 (formerly, Mount Union College) and a Master of Science degree in Mathematics from  
10 Youngstown State University. I have been employed by FirstEnergy Service Company  
11 since 2012.

12 **Q. WHAT ARE YOUR CURRENT JOB DUTIES AND AREAS OF**  
13 **RESPONSIBILITY?**

14 A. My current responsibilities include serving as the lead analyst for preparation of various  
15 riders for Ohio Edison Company (“Ohio Edison”), The Cleveland Electric Illuminating  
16 Company (“CEI”) and The Toledo Edison Company (“Toledo Edison”) (collectively, the  
17 “Companies”) and conducting various research and analysis for the Ohio Rate Department.

18 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PUBLIC UTILITIES**  
19 **COMMISSION OF OHIO?**

20 A. Yes. I testified before the Public Utilities Commission of Ohio (“Commission”) on behalf  
21 of the Companies in Case No. 14-1297-EL-SSO.

1 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

2 A. The purpose of my testimony is to address the revenue requirements, rates and estimated  
3 customer impacts from the Companies' proposed Distribution Platform Modernization  
4 ("DPM") Plan, which is attached to the Companies' Application as Attachment A. I am  
5 sponsoring and incorporate into my testimony the following attachments to the Companies'  
6 Application:

- 7 • Attachment B - Estimated revenue requirements under the proposed DPM Plan.
- 8 • Attachment C - Estimated rates from the DPM Plan.
- 9 • Attachment D - Estimated customer impacts from the DPM Plan.
- 10 • Attachment E - Template for the quarterly filings for cost recovery of the DPM  
11 Plan under Rider AMI.

12 I also am sponsoring and incorporate into my testimony the Cost/Benefit Analysis in the  
13 section of the DPM Plan titled "Estimated Costs v. Benefits."

14 **DPM REVENUE REQUIREMENT AND COST RECOVERY**

15 **Q. WHERE WILL THE REVENUE REQUIREMENTS ASSOCIATED WITH THE**  
16 **DPM PLAN BE RECOVERED?**

17 A. Revenue Requirements associated with the DPM Plan will be recovered through the  
18 existing, Commission-approved Advanced Metering Infrastructure Rider ("Rider AMI").

19 **Q. PLEASE DESCRIBE RIDER AMI.**

20 A. Rider AMI was originally approved on January 21, 2009 in Case No. 07-551-EL-AIR,  
21 which provided a mechanism for the Companies to recover smart grid and advanced  
22 metering costs. On June 30, 2010, Rider AMI was approved in Case No. 09-1820-EL-  
23 ATA to collect actual costs incurred for the Companies' Smart Grid Modernization

Initiative (“SGMI Project”) that were not reimbursed by the Department of Energy (“DOE”). On March 31, 2016, Rider AMI was approved in Case No. 14-1297-EL-SSO to continue recovering costs associated with the SGMI Project and to recover costs of any Commission-approved grid modernization projects.

**Q. HOW WILL THE REVENUE REQUIREMENT FOR THE DPM PLAN BE DETERMINED?**

A. Pursuant to the Commission’s Order in Case No. 14-1297-EL-SSO, the annual revenue requirement will include depreciation expense, property tax expense, return on equity, interest expense, income taxes, other associated taxes, and operations and maintenance (“O&M”) expense, including incremental O&M expense associated with the ongoing administration, management, tracking, and reporting of the DPM Plan projects. The rate of return will be based on the capital structure in existence at the time Rider AMI is filed to be updated; the return on equity will initially be set at 10.38% (following the ATSI ROE which may be adjusted in the future); and the cost of debt will be set at the embedded long-term cost of debt in existence at the time the rider is updated. Attachment B details the estimated revenue requirements associated with the DPM Plan for the first five years.

**Q. WHAT WERE THE PRIMARY ASSUMPTIONS MADE IN THE DEVELOPMENT OF THE ESTIMATED REVENUE REQUIREMENTS?**

A. The primary assumptions used in the development of the estimated revenue requirements were:

- Estimated annual Capital and O&M spend provided by Companies’ witnesses Vallo and Rouse;

- Gross plant in-serviced on a half-year convention and grossed up for the capitalization of Allowable Funds Used During Construction (AFUDC);
- Circuit ties, reconductoring, reclosers and SCADA are assumed to take six months between when the capital investments are made and when the investments are completed and placed in service in FERC account 365 (Overhead Conductors and Devices), which has a book life of approximately 30 years;
- ADMS is assumed to take 18 months between when the capital investment is made and when the investment is placed in-service in FERC account 303 (Miscellaneous Intangible Plant), which has a book life of seven years;
- Tax depreciation is assumed to include bonus depreciation of 40% in year 1 and 30% in year 2; MACRS 20 tax depreciation for circuit ties, reconductoring, reclosers and SCADA; and three-year straight-line tax depreciation for ADMS;
- Current composite income tax rate at 36%;
- Companies' weighted average property tax rate at 9.7%;
- Current approved capital structure – 51% debt, 49% equity;
- Return on equity – 10.38%;
- Long-term cost of debt – 6.54%; and
- Revenue requirement grossed up 0.26% for Commercial Activity Tax (CAT).

**Q. HOW WILL THE DPM PLAN COSTS BE RECOVERED IN RIDER AMI?**

Rider AMI is a non-bypassable rider charged on a per customer basis. The revenue requirement of the DPM Plan will be allocated among rate schedules using the stipulated revenue distribution from the Companies' most recent distribution rate case, Case No. 07-551-EL-AIR. Each rate schedule's allocated estimated annual revenue requirement will

1 then be converted to a monthly customer charge based on the estimated annual number of  
2 customers for the upcoming recovery period. The Rider AMI rate design was approved by  
3 the Commission in Case No. 14-1297-EL-SSO. Attachment C shows the estimated rate  
4 calculations.

5 **Q. HOW OFTEN WILL RIDER AMI BE UPDATED?**

6 A. Consistent with current Commission-approved practice, Rider AMI will be updated and  
7 reconciled on a quarterly basis. The initial Rider AMI charge will go into effect after a  
8 Commission order is filed approving the DPM Plan. Thereafter, no later than December  
9 1, March 1, June 1 and September 1 of each year, the Companies will file updated Rider  
10 AMI tariff rates for the upcoming recovery period. Unless otherwise ordered by the  
11 Commission, the tariff rates will become effective on the subsequent January 1, April 1,  
12 July 1 and October 1, respectively. Attachment E is a template for the calculation of the  
13 revenue requirement to be included in the quarterly filing. Additional details will be  
14 included in the actual quarterly filings, such as, net plant balances and depreciation expense  
15 calculations by FERC Account, and property tax calculations.

16 **Q. WILL RIDER AMI INCLUDE A RECONCILIATION?**

17 A. Yes. Each quarterly Rider AMI filing will reconcile the estimated revenue requirement  
18 included in the previous quarter's filing to the actual revenue requirement based on actual  
19 costs and plant in service, and actual revenue received compared to forecasted revenue.  
20 Any over or under collection determined from that comparison will be reconciled in the  
21 subsequent quarter's revenue requirement calculation.

22 **Q. ARE YOU FAMILIAR WITH THE COMPANIES' DELIVERY CAPITAL**  
23 **RECOVERY RIDER ("RIDER DCR")?**

24 A. Yes.

1 **Q. WILL THE COMPANIES DOUBLE-RECOVER COSTS ASSOCIATED WITH**  
2 **THE DPM PLAN THROUGH RIDER AMI AND RIDER DCR?**

3 A. No. The costs associated with the DPM Plan will be tracked and identified separately from  
4 other costs. This will allow the Companies to exclude the DPM Plan costs from the  
5 calculation of Rider DCR. Exclusion of DPM Plan related costs from Rider DCR can be  
6 reviewed and verified as part of the annual Rider DCR audits. Similarly, Rider AMI is  
7 subject to an annual audit which will include a review of the Companies' adherence to the  
8 DPM Plan, and a determination of whether the amounts sought for recovery associated  
9 with the DPM Plan are not unreasonable based on the facts and circumstances known at  
10 the time the investments were made.

11 **ESTIMATED CUSTOMER IMPACTS**

12 **Q. HAVE THE COMPANIES ESTIMATED THE RATE IMPACTS ON CUSTOMERS**  
13 **OF THE PROPOSED DPM?**

14 A. Yes. Typical bills estimating the annual rate impacts of the proposed DPM Plan on non-  
15 shopping customers are shown on Attachment D.

16 **Q. WHAT WERE THE PRIMARY ASSUMPTIONS MADE IN THE**  
17 **DEVELOPMENT OF THESE ESTIMATED CUSTOMER IMPACTS?**

18 A. The primary assumptions used in the development of the estimated typical bills were:

- 19 • Estimated tariff rates for Rider AMI calculated in Attachment C;
- 20 • Generation Service Rider (Rider GEN) rates are annualized using prices effective June  
21 1, 2017; and
- 22 • All other applicable tariff pricing as of October 1, 2017.

1 **Q. HOW WILL THE IMPLEMENTATION OF THE DPM PLAN PROVIDE MORE**  
2 **GRADUAL RATE IMPACTS TO CUSTOMERS THAN OTHERWISE MIGHT**  
3 **OCCUR?**

4 A. As discussed in the direct testimony of other Companies' witnesses, the investments  
5 included in the DPM Plan are needed to support and enable future grid modernization  
6 investments. In the event the Companies do make investments to further modernize their  
7 distribution system, the incremental rate impact to customers will be more gradual than  
8 otherwise would likely occur because customers' rates will already reflect recovery of costs  
9 associated with the DPM Plan. Thus, any future grid modernization investments made by  
10 the Companies would have less of an incremental impact on the customers' monthly bills  
11 than if the Companies waited to implement the DPM Plan work and the further grid  
12 modernization work at the same time.

13 **COST/BENEFIT ANALYSIS**

14 **Q. HAVE THE COMPANIES ESTIMATED THE NET BENEFITS OF THE DPM**  
15 **PLAN TO CUSTOMERS?**

16 A. Yes, the Companies estimated the net benefits of the DPM Plan in the section of the DPM  
17 Plan titled "Estimated Costs vs. Benefits" on both a nominal and net present value basis.

18 **Q. WHAT WERE THE PRIMARY ASSUMPTIONS MADE IN THE**  
19 **DEVELOPMENT OF THESE ESTIMATED NET BENEFITS?**

20 A. The primary assumptions used in the development of the estimated net benefits were:

- 21 • Estimated annual Capital and O&M spend provided by Companies' witness Vallo and  
22 Rouse;
- 23 • Estimated customer benefits provided by Companies' witness Beutler; and



- Weighted average cost of capital of 7.22% used as the discount rate to develop the net present value.

**Q. PLEASE DESCRIBE THE BASIS OF THE DISCOUNT RATE USED IN THE NET PRESENT VALUE CALCULATIONS.**

A. The discount rate of 7.22% represents the Companies' composite after-tax weighted average cost of capital using the cost of capital and income tax rate assumptions discussed above.

**Q. PLEASE SUMMARIZE THE RESULTS OF THE COST/BENEFIT ANALYSIS**

A. On a nominal basis, the DPM Plan is estimated to result in net benefits to customers of \$2.0 billion, or a cost/benefit ratio of 3.4. On a net present value basis, estimated net benefits are \$0.5 billion, or a cost/benefit ratio of 2.0.

## **CONCLUSION**

**Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

A. Yes; however, I reserve the right to supplement my testimony.

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