

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)	Case No. 17-2436-EL-UNC
Edison Company for a Distribution Platform)	
Modernization Plan)	
)	

DIRECT TESTIMONY OF

LISA M. ROUSE

ON BEHALF OF

OHIO EDISON COMPANY

THE CLEVELAND ELECTRIC ILLUMINATING COMPANY

THE TOLEDO EDISON COMPANY

December 1, 2017

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

2 A. My name is Lisa M Rouse. I am employed by FirstEnergy Service Company as Director,
3 Outage Management. My business address is 76 S. Main Street, Akron, OH 44308.

4 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND, PROFESSIONAL**
5 **QUALIFICATIONS, AND EMPLOYMENT EXPERIENCE.**

6 A. I graduated with a Bachelor of Science degree in Electrical Engineering from The
7 University of Akron and have served in several positions in the electric utility industry for
8 the past 28 years. I began my career with Florida Power & Light in 1989 and joined Ohio
9 Edison Company in 2002. I have held various roles in engineering, distribution control
10 center operations, and operations management. My professional experiences include: ten
11 years as a design engineer, three years as Reliability Coordinator and Restoration Field
12 Supervisor, nine years in Control Center Operations and six years in Executive Leadership
13 with Distribution Control Centers and Reliability. I assumed my current position in 2011.

14 **Q. PLEASE DESCRIBE YOUR CURRENT ROLES AND RESPONSIBILITIES.**

15 A. As Director, Outage Management, I am responsible for: optimizing performance of
16 Distribution Control Center (“DCC”) operations by providing guidance and developing
17 standardized DCC processes and procedures; providing accurate reliability metrics and
18 reporting; supporting and serving as subject matter expert of the Manual of Operations;
19 selecting and managing the outage management systems (including Advanced Distribution
20 Management System, “ADMS”); and developing standardized design, methodology and
21 overall strategy for Smart Grid programs across the FirstEnergy Corp. distribution utilities,
22 including Ohio Edison Company, The Cleveland Electric Illuminating Company, and The
23 Toledo Edison Company (collectively, the “Companies”).

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

2 A. The purpose of my testimony is to describe the ADMS included in the Distribution
3 Platform Modernization (“DPM”) Plan, including the estimated costs associated with this
4 work. Details behind this category of work can be found in the sections of the DPM Plan
5 titled “Data Acquisition Systems” and “Estimated Costs”, which I am sponsoring and
6 incorporate into my testimony.

7 **Q. HOW WERE THE COST ESTIMATES FOR ADMS INCLUDED IN THE DPM**
8 **PLAN DERIVED?**

9 A. In early 2015, the Companies engaged Accenture Consulting to explore the needs and costs
10 associated with ADMS deployment. Accenture is an industry expert in this field, and has
11 significant experience working with other utilities on ADMS solutions. Ever since, I have
12 led the team at the Companies that has continued to monitor and research ADMS
13 deployments and has had further discussions with Accenture as recently as October 2017
14 to ensure the Companies were informed of most recent industry and vendor trends. The
15 Companies’ strategy in investing in ADMS is to draw from lessons learned by other large
16 utilities and to select a proven technology vendor with software that can adapt to the
17 changes required to support future grid modernization. The Companies relied on their
18 experience, research, and professional judgment, including consultation with Accenture, to
19 develop the cost estimates for ADMS included in the DPM Plan in a manner that is
20 consistent with this strategy.

1 **Q. WHAT IS THE ESTIMATED COST OF THE ADMS AS PART OF THE DPM**
2 **PLAN?**

3 A. Based on the methodology discussed above, the total estimated capital cost of the ADMS
4 over the three-year term of the DPM Plan is \$30 million. These estimated costs are used
5 in the cost/benefit analysis described in the testimony of Companies' witness McMillen.

6 **Q. IS ADMS INCREMENTAL TO THE COMPANIES' BASE LEVEL OF SPEND?**

7 A. Yes. As discussed in the direct testimony of Companies' witness Karafa, the Companies
8 have necessary capital expenditures that are made every year to maintain safe and reliable
9 service to customers. These base expenditures allow the Companies to operate, maintain,
10 and expand, where needed, their distribution system under its existing architecture and
11 design. The ADMS implementation included in the DPM Plan is outside of this normal
12 work because it enhances and modernizes the functionality of the Companies' distribution
13 system to provide an additional level of customer benefits. As described in the DPM Plan,
14 ADMS will significantly improve the Companies' distribution system visibility, enable
15 remote re-routing of power, and perform advanced decision analysis regarding power
16 flows. The ADMS modernizes the Distribution System Operator Interface and enables the
17 Companies to support further grid modernization and interconnection with end use
18 technologies. ADMS goes beyond maintaining the Companies' current distribution system
19 under its existing design and is outside of the scope of the Companies' base capital
20 expenditures.

1 **Q. WOULD CUSTOMERS BE ABLE TO REALIZE THE FULL BENEFITS OF GRID**
2 **MODERNIZATION WITHOUT THIS INVESTMENT AS PART OF THE DPM**
3 **PLAN?**

4 A. No. ADMS is needed to realize the full benefits of the DPM Plan because it allows the
5 Companies' system operators a more complete view of the distribution system and is
6 capable of advanced decision analysis regarding power flows. Absent the installation of
7 ADMS as part of the DPM Plan, the benefits of the circuit ties, circuit reconductoring,
8 reclosers, and SCADA will not be fully achieved. The ADMS is a crucial system that
9 provides visibility and control to operators. It also facilitates quicker response to changes
10 on the distribution system to provide adequate voltage, supports partial restoration following
11 outages, and enables the remote re-routing of power during system constraints. The ADMS
12 software included in the DPM Plan can synthesize data and create solutions to re-route
13 power flows more quickly and more efficiently than otherwise would occur if manually
14 calculated by a distribution system operator. The centralized software provides the "best"
15 solution very quickly, with the least burden to the surrounding distribution system.

16 **Q. WILL ADMS ALSO SUPPORT FUTURE GRID MODERNIZATION**
17 **INVESTMENTS OUTSIDE OF THE DPM PLAN?**

18 A. Yes. While ADMS is necessary to realize the full benefits of the DPM Plan, it will also
19 serve as the platform software needed to support future grid modernization investments and
20 customer-oriented tools, such as distribution automation, integrated Volt/VAR control
21 ("IVVC"), and a Distribution Energy Resource Management System ("DERMS"). If
22 distribution automation is deployed by the Companies, the ADMS can be used to facilitate
23 the automated re-routing of power. Similarly, the ADMS platform can be leveraged to

1 support IVVC by capturing, managing, and analyzing data to allow the Companies to
2 automatically manage voltage and power quality. When ADMS is combined with DERMS,
3 it will accommodate distributed energy resources on the system by tracking and
4 automatically adjusting to intermittent power sources.

5 **Q. WHY IS IT IMPORTANT TO INTEGRATE ADMS WITH THE OTHER**
6 **PROJECTS INCLUDED IN THE DPM PLAN?**

7 A. As discussed in the direct testimony of Companies' witness Vallo, the other categories of
8 work included in the DPM Plan create alternate paths for power flow and the capability to
9 remotely control the re-routing of power. When combined with SCADA-enabled reclosers
10 and other additional SCADA points on the system, the ADMS conducts a decision analysis
11 and provides operators with the ability to remotely react to system conditions more quickly
12 and efficiently. This not only provides a faster and safer way to restore power to customers
13 following an outage, it also ensures proper voltage is delivered to customers following a
14 power interruption.

15 **Q. DOES THIS PROJECT PROVIDE BENEFITS TO CUSTOMERS?**

16 A. Yes. The enhanced data availability, system visibility, and decision analysis capability of
17 ADMS provide reliability benefits to customers and reduce restoration times associated
18 with major storms. These benefits will continue independent of any future grid
19 modernization investments made by the Companies and are needed to help address
20 customers' increasing expectations for reliability, as discussed in the direct testimony of
21 Companies' witness Karafa.

1 **Q. WHAT ACTIONS WILL THE COMPANIES TAKE AS PART OF THE DPM**
2 **PLAN TO MITIGATE THE RISK THAT THIS INVESTMENT WILL BECOME**
3 **OBSOLETE PREMATURELY?**

4 A. The Companies have completed research regarding the ADMS, including consultation with
5 industry experts, peer utilities and vendors. When choosing an ADMS, the Companies will
6 evaluate and select a solution from a market leader with the demonstrated ability to adapt
7 to a changing future technological landscape. The Companies will install periodic updates
8 to software that will facilitate adaptability to changing system conditions and extend the
9 useful life of this software platform.

10 **Q. PLEASE SUMMARIZE YOUR CONCLUSIONS.**

11 A. The implementation of ADMS included in the DPM Plan will provide significant self-
12 sustaining benefits to customers in terms of improved reliability and outage restoration.
13 This grid modernization investment is outside the scope of the Companies' base capital
14 expenditures needed to maintain safe and reliable service, and is necessary to enable future
15 grid modernization. ADMS, along with the other categories of work sponsored in the direct
16 testimony of Companies' witness Vallo, should be approved as soon as possible so that
17 customers can start to realize the benefits.

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

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

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

12/1/2017 5:29:09 PM

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Case No(s). 17-2436-EL-UNC

Summary: Testimony of Lisa M. Rouse electronically filed by Mr. James F Lang on behalf of Ohio Edison Company and The Cleveland Electric Illuminating Company and The Toledo Edison Company