

**BEFORE  
THE PUBLIC UTILITIES COMMISSION OF OHIO**

IN THE MATTER OF THE FILING BY	)	CASE NO. 16-481-EL-UNC
OHIO EDISON COMPANY, THE	)	
CLEVELAND ELECTRIC	)	
ILLUMINATING COMPANY, AND	)	
THE TOLEDO EDISON COMPANY	)	
OF A GRID MODERNIZATION	)	
BUSINESS PLAN	)	

IN THE MATTER OF THE FILING BY	)	CASE NO. 17-2436-EL-UNC
OHIO EDISON COMPANY, THE	)	
CLEVELAND ELECTRIC	)	
ILLUMINATING COMPANY, AND	)	
THE TOLEDO EDISON COMPANY	)	
OF AN APPLICATION FOR	)	
APPROVAL OF A DISTRIBUTION	)	
PLATFORM MODERNIZATION	)	
PLAN	)	

IN THE MATTER OF THE	)	CASE NO. 18-1604-EL-UNC
APPLICATION OF OHIO EDISON	)	
COMPANY, THE CLEVELAND	)	
ELECTRIC ILLUMINATING	)	
COMPANY, AND THE TOLEDO	)	
EDISON COMPANY TO IMPLEMENT	)	
MATTERS RELATING TO THE TAX	)	
CUTS AND JOBS ACT OF 2017	)	

IN THE MATTER OF THE	)	CASE NO. 18-1656-EL-ATA
APPLICATION OF OHIO EDISON	)	
COMPANY, THE CLEVELAND	)	
ELECTRIC ILLUMINATING	)	
COMPANY, AND THE TOLEDO	)	
EDISON COMPANY FOR APPROVAL	)	
OF A TARIFF CHANGE	)	

**COMMENTS OF OHIO EDISON COMPANY, THE CLEVELAND ELECTRIC  
ILLUMINATING COMPANY, AND THE TOLEDO EDISON COMPANY ON THE  
NOVEMBER 14, 2022 OPERATIONAL BENEFITS ASSESSMENT REPORT**

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## I. INTRODUCTION

Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company (“Companies”) submit these Comments on Daymark Energy Advisors’ (“Daymark”) report entitled “Operational Benefits Assessment of FirstEnergy Ohio’s Grid Mod I” (“Report”) that was filed with the Commission on November 14, 2022.

The Report’s key findings include that the Companies met or exceeded deployment targets<sup>1</sup> and generally satisfied their requirement to report on the stipulated metrics for the first phase of distribution grid modernization (“Grid Mod I”).<sup>2</sup> The Companies agree with the Report’s recommendation to use the deemed annual operational savings from Grid Mod I<sup>3</sup> for years 4-6.<sup>4</sup> The Report also reflects on the Grid Mod I Stipulation and opines that this operational benefits assessment could have been better facilitated with alternate benefit tracking methodologies and additional reporting metrics. The Companies appreciate the Report’s recommendations regarding tracking and metrics and are reviewing the recommendations for possible inclusion into future grid modernization deployments, including their pending Grid Mod II proposal.<sup>5</sup>

For the reasons more fully set forth below, the Companies respectfully request that the Commission find that: (1) the Companies’ deployment and reporting for Grid Mod I was consistent with the approved Stipulation, Supplemental Stipulation, and Commission Order; (2) the fixed operational savings included in Attachment D of the Stipulation<sup>6</sup> be used for years 4-6; and (3)

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<sup>1</sup> Report at 3.

<sup>2</sup> *Id.* at 21.

<sup>3</sup> Stipulation and Recommendation (11/9/2018) (“Stipulation”) at 23-24 and Attachment D, Supplemental Stipulation and Recommendation (1/25/2019) (“Supplemental Stipulation”) at 6, and Opinion and Order (7/17/2019) (“Order”) at ¶71.

<sup>4</sup> Report at 52.

<sup>5</sup> Case No. 22-704.

<sup>6</sup> Stipulation at 23-24 and Attachment D; *see also*, Supplemental Stipulation at 6.

Daymark’s additional recommendations be considered in the context of future grid modernization proposals, consistent with the Supplemental Stipulation.

## **II. BACKGROUND OF THE GRID MOD I OPERATIONAL BENEFITS ASSESSMENT**

Grid Mod I was the product of a Stipulation and Supplemental Stipulation approved by the Commission.<sup>7</sup> Grid Mod I provided for, among other things, deployment of certain grid modernizing technologies, the tracking and reporting of 47 agreed-upon metrics, deemed operational savings to be credited to customers through Rider AMI, and an operational benefits assessment conducted mid-way through deployment.<sup>8</sup>

The operational benefits assessment was intended “to evaluate whether the actual functionality and performance of the project is consistent with the planned specifications.”<sup>9</sup> As part of this assessment, an independent cost benefit analysis could be conducted, “which could include a review and possible increase or decrease to the level of operational savings credited to the revenue requirement of Rider AMI during Grid Mod I.”<sup>10</sup> Because the signatory parties agreed to deem operational savings at set amounts,<sup>11</sup> the operational benefits assessment was intended as a tool to see if the deemed values were too high or too low. As Staff explained in their initial post-hearing brief, “[m]idway through the Grid Mod I deployment, the level of operational savings for all included technologies will be reviewed by a third-party consultant and the credit to Rider AMI may be modified, based on the findings of the review and subject to Commission approval.”<sup>12</sup> The

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<sup>7</sup> See generally, Stipulation, Supplemental Stipulation, and Order.

<sup>8</sup> *Id.*

<sup>9</sup> Supplemental Stipulation at 5.

<sup>10</sup> *Id.*

<sup>11</sup> Stipulation at 23.

<sup>12</sup> Case No. 16-0481-EL-UNC (3/1/2019) Initial Post-Hearing Brief Submitted on Behalf of the Staff of the PUCO at 8.

results of the review are subject to Commission approval,<sup>13</sup> and “may also be incorporated into future deployment of the Companies’ grid modernization investment to ensure the goals of the investments are being met.”<sup>14</sup>

### **III. COMPANIES’ COMMENTS**

#### **A. Deployment and Reporting**

The Companies agree with the Report’s findings that they have been “largely successful” in implementing the Grid Mod I technologies.<sup>15</sup> The Companies have had a successful deployment of advanced metering infrastructure (“AMI”), distribution automation (“DA”), and integrated volt/var control (“IVVC”) field devices, despite the challenges of COVID-19 and global supply chain constraints. Specifically, in Grid Mod I, the Companies have completed DA and IVVC circuit construction, including communication verification and advanced distribution management system (“ADMS”) Advanced Applications integration, on 209 DA circuits and 206 IVVC circuits.<sup>16</sup> As noted in the Report, as of August 8, 2022, the Companies had installed 706,545 AMI meters and associated data systems and processes, surpassing their commitment to install a minimum of 700,000 AMI meters.<sup>17</sup>

The Companies also agree with the Report’s finding that they have “generally met [their] obligation” to report on the stipulated Grid Mod I metrics.<sup>18</sup>

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<sup>13</sup> Opinion at ¶ 71.

<sup>14</sup> Supplemental Stipulation at 5.

<sup>15</sup> Report at 3.

<sup>16</sup> *Id.* at 27. The Companies committed to installing DA on at least 200 circuits and IVVC on at least 202 circuits (Stipulation at 19).

<sup>17</sup> Report at 27.

<sup>18</sup> *Id.* at 21.

## B. Operational Savings

In Grid Mod I, the signatory parties agreed that estimated operational savings produced by the investments and accruing to the Companies would be credited to customers and against the Rider AMI revenue requirement.<sup>19</sup> The Stipulation provided that for the first three years of deployment, the credit would be fixed at the levels of estimated operational savings provided on Attachment D to the Stipulation, subject to a possible increase or decrease as a result of the operational benefits assessment.<sup>20</sup> The Supplemental Stipulation further provided that the deemed annual operational savings reflected on Attachment D may continue for years 4-6 “if there is no approved Grid Mod II plan . . . or if there is no adopted recommendation from the [operational benefits assessment]. . . .”<sup>21</sup>

The estimated amounts of operational savings for years 1-6 as set forth on Attachment D to the Stipulation are excerpted here:

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		\$/Mil	\$/Mil	\$/Mil	\$/Mil	\$/Mil	\$/Mil
AMI - Meter Reading	Avoided O&M Cost	\$ -	\$ (0.66)	\$ (2.56)	\$ (5.09)	\$ (6.07)	\$ (6.16)
AMI - Meter Services	Avoided O&M Cost	\$ -	\$ (0.01)	\$ (0.11)	\$ (0.24)	\$ (0.28)	\$ (0.28)
AMI - Back Office	Avoided O&M Cost	\$ -	\$ -	\$ -	\$ (0.09)	\$ (0.13)	\$ (0.13)
AMI - Call Center Efficiency	Avoided O&M Cost	\$ -	\$ -	\$ -	\$ (0.04)	\$ (0.04)	\$ (0.04)
ADMS Operational Savings	Avoided O&M Cost	\$ -	\$ -	\$ -	\$ (2.17)	\$ (2.21)	\$ (2.25)
DA Operational Savings	Avoided O&M Cost	\$ (0.05)	\$ (0.11)	\$ (0.16)	\$ (0.17)	\$ (0.17)	\$ (0.17)
Revenue Assurance—Theft Detection & Meter Accuracy	Increased Revenue	\$ -	\$ (0.13)	\$ (0.45)	\$ (0.79)	\$ (0.79)	\$ (0.79)
<b>Total Estimated Operational Benefits of Grid Mod I</b>		<b>\$ (0.05)</b>	<b>\$ (0.90)</b>	<b>\$ (3.28)</b>	<b>\$ (8.58)</b>	<b>\$ (9.68)</b>	<b>\$ (9.82)</b>

The Report found that the auditor was “unable to make a recommendation for an ongoing level of operational savings to be recognized in rates[.]”<sup>22</sup> and it recommended applying the fixed

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<sup>19</sup> Stipulation at 23.

<sup>20</sup> *Id.* at 22-23.

<sup>21</sup> Supplemental Stipulation at 6.

<sup>22</sup> Report at 50.

savings agreed to in the Stipulation's Attachment D for years 4-6.<sup>23</sup> The Companies agree with this recommendation and have begun implementing it in accordance with the provisions of the Supplemental Stipulation.<sup>24</sup>

Though not apparent from the Report,<sup>25</sup> the Companies quantified achieved operational savings in connection with AMI meter reading totaling more than \$3.9 million through June 2022.<sup>26</sup> This amount represents more than 100% of the estimated operational savings associated with AMI in years 1-3 and approximately 93.5% of the **total** estimated operational savings for years 1-3.<sup>27</sup> And, while not reported in dollars, the Companies track DA operational savings through the agreed-upon metrics 39 and 40 (truck rolls related to an outage and outage-related truck rolls avoided).<sup>28</sup> To the extent the Companies have not achieved all of the estimated operational savings across all categories for years 1-3, customers are protected because the deemed amount of operational savings is credited to them through Rider AMI, even though it exceeds the savings realized by the Companies.

Importantly, as shown in the excerpt of Attachment D above, three of the seven categories of operational savings – including savings related to ADMS – were not estimated to accrue at all in years 1-3. Thus, the lack of reported operational savings in these categories to date is expected. Consistent with the Stipulation, the signatory parties did not anticipate realizing these operational savings until after the operational benefits assessment had been completed.

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<sup>23</sup> *Id.* at 52.

<sup>24</sup> Supplemental Stipulation at 6.

<sup>25</sup> *See, e.g.*, Report at 4-5 (“Collectively, the demonstrated operational savings have fallen short of the level included in the Stipulation.”). Report at 21, n. 57 (“As examples, [the] Companies . . . have not collected data which directly represent operational savings from the AMI deployment.”).

<sup>26</sup> DM Set 3-DR-015 and Attachments 1-3.

<sup>27</sup> Stipulation at Attachment D.

<sup>28</sup> PAC Set 1-DR-025, Attachment 1; DM Set 4-DR-025, Attachment 1.

### C. Metrics

The Report also included an evaluation of the Grid Mod I reporting metrics. While the Report found that the Companies “generally met [their] obligation” to report on the stipulated Grid Mod I metrics[,]<sup>29</sup> it also determined that the reported metrics could have better facilitated the operational benefits assessment and that many of the metrics were not “directly informative of benefits being achieved.”<sup>30</sup> The Report offered recommendations for improving reporting metrics going forward.

The Report’s critique of the metrics may have been premised on an assumption that the approved metrics were intended to directly track the estimated operational savings and benefits as they were calculated in the Grid Mod I cost-benefit analysis (“CBA”) one-for-one.<sup>31</sup> However, this was not the approach as agreed to in the Stipulation or Supplemental Stipulation, nor required by the Commission’s Order. Rather, the metrics were developed with Staff and the other signatory parties and were part of a settlement that was approved by the Commission. Additionally, the Companies’ reporting metrics are nearly identical to those previously used by at least one other Ohio electric distribution utility in the measurement of its grid modernization investments.<sup>32</sup>

The Report creates an opportunity to evaluate the effectiveness of the metrics and refine them in future grid modernization proposals. The Companies appreciate the recommendations and are reviewing them and considering which, if any, could be incorporated in the pending Grid Mod II proposal.

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<sup>29</sup> Report at 21.

<sup>30</sup> *Id.* at 2.

<sup>31</sup> *See, e.g.*, Report at 1-2 (stating that there was a “lack of direct reporting as to operational savings being achieved. . .” and that the Companies did not “present evidence of performance and/or savings which related back to the original [CBA] assumptions.”).

<sup>32</sup> *See* Case No. 18-1618-EL-RDR (4/12/20219), AEP Ohio GridSmart® Deployment Audit: Review of the Phase 1 and Phase 2 Operational Benefits, Final Report, performed by Daymark at 143-145.

#### **D. Cost-Benefit Analysis**

The CBA includes estimated costs, benefits, and operational savings for Grid Mod I. It was developed in collaboration with Staff,<sup>33</sup> along with the other signatory parties as part of the settlement approved by the Commission. Estimated benefits and operational savings are challenging for any party to identify with precision at the time of filing, and the Commission observed that “the quantitative net benefit associated with Grid Mod I cannot be ascertained with certainty, but we can acknowledge that Grid Mod I is expected to produce a positive cost-benefit to ratepayers. . . .”<sup>34</sup>

Although the Grid Mod I Stipulation specifically contemplates an independent CBA conducted by the consultant,<sup>35</sup> the Report focuses on a detailed review of the CBA assumptions that were included as part of the Grid Mod I Stipulation approved by the Commission. The Report concluded that the Grid Mod I CBA did not enable the operational benefits assessment, finding that it “does not meet the level of transparency which would be expected per the Commission’s grid modernization proceeding conclusions, or, more broadly, a level which would allow for audit conclusions to be reached.”<sup>36</sup> The Report also faults the Companies for not being forthcoming in identifying certain analyses supporting the CBA.<sup>37</sup>

The Companies respectfully disagree that the CBA or its sources are non-transparent and that they were not forthcoming during the assessment. The Companies received the request for the CBA on May 24, 2022 and provided it on May 26, 2022.<sup>38</sup> The assumptions underlying the

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<sup>33</sup> Order at ¶101.

<sup>34</sup> *Id.* at ¶116.

<sup>35</sup> Stipulation at 22.

<sup>36</sup> Report at 4.

<sup>37</sup> *Id.* at 43-44.

<sup>38</sup> DM Set 1 (providing PAC Set 01-DR-003- Attachments 1-2).



CBA inputs are listed in the CBA itself under the column headings “Source/Calculation.”<sup>39</sup> During the audit, the Companies provided all requested information based on data that was available and used in the development of the CBA and offered to meet to walk through the sources for the CBA model.

Detailed explanations of many of the sources underlying the CBA (*e.g.*, ICE Calculation Tool, SGMI Project,<sup>40</sup> CVR Study, SGCC Study) are found in the Companies’ Grid Modernization Business Plan (“Business Plan”). The Business Plan was filed with the Commission in the first of these consolidated cases,<sup>41</sup> and was included in the Scope of Investigation in the RFP for this operational benefits assessment.<sup>42</sup> The Companies also discussed it in the kickoff meeting on May 26, 2022. The Business Plan explains that: “additional studies throughout the country have also addressed the varying implications of smart grid technologies. Several of these studies, which are more fully discussed in a later section of this Plan, form the basis for many of the assumptions related to the quantification of customer and societal benefits.”<sup>43</sup> The Business Plan also provides details about the Companies’ methodology, including how they approached the estimation of customer and societal benefits and operational savings.<sup>44</sup>

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<sup>39</sup> *Id.*

<sup>40</sup> The Commission remarked directly about the value of the SGMI Project (or CEI Pilot) as a data source underlying the Grid Mod I CBA: “Importantly, we note that the data used by FirstEnergy regarding the major storms/events is data collected within the Companies’ service territories as a part of their Pilot Program. This is not hypothetical data based on assumptions or otherwise. We recognize the profound rarity to have at our disposal such readily available data as to the impacts of DA, AMI, and IVVC deployment in Ohio and, therefore, attribute substantial weight to this evidence.” Order at ¶112.

<sup>41</sup> Case No. 16-481-EL-UNC (2/29/2016) Grid Modernization Business Plan and Exhibit A thereto. *See also*, Report at 6 (“The Companies filed their plan, titled the Grid Modernization Business Plan, in Case No. 16-481-EL-UNC in February 2016.”).

<sup>42</sup> Entry (3/9/2022), Request for Proposal No. RA21-GM-1, at 3.

<sup>43</sup> Business Plan at Ex. A, pp. 3-4.

<sup>44</sup> *Id.* at Ex. A, pp. 17-30.

The Report references additional spreadsheets related to assumptions underlying the CBA that were not provided until August 17, 2022.<sup>45</sup> The referenced spreadsheets are models or scenarios that were developed for the Companies by an outside consultant prior to the filing of the Business Plan that informed two operational savings elements of the CBA – the DA operational savings and the ADMS operational savings.<sup>46</sup> The Companies referenced these scenarios in interviews conducted by Daymark in June and July 2022. As soon as the Companies had clarification in August 2022 that Daymark was seeking copies of these studies, the Companies provided them.

Although they disagree with the Report’s conclusions about the CBA and its sources, the Companies appreciate the Report’s recommendations related to the CBA assumptions and are reviewing the recommendations in the context of the pending Grid Mod II proposal.

#### **IV. CONCLUSION**

The Companies respectfully request that the Commission issue a Finding and Order that finds that: (1) the Companies’ deployment and reporting for Grid Mod I was consistent with the approved Stipulation, Supplemental Stipulation, and Commission Order; (2) the fixed operational savings included in Attachment D of the Stipulation be used for years 4-6; and (3) Daymark’s additional recommendations be considered in the context of future grid modernization proposals, consistent with the Supplemental Stipulation.

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<sup>45</sup> Report at 15.

<sup>46</sup> See CBA (DM Set 1 (providing PAC Set 01-DR-003- Attachments 1-2)), specifically the references to Case No. 16-481-EL-UNC in the “Source/Calculation” columns on the “DA Op Savings” tab and “ADMS Op Savings” tab.

Respectfully submitted,

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### **CERTIFICATE OF SERVICE**

I hereby certify that a true and accurate copy of the forgoing Comments was filed electronically through the Docketing Information System of the Public Utilities Commission of Ohio on this 11th day of August, 2023. The PUCO's e-filing system will electronically serve notice of the filing of this document on counsel for all parties.

/s/Christine E. Watchorn

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Summary: Comments on the November 14, 2022 Operational Benefits Assessment Report electronically filed by Ms. Christine E. Watchorn on behalf of Ohio Edison Company and The Cleveland Electric Illuminating Company and The Toledo Edison Company.