

November 15, 2019

Docketing Division
Public Utilities Commission of Ohio
180 East Broad Street
Columbus OH 43215

PUCO

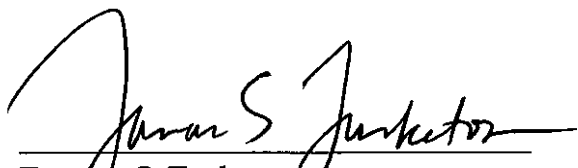
2019 NOV 15 PM 3:07

2019-11-15 15:07

RE: *In the Matter of the Review of the Smart Grid Modernization Initiative Contained in the Tariffs of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company, Case No. 17-2276-EL-RDR.*

Dear Docketing Division:

Enclosed please find the Staff's Review and Recommendations in regard to the review of the Smart Grid Modernization Initiative filed by Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company, in Case No. 17-2276-EL-RDR.



Tamara S. Turkenton
Director, Rates and Analysis Department
Public Utilities Commission of Ohio



David Lipthratt
Chief, Research and Policy Division
Public Utilities Commission of Ohio

Enclosure

Cc: Parties of Record

This is to certify that the images appearing are an accurate and complete reproduction of a case file document delivered in the regular course of business.

180 East Broad Street, _____ Date Processed NOV 15 2019
Columbus, Ohio 43215-3793

**Cleveland Electric Illuminating Company
Ohio Edison Company
Toledo Edison Company
Case No. 17-2276-EL-RDR (Rider AMI)**

SUMMARY

On February 28, 2019, Cleveland Electric Illuminating Company (CEI), Ohio Edison Company (OE), and The Toledo Edison Company (TE) (collectively FirstEnergy or Company) filed their application (Application) for the annual review of 2018 costs applicable to the Advanced Metering Infrastructure/Modern Grid Rider (Rider AMI). Rider AMI is a non-bypassable rider, approved by the Commission as the mechanism for recovering the costs related to the deployment of smart grid and advanced metering infrastructure as originally approved in Case No. 07-551-EL-AIR.

In its order in Case No. 10-388-EL-SSO¹, the Commission provided guidance on matters related to Rider AMI and costs that could be recovered through this rider. The Commission authorized FirstEnergy to collect smart grid costs that it incurred as part of its pilot program over a ten-year period through Rider AMI, with quarterly adjustments to the rate. The rider is billed monthly on a fixed customer charge basis.

In Case No. 14-1297-EL-SSO², the Commission ordered that the rider shall continue, and that FirstEnergy shall file a grid modernization business plan highlighting future initiatives for Commission consideration and approval. Any portion of the plan approved by the Commission shall be recoverable by FirstEnergy through Rider AMI, which will be updated and reconciled on a quarterly basis and will remain in effect until such costs are fully recovered. On February 29, 2016, FirstEnergy filed a grid modernization business plan with the Commission in Case No. 16-481-EL-UNC (Grid Mod Case) and on December 4, 2017, an application for approval of a distribution platform modernization plan (DPM Plan) in Case No. 17-2436-EL-UNC.

On November 9, 2018, a stipulation and recommendation (Stipulation) was filed, recommending a resolution for the Grid Mod Case and DPM Plan. The Commission issued its Opinion and Order on July 17, 2019, approving the Stipulation, subject to the Commission's adjustments to the calculation of the total estimated net benefits proposed for Grid Mod I.

STAFF REVIEW AND RECOMMENDATIONS

Staff's review of the Application was designed to ensure that FirstEnergy's policies and practices comport with sound ratemaking principles and Commission policies, confirm that its books and records are reliable sources of financial data, and ultimately determine if the application is just and reasonable.

¹ Case No. 10-338-EL-SSO, August 25, 2010 Opinion and Order at 13-14

² Case No. 14-1297-EL-SSO, March 31, 2016 Opinion and Order at 9-10

In its review, Staff examined the as-filed schedules for consistency with the Commission's Opinion and Orders in previous smart grid cases and to ensure proper accounting treatment was applied. The audit consisted of a review of the financial statements for completeness, occurrence, presentation, valuation, allocation, and accuracy. Staff conducted this audit through a combination of document review, interviews, and interrogatories. Staff requested documentation as needed to determine that the costs were substantiated or to conclude that an adjustment was warranted.

New Capital Installations

First Energy included new capital expenditures related to the installation of new reclosers, new communication equipment, and enhancements to the support system for the smart meter infrastructure on various circuits in the CEI pilot program. The work was performed in order to provide increased reliability by isolating or sectionalizing circuits. Staff is concerned that the Company is broadening the scope and the intent of the pilot program as authorized.

The Commission's Order in Case No. 10-388-EL-SSO granted the Company's application for the establishment of the Ohio Site Deployment of the smart grid initiative. The Order in that case states that "The Companies shall not complete any part of the Ohio Site Deployment that the United States Department of Energy (DOE) does not match funding in an equal amount³."

On December 22, 2014 the Company filed an application, Case No. 09-1820-EL-ATA requesting additional cost recovery to complete studies related to the Ohio Site Deployment of the smart grid modernization initiative. This application estimated the operating and maintenance costs to complete the data collection to be approximately \$8.5 million and the Commission Order limited the recovery to 100 percent of the on-going data collection and maintenance costs for the completion of these studies from June 1, 2015 to June 1, 2019⁴. The Commission's Finding and Order on May 28, 2015 found that the Companies application for further cost recovery is reasonable and should be granted. Although the Company filed an application requesting additional cost recovery for maintenance costs related to data collection, Staff asserts that the application did not request nor contemplate additional capital expenditures.

The new capital installations in the current filing have not been matched in an equal amount by the DOE nor has the Company filed an application with the Commission requesting the authority to recover the new capital costs. Staff believes these new capital costs were never contemplated in the application requesting additional maintenance costs in order to complete data collection. Therefore, Staff recommends that the new capital installations totaling \$676,912 be removed from the rider.

Staff notes that within the new capital installation transactions, Staff found issues pertaining to tree trimming maintenance and duplicate invoices. Should the Commission decide to authorize the capital expenditures associated with the new installations, then Staff would recommend removal of \$1,101 associated with a duplicate invoice and tree trimming.

Replacement and Repairs

³ Case No. 10-338-EL-SSO, August 25, 2010 Opinion and Order at 13-14

⁴ Case No. 09-1820-EL-ATA, May 28, 2015 Finding and Order at 3

The Company included in the rider for recovery capital expenditures and expenses related to the replacement and repairs of smart meters, communication devices and recloser controls for CEI's pilot program. In some instances, the repairs were partially allocated to capital expenditures, which concerns Staff as repairs are typically expensed. Staff contends that this is outside the scope of the rider and that any capital replacements should be recognized within the Delivery Capital Recovery Rider (Rider DCR), and repairs are typical operation and maintenance expenses that are recovered through base rates. Staff recommends that capital expenditures associated with replacements such as smart meters and reclosers totaling \$97,623 be removed from the rider.

CONCLUSION

The Staff has completed its review of the filing and finds that FirstEnergy has appropriately included in Rider AMI only those costs that were incurred as a result of serving its customers in Ohio, with the exceptions noted. Staff recommends an adjustment of \$774,535 as shown on attachment 1. This adjustment is comprised of both capital and maintenance expenses with some project costs being allocated between both categories. If the Commission finds that these charges are inappropriate for recovery, Staff asks that the Commission direct the Company to work with Staff in order to accurately reflect the adjustment within Rider AMI.

Row Labels	Sum of Actual Dollars	Type of Work	Linkage to DAVVC Pilot Program Circuits	Staff Recommended Adjustment	Adjustment Amount
1-HK Install new SGM recloser #111	\$29,260.11	New recloser installation	1-HK recloser #111 is intended to provide increased reliability to the CEI Distribution Control Center, which is responsible for operating CEI's Distribution Automation (DA) pilot. This recloser is being installed to isolate the control center from potential faults.	Yes New Capital Installation	\$29,260.11
1-OX Inst new smart grid recloser #103	\$58,948.09	New recloser installation	The 1-OX circuit is one of the 36 circuits included in CEI's original DA Pilot footprint. This recloser is being added to improve reliability of the 1-OX circuit by mitigating outages. Through practical learning in the pilot area, it was determined the customer reliability experience would improve from further sectionalization and providing single phase trip where it did not already exist.	Yes New Capital Installation	\$58,948.09
1-OX Inst new smart grid recloser #104	\$70,530.10	New recloser installation	The 1-OX circuit is one of the 36 circuits included in CEI's original DA Pilot footprint. This recloser is being added to improve reliability of the 1-OX circuit by mitigating outages. Through practical learning in the pilot area, it was determined the customer reliability experience would improve from further sectionalization and providing single phase trip where it did not already exist.	Yes New Capital Installation	\$70,530.10
1-OX Install new SGM recloser #108	\$59,724.89	New recloser installation	The 1-OX circuit is one of the 36 circuits included in CEI's original DA Pilot footprint. This recloser is being added to improve reliability of the 1-OX circuit by mitigating outages. Through practical learning in the pilot area, it was determined the customer reliability experience would improve from further sectionalization and providing single phase trip where it did not already exist.	Yes New Capital Installation	\$59,724.89
2-HP Install new SGM recloser #110	\$31,236.91	New recloser installation	2-HP recloser #110 is intended to provide increased reliability to the CEI Distribution Control Center, which is responsible for operating CEI's Distribution Automation (DA) pilot. This recloser is being installed to isolate the control center from potential faults.	Yes New Capital Installation	\$31,236.91
3-PG Inst new smart grid recloser #105	\$61,191.08	New recloser installation	The 3-PG circuit is one of the 36 circuits included in CEI's original DA Pilot footprint. This recloser is being added to improve reliability of the 3-PG circuit by mitigating outages. Through practical learning in the pilot area, it was determined the customer reliability experience would improve from further sectionalization and providing single phase trip where it did not already exist.	Yes New Capital Installation	\$61,191.08
3-PG Inst new smart grid recloser #106	\$60,736.92	New recloser installation	The 3-PG circuit is one of the 36 circuits included in CEI's original DA Pilot footprint. This recloser is being added to improve reliability of the 3-PG circuit by mitigating outages. Through practical learning in the pilot area, it was determined the customer reliability experience would improve from further sectionalization and providing single phase trip where it did not already exist.	Yes New Capital Installation	\$60,736.92
3-PN Install new SGM recloser #107	\$53,510.26	New recloser installation	The 3-PN circuit is one of the 36 circuits included in CEI's original DA Pilot footprint. This recloser is being added to improve reliability of the 3-PN circuit by mitigating outages. Through practical learning in the pilot area, it was determined the customer reliability experience would improve from further sectionalization and providing single phase trip where it did not already exist.	Yes New Capital Installation	\$53,510.26
4-PN Install new SGM recloser #109	\$67,145.58	New recloser installation	The 4-PN circuit is one of the 36 circuits included in CEI's original DA Pilot footprint. This recloser is being added to improve reliability of the 4-PN circuit by mitigating outages. Through practical learning in the pilot area, it was determined the customer reliability experience would improve from further sectionalization and providing single phase trip where it did not already exist.	Yes New Capital Installation	\$67,145.58
CEI DAVVC Eqp Upgrade/Replace	\$16,576.50	New equipment purchases benefiting multiple CEI DAVVC pilot locations	This "Order Desc" is for new equipment purchases that benefit multiple CEI DAVVC pilot locations. For example, a recloser test switch box was purchased to test reclosers for CEI's 36-circuit DA pilot.	Yes New Capital Installation	\$16,576.50

CXC-573461 Replace regulator Controller	\$79.48	Replacement of regulator controller	This "Order Desc" was for the replacement of a regulator controller on the 1-OX circuit which is part of CEI's original 34-circuit VVC pilot.	Yes Replacement/Repair	\$79.48
DPP 17 1-OX first new vpor recloser #102	\$31,069.61	New recloser installation	This Smart Grid recloser was installed on the 1-OX circuit, which is part of CEI's original 36-circuit DA pilot, to protect this smart grid circuit from overloading due to single phase trip.	Yes New Capital Installation	\$31,069.61
DPP 17 4-NW new smart grid recloser #101	\$61,854.87	New recloser installation	This Smart Grid recloser was installed on the 4-NW circuit, which is part of CEI's original 36-circuit DA pilot, to protect this smart grid pilot circuit from overloading due to single phase trip.	Yes New Capital Installation	\$61,854.87
DPP 17 Recloser 68 L-1-NW repl control	\$551.59	Replacement of recloser control	This "Order Desc" was for the replacement of a recloser control on the 2-OX circuit which is part of CEI's original 36-circuit DA pilot.	Yes Replacement/Repair	\$551.59
OH IT AMI Enhancements 2018	\$8,075.32	Enhancements / upgrades of support systems for CEI's Rider AMI Smart Meter pilot	This "Order Desc" is for enhancements / upgrades of support systems for the Smart Meter infrastructure in CEI's pilot area (and not for the DA or VVC components of the pilot).	Yes New Capital Installation	\$8,075.32
OH IT Itron Upgrades 2018	\$6,995.85	Enhancements / upgrades of support systems for CEI's Rider AMI Smart Meter pilot	This "Order Desc" is for enhancements / upgrades of Itron systems for the Smart Meter infrastructure in CEI's pilot area (and not for the DA or VVC components of the pilot).	Yes New Capital Installation	\$6,995.85
PO FW: Recloser installation CXC-119867	\$1,318.24	Non-recurring maintenance expense to repair/test recloser that lost power	This "Order Desc" was for the repair and testing of a smart grid recloser that had lost power on the 3-KP circuit which is part of CEI's original 36-circuit DA pilot.	Yes Replacement/Repair	\$1,318.24
Retrofit Sectionalizer R-9-NF P#508789	\$20,623.25	NA	The settlement rule defined for this Order was incorrect and caused all charges to settle in error to CEI's Rider AMI DA Pilot. The settlement rule was corrected on May 8, 2019, and all charges on the Order were reversed from CEI's Rider AMI DA Pilot.	Yes Replacement/Repair	\$20,623.25
SGMI - OH Smt Mtr/AMI Post-DOE O-M	\$693,099.17	Recurring expenses to operate and maintain CEI's Rider AMI Smart Meter pilot	This "Order Desc" is for recurring expenses to operate and maintain the Smart Meter infrastructure in CEI's pilot area (and not for the DA or VVC components of the pilot). These expenses include charges for:	No	
SGMI - OH-Post Smt Mtr Xeng	\$3,620.05	Exchange / replacement of meters for CEI's Rider AMI Smart Meter pilot	This "Order Desc" is for the exchange / replacement of smart meters for CEI's pilot (and not for the DA or VVC components of the pilot).	Yes Replacement/Repair	\$3,620.05
SGMI - Replace controller on Recloser #1	\$1,879.62	Replacement of recloser control	This "Order Desc" was for the replacement of a recloser control on the 1-LL circuit which is part of CEI's original 36-circuit DA pilot.	Yes Replacement/Repair	\$1,879.62
SGMI communication maint/repair 2017	\$776.88	Recurring maintenance / repair of CEI DAVVC Pilot field network communications equipment that started in 2017 and carried over to 2018	This "Order Desc" was used by CEI electrical services, line shop, and transmission maintenance employees whose assistance was needed to access (via bucket truck), maintain and repair field netcom devices for CEI's 36-circuit DA pilot and 34-circuit VVC pilot.	Yes Replacement/Repair	\$776.88
SGMI communication maint/repair 2018	\$66,768.10	Recurring maintenance / repair of CEI DAVVC Pilot field network communications equipment that started in 2018	This "Order Desc" was used by CEI electrical services, line shop, and transmission maintenance employees whose assistance was needed to access (via bucket truck), maintain and repair field netcom devices for CEI's 36-circuit DA pilot and 34-circuit VVC pilot.	Yes Replacement/Repair	\$66,768.10
SGMI replace control Rrp P#192198	\$2,005.98	Replacement of recloser control	This "Order Desc" was for the replacement of a recloser control on the 3-PG circuit which is part of CEI's original 36-circuit DA pilot.	Yes Replacement/Repair	\$2,005.98
SGMI-OH DAVVC Peak-DOE Corp	\$510,210.48	Recurring non-IT corporate expenses to operate and maintain CEI's 36-circuit DA pilot and 34-circuit VVC pilot	This "Order Desc" is for recurring non-IT corporate expenses to operate and maintain CEI's entire 36-circuit DA pilot and 34-circuit VVC pilot. These expenses include charges for: - Analyzing and calculating C/IOCM savings for CEI DA pilot outage events - Data collection and analysis of CEI VVC pilot data	No	
SGMI-OH DAVVC Post-DOE NetCom	\$360,773.11	Recurring IT-related costs to operate and maintain the communications network for CEI's 36-circuit DA pilot and 34-circuit VVC pilot	This "Order Desc" is for recurring IT-related costs to operate and maintain the communications network for CEI's 36-circuit DA pilot and 34-circuit VVC pilot. These expenses include: - Charges from netcom providers - Monitoring of field netcom device performance - IT employee maintenance / repair of field netcom devices - ABB Tropas radio software maintenance	No	
SGMI-OH DAVVC Post-DOE OpCo	\$332,031.95	Recurring CEI operating company expenses to operate and maintain CEI's 36-circuit DA pilot and 34-circuit VVC pilot	This "Order Desc" is for recurring CEI operating company expenses to operate and maintain CEI's 36-circuit DA pilot and 34-circuit VVC pilot. These expenses include: - Analysis of CEI DA pilot outage events - Research EMS pilot DMS model mapping issues - Switching and monitoring of VVC pilot operating modes for purposes of evaluating conservation voltage reduction (CVR) - Maintain smart grid recloser settings - Research / resolve smart grid field equipment issues	No	

SGM-OH DAWVC PostDOE RTO	\$62,206.63	Recurring IT-related expenses to maintain the GE Alston eterra pilot and maintain the GE Alston eterra pilot DMS used by CEI's 36-circuit DA pilot and 34-circuit VVC pilot.	No	
SGM-OH Pele Security Mitigation	\$60,055.46	<p>This "Order Desc" is for recurring IT-related costs to monitor, test and maintain the GE Alston eterra pilot DMS used by CEI's 36-circuit DA pilot and 34-circuit VVC pilot.</p> <p>A network communications device known as an Iolan Pele (Pelle) performs an internet protocol (IP) to serial protocol translation to enable communications between the GE Alston eterra pilot Distribution Management System (DMS) and each smart grid device (readers, capacitor banks, volt sensors, etc.) installed in CEI's original 36-circuit DA Pilot and 34-circuit VVC Pilot. For cyber security reasons, the Pelle devices are being removed from the pole-mounted cabinets, and the ABB Tropos radios are being reconfigured to perform the IP to serial protocol translation.</p>	Yes New Capital Installation	\$60,055.46
Grand Total	\$2,733,592.08			
			New Capital Adjustment	\$575,911.65
			Replacement/Repair Adjustment	\$97,623.19
			Total Adjustment	\$774,534.74