**BEFORE**
**THE PUBLIC UTILITIES COMMISSION OF OHIO**

| | | |
|---|---|---|
| In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company for Approval of Phase Two of Their Distribution Grid Modernization Plan. | ) | Case No. 22-704-EL-UNC |
| In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company for Review of Rider AMI (2019). | ) | Case No. 18-1647-EL-RDR |
| In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company for Review of Rider AMI (2020). | ) | Case No. 19-1903-EL-RDR |
| In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company for Review of Rider AMI (2021). | ) | Case No. 20-1672-EL-RDR |

**INITIAL POST-HEARING BRIEF OF THE**
**ENVIRONMENTAL LAW & POLICY CENTER**

Erica McConnell
Ohio Bar No. 102799
Staff Attorney
Environmental Law & Policy Center
21 W. Broad Street, 8th Floor
Columbus, OH 43215
emcconnell@elpc.org
(312) 673-6500

**July 31, 2024**

**TABLE OF CONTENTS**

# I. INTRODUCTION

Advanced Metering Infrastructure (AMI) and other grid modernization investments offer significant potential benefits to utilities and their customers. As highlighted in the initial grid modernization application filed by Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company (collectively, the Companies), a key potential benefit for customers is the enhanced ability to manage electric usage and save money on bills, including by using smart thermostats and participating in time-varying rates (TVR). Case No. 16-0481-EL-UNC, Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company Grid Modernization Business Plan, Ex. A at 23-30 (Feb. 29, 2016) (Grid Mod I). In addition, these tools and programs, along with other related programs like demand response, can help shift electric usage away from peak demand times, thereby alleviating stress on the distribution system and avoiding or deferring system investments and, in turn, saving money for utilities and their customers.

In this second phase of their grid modernization process (Grid Mod II), the Companies seek to extend the benefits of grid modernization to more customers, in particular through full deployment of AMI. Application for Approval of Phase Two of Their Distribution Grid Modernization Plan at 1-2 (Grid Mod II Application). As discussed further below, the Stipulation filed in this proceeding not only expands AMI access to all customers in the Companies' service territories, it also helps to ensure that more customers experience the promised benefits of these AMI and other grid modernization investments. Importantly, it establishes a smart thermostat rebate (STR) program, to allow more customers access to this essential money-saving tool. It also contains provisions addressing improvements to TVR design and marketing, as well as customer energy management (CEM) reports, which would educate customers via email about their energy usage and management options, including smart thermostats and TVR. And it details a process to develop a hosting capacity "heat map," which would offer another tool to help distributed energy resource (DER) providers, more sophisticated customers, utilities, and other interested stakeholders understand distribution system capacity, and how to plan for and deploy new customer load (e.g., electric vehicle charging stations) and generation technologies (e.g., distributed solar) efficiently and cost-effectively. For the reasons outlined in this brief, the Environmental Law & Policy Center (ELPC) recommends that the Commission approve the Stipulation.

## II. FACTS

On July 15, 2022, the Companies filed their Grid Mod II Application. A multi-party Stipulation and Recommendation (Stipulation) was filed on April 12, 2024. Cos. Ex. 1. Signatories to the Stipulation include the Companies, consumer advocate Citizens Utility Board of Ohio (CUB), environmental advocates ELPC and the Ohio Environmental Council (OEC), competitive supplier organizations Retail Energy Supply Association (RESA) and Interstate Gas Supply, LLC (IGS), and various large customer entities and organizations. Cos. Ex. 1 at 31. In addition to the Companies, RESA and IGS jointly filed testimony in support of the Stipulation. The Office of the Ohio Consumers' Counsel (OCC) and the Northwest Ohio Aggregation Coalition (NOAC) jointly filed testimony in opposition.

Under the Stipulation, the Companies would finish their AMI deployment in their service territories by installing an additional 1.4 million advanced meters over four years. Cos. Ex. 1 at 7; Cos. Ex. 2 at 9-10. They would join the three other Ohio investor-owned utilities that have Commission approval for complete or near-complete AMI deployment. Cos. Ex. 2 at 10.

The Stipulation also requires the development or improvement of various programs, including:

- **Smart thermostat rebate (STR) program**. The Companies will budget $3 million per year for a STR program for the term of Grid Mod II, which would cover the costs of rebates, as well as program administration and other related costs. The Companies are targeting STR program participation of at least 16,000 AMI-enabled customers per year. Low-income residential customers (≤ 300% of the federal poverty level) may receive up to $150 for a new smart thermostat. All other residential customers may receive up to $100 for a new smart thermostat, so long as they participate in either a TVR or demand response program offered by the Companies or a Competitive Retail Electric Service (CRES) provider. CRES providers may also help facilitate the provision of smart thermostats to customers. If the Companies spend less than $1.5 million on the STR program in any year, then the Companies will increase spending in the following year and must work with the Grid Mod Collaborative to target those additional funds, including towards additional customer education and marketing. In addition to ongoing, quarterly Grid Mod Collaborative meetings, the Companies will host semi-annual working group meetings with smart thermostat vendors and other interested stakeholders to help maximize the benefits of the STR program. Cos. Ex. 1 at 10-12; Cos. Ex. 3 at 8-12; Grid Mod II Application at 8.
- **Customer energy management (CEM) program**. The Companies will email participating AMI-enabled customers customized energy updates and CEM reports, with information about their hourly electricity usage and suggestions for how to reduce their usage leveraging their AMI data, including through

participation in STR and TVR programs. Cos. Ex. 1 at 13-14; Cos. Ex. 2 at 3-8; Grid Mod II Application at 8.

- **Time-varying rates (TVR)**. The Companies will try to increase customer awareness and understanding of their TVR options, and will work with the Grid Mod Collaborative to evaluate and consider changes to TVR design and marketing plans. The Companies also commit to withdrawing their TVR offering once there are either at least three different CRES providers offering TVR options or three different types of TVR offerings. Cos. Ex. 1 at 8-9; Cos. Ex. 3 at 13-15.
- **Hosting capacity "heat map."** Through a phased process, the Companies will develop a publicly available hosting capacity "heat map," which would show the power capacity rating of each distribution circuit, along with planned customer load in excess of 2 MW, as well as DERs and other customer equipment that could reduce circuit load. With this information, DER providers and customers can see where the Companies' distribution system could more likely accommodate additional load and/or generation. Cos. Ex. 1 at 7-8; Cos. Ex. 2 at 14-16.
- **Grid Mod Collaborative**. Within the ongoing, quarterly Grid Mod Collaborative, the Companies will report on and work to improve various efforts detailed in the Stipulation, including the programs and efforts listed above. One week prior to Collaborative meetings, the Companies should provide participants with various data and information including: the meeting agenda; CEM approaches used to promote the STR, TVR, and demand response

programs; customer participation and savings information for STR, TVR, and demand response programs; and customer email engagement within the CEM program. Cos. Ex. 1 at 13-14.

The total estimated capital cost under the Stipulation is approximately $421 million, reduced from the originally proposed $626 million, with the AMI program ($418 million) making up the vast majority of that total. Cos. Ex. 1 at 5, 7; Cos. Ex. 2 at 13. The Companies' cost-benefit analysis estimates net benefits to customers of over $149 million on a net present value basis. Cos. Ex. 2 at 19 (referencing Att. A to that exhibit).

## III. STANDARD OF REVIEW

In reviewing a proposed stipulation, "[t]he ultimate issue for the Commission's consideration is whether the agreement . . . is reasonable and should be adopted." *In re Ohio Power Co. & Columbus S. Power Co. for Authority to Establish a Standard Service Offer*, Case No. 11-346-EL-SSO, et al., Opinion & Order at 27 (Dec. 14, 2011). In conducting the inquiry, the Commission traditionally relies on a three-part test:

1. Is the settlement a product of serious bargaining among capable, knowledgeable parties?
2. Does the settlement, as a package, benefit ratepayers and the public interest?
3. Does the settlement package violate any important regulatory principle or practice? *Id.*

## IV. ARGUMENT: THE STIPULATION IS REASONABLE AND SATISFIES THE COMMISSION'S THREE-PART TEST.

### A. The Stipulation Is the Product of Serious Bargaining Among Capable, Knowledgeable Parties.

ELPC will defer to the Companies and other parties to address this issue. In ELPC's experience, the Commission applies this standard loosely and finds that multi-party stipulations meet this prong of the three-part test.

### B. The Stipulation Is in the Public Interest and Benefits Ratepayers.

The Stipulation extends the benefits of grid modernization to all of the Companies' ratepayers by allowing the Companies to complete their AMI deployment, and establishing or improving programs that enable customers to benefit from the Companies' AMI investments. As Companies' witness Edward Miller explained, together the STR, CEM, and TVR programs "leverage Advanced Metering Infrastructure ("AMI") to help customers understand and manage their energy usage. … [T]hese programs benefit customers and the public interest by increasing customer education about energy usage, encouraging conservation, encouraging the efficient use of energy, and facilitating the adoption of time-varying rates." Cos. Ex. 3 at 1. The Companies estimate significant financial net benefits to customers from the Stipulation, totaling $149 million on a net present value basis. Cos. Ex. 2 at 19 (referencing Att. A).

The STR program lowers the initial cost barrier for customers to purchase a smart thermostat through rebates to all residential customers and higher rebates to low-income customers. Cos. Ex. 1 at 10; Cos. Ex. 3 at 2. Further, it requires non-low-income customers using a rebate to purchase a smart thermostat to participate in a TVR or demand response program, thereby helping to ensure that customers use these tools as intended, to realize their own electricity and bill savings, and also to contribute to the system benefits and cost savings associated with reducing and shifting electric usage. Cos. Ex. 1 at 10; Cos. Ex. 3 at 10.

The Stipulation provides for several protections to ensure the STR program operates and benefits customers as expected. It requires regular reporting to the Grid Mod Collaborative regarding the program progress and specifies the opportunity to discuss modifications or a phase-out of the program, if needed. Cos. Ex. 1 at 10-12, 13-14. It also establishes a semi-annual working group for the Companies to discuss the program and opportunities for improvement with smart thermostat vendors and other interested stakeholders. Cos. Ex. 1 at 12. The CEM program will further benefit customers through educating them about their energy usage and opportunities to save energy and money, including through the STR and TVR programs. Cos. Ex. 1 at 13-14; Cos. Ex. 2 at 3-8.

The hosting capacity "heat map" detailed in the Stipulation also benefits customers and the public interest. Cos. Ex. 1 at 7-8; Cos. Ex. 2 at 14-16. By showing available system capacity, along with expected load, DER, and other customer equipment, the "heat map" will allow DER providers, more sophisticated customers, and other interested stakeholders to understand where the system can accommodate additional load (e.g., electric vehicle charging) or generation (e.g., distributed solar) without expensive upgrades. Providers and customers will be able to rely on the "heat map," along with AMI data, to help inform their decisions about where and whether to invest in new load or generation technologies, prior to entering into a more time-consuming, expensive process with the Companies (e.g., applying for interconnection). In addition, these maps can help inform utility planning for new customer load and generation, and provide intervenors and the Commission useful information in utility rate and grid planning cases.

While ELPC supports and urges the Commission to approve the Stipulation, we agree with OCC/NOAC witness Paul J. Alverez that "continuing and vigilant efforts are required by all parties—the PUCO, PUCO Staff, intervenors, and utilities—if the promise of smart meter benefits are to be maximized for consumers' benefit." OCC/NOAC Joint Ex. 1 at 13. In particular, ELPC shares many of Mr. Alvarez's concerns related to the Companies' TVR program, which Mr. Alvarez correctly notes has seen very low customer participation to date. OCC/NOAC Joint Ex. 1 at 16. However, the Stipulation addresses this by committing FirstEnergy to exploring further improvements to the TVR design and marketing within the Grid Mod Collaborative, of which OCC is a member. Cos. Ex. 1 at 8-9; Cos. Ex. 3 at 13-15.

In addition, as Mr. Alvarez recognizes, the Stipulation includes a smart thermostat rebate, OCC/NOAC Joint Ex. 1 at 17, which should incentivize additional participation in both the TVR and a potential demand response program, and in turn help to realize the benefits of AMI. ELPC notes that the peak-time rebate program that Mr. Alvarez describes resembles the demand response contemplated in the Companies' recent fifth Electric Security Plan (ESP V), which would have rewarded customers for reducing their energy usage during identified peak events via pre-established enrollment and annual participation incentives.[1] OCC/NOAC Joint Ex. 1 at 33-34.[2] In both cases—peak-time rebates and demand response—the goal is to reduce peak demand while still allowing customers to opt out of participating in any given event, and smart thermostats are essential to enabling customer participation. Therefore, ELPC encourages the Commission to approve the Stipulation, to allow for the STR program and the other programs and efforts to enable customers to more fully benefit from the Companies' AMI investments.

### C. The Stipulation Does Not Violate Any Important Regulatory Principles and Practices.

The Stipulation does not violate any important regulatory principles and practices, and instead supports key state policy directives. Consistent with Section 4905.70, it would "promote and encourage conservation of energy and a reduction in the growth rate of energy

[1] The Companies proposed a residential demand response program in their ESP V application. Case No. 23-301-EL-SSO, Application at 1-3, 11 (April 5, 2023); Case No. 23-301-EL-SSO, Direct Testimony of Edward C. Miller, at 19-22 (April 5, 2023). In its Order, the Commission rejected the Companies' demand response program as proposed and required them "to develop and propose a smart thermostat rebate program with an annual budget of $2,000,000 for the entire five-year term of ESP V," pointing to the recently approved smart thermostat demand response program in AEP Ohio's ESP V case. Case No. 23-301-EL-SSO, Opinion and Order, 131-33 (referencing Case Nos. 23-23-EL-SSO & 23-24-EL-AAM, Opinion and Order at ¶153 (Apr. 3, 2024)). ELPC jointly filed an Application for Rehearing, seeking reconsideration of the Commission's decision regarding the Companies' residential demand response and residential rebate programs, which the Commission has not yet addressed substantively. Case No. 23-301-EL-SSO, Application for Rehearing by Environmental Law & Policy Center, Citizens Utility Board of Ohio, and Ohio Environmental Council (June 14, 2024). Therefore, it is currently unclear whether the Commission will reconsider its decision or, regardless of reconsideration, whether the Companies' future ESP V smart thermostat rebate program will incorporate a demand response component.

[2] Mr. Alvarez's proposal includes a per incident customized rebate, in contrast to the Companies' proposal to give enrollment and participation incentives. OCC/NOAC Joint Ex. 1 at 33-34.

consumption….” By combining AMI with the STR, TVR, and CEM programs, the Companies will be able to educate customers about their electricity usage, and empower them to conserve energy by using their smart thermostats and participating in TVR and demand response programs. Section 4905.70 specifically calls out “time-of-day pricing” as an area of interest, and the Stipulation requires the Companies to improve their version of such pricing, their TVR program.

In addition, the Stipulation promotes at least the following subsections of Section 4928.02:

- “(A) Ensure the availability to consumers of adequate, reliable, safe, efficient, nondiscriminatory, and reasonably priced retail electric service.” The full deployment of AMI together with the STR, CEM, and TVR programs will help customers to better understand and manage their electricity usage and save money on their bills, thereby promoting more efficient and reasonably priced service. They will also help the Companies work with their customers to manage peak demand and associated stress on their systems, to save money through avoided investments, and promote adequate, reliable, efficient, and reasonably priced service in the longer term.
- “(D) Encourage innovation and market access for cost-effective supply- and demand-side retail electric service including, but not limited to, demand-side management, time-differentiated pricing, waste energy recovery systems, smart grid programs, and implementation of advanced metering infrastructure.” The Stipulation allows for the completion of AMI implementation in the Companies’ service territories. In addition, the Stipulation’s STR program lowers the upfront cost barrier for customers to

obtain smart thermostats, a tool essential to enabling participation in demand-side management and time-differentiated pricing programs. The STR program explicitly requires non-low-income customer participation in either the Companies' or CRES providers' TVR or demand response programs, which will reduce peak demand. It also allows for CRES providers to engage in the STR program and provide customers with smart thermostats. The hosting capacity "heat map" further supports this policy by giving DER providers and customers additional information about the Companies' systems, to help inform decisions about siting new customer load and generation technologies.

- "(G) Recognize the continuing emergence of competitive electricity markets through the development and implementation of flexible regulatory treatment." Along with other provisions intended to better enable competitive electricity markets, *see, e.g.*, Cos. Ex. 1 at 19-25 (regarding Data Access), the Stipulation helps ensure that CRES providers can effectively offer customers electricity- and money-saving options, such as TVR and demand response programs, as described immediately above.

Although the Stipulation meets the third part of the Commission's three-part test in that it advances these state policies, ELPC recognizes and shares many of OCC/NOAC witness Alvarez's concerns regarding the risks and downsides associated with the rider cost recovery that the Stipulation would allow. OCC/NOAC Joint Ex. 1 at 40-45. However, Ohio law allows for such treatment, and the Commission frequently approves it in practice. *See, e.g.,* Case No. 23-301, Opinion and Order (approving the Companies' ESP V application as modified, which includes continuation of Rider AMI and other riders). Thus, ELPC does not agree with Mr. Alvarez that relying on these mechanisms here constitutes a violation of regulatory principles and practices.

## V. CONCLUSION

The Stipulation satisfies all three elements of the three-part test for Commission evaluation of settlements. It will expand AMI access to all of the Companies' customers and, through the STR, TVR, and CEM programs, it will ensure that customers experience the promised benefits of AMI and other grid modernization investments. Together, these programs will help the Companies and their customers conserve electricity and use it more efficiently, saving customers money and avoiding system investment costs by reducing peak demand. In addition, the hosting capacity "heat map" will provide another tool for DER providers, customers, utilities, and other stakeholders to understand, use, and manage the distribution system more efficiently and cost-effectively, in particular in planning for and deploying new customer load and generation technologies. ELPC recommends Commission approval of the Stipulation.

Dated: July 31, 2024

Respectfully submitted,

*/s/ Erica McConnell*

Erica McConnell
Ohio Bar No. 102799
Staff Attorney
Environmental Law & Policy Center
21 W. Broad Street, 8th Floor
Columbus, OH 43215
emcconnell@elpc.org
(312) 673-6500

**Willing to Accept Service by Email**

**CERTIFICATE OF SERVICE**

I hereby certify that a true copy of the foregoing *Initial Post-Hearing Brief* submitted on behalf of the Environmental Law & Policy Center was filed electronically through the Docketing Information System of the Public Utilities Commission of Ohio on July 31, 2024. The PUCO's e-filing system will electronically serve notice of the filing of this document on counsel for all parties and a courtesy copy has also been emailed to the service list. Parties who have not opted into PUCO's e-filing system have been sent a copy by regular U.S. mail.

Respectfully submitted,

*/s/ Erica McConnell*

Erica McConnell
Ohio Bar No. 102799
Staff Attorney
Environmental Law & Policy Center
21 W. Broad Street, 8th Floor
Columbus, OH 43215
emcconnell@elpc.org
(312) 673-6500

**Willing to Accept Service by Email**

Service List

thomas.lindgren@ohioago.gov
Amy.BotschnerOBrien@OhioAGO.gov
Kimberly.Naeder@OhioAGO.gov
rhiannon.howard@ohioago.gov
emcconnell@elpc.org
bojko@carpenterlipps.com
Stacie.Cathcart@igs.com
Michael.nugent@igs.com
jlang@calfee.com
mbarbara@calfee.com
tdougherty@theOEC.com
rdove@keglerbrown.com
nbobb@keglerbrown.com
Paul@carpenterlipps.com
cwatchorn@firstenergycorp.com
TAlexander@beneschlaw.com
MKeaney@beneschlaw.com
mkurtz@BKLlawfirm.com
kboehm@BKLlawfirm.com
trhayslaw@gmail.com
Leslie.kovackik@toledo.oh.gov

knordstrom@theOEC.org
ctavenor@theOEC.org
todd.schafer@outlook.com
little@litohio.com
hogan@litohio.com
ktreadway@oneenergyllc.com
jdunn@oneenergyllc.com
mpritchard@mcneeslaw.com
awalke@mcneeslaw.com
cgrundmann@spilmanlaw.com
dwilliamson@spilmanlaw.com
slee@spilmanlaw.com
dstinson@brickergraydon.com
gkrassen@nopec.org

Attorney Examiners

Megan.addison@puco.ohio.gov
Greg.price@puco.ohio.gov
Jacqueline.st.john@puco.ohio.gov

By Regular U.S. Mail

WALMART STORES EAST LP
DERRICK PRICE WILLIAMSON
SPILMAN THOMAS & BATTLE, PLLC
1100 BENT CREEK BLVD. STE101
MECHANICSBURG PA 17050

WALMART INC. SENIOR MANAGER, ENERGY SERVICES
LISA V. PERRY
2608 SE J STREET
BENTONVILLE AR 72716