

**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) Case No. 22-0704-EL-UNC
Edison Company for Approval of Phase)
Two of Their Distribution Grid)
Modernization Plan)

In the Matter of the Application of Ohio)
Edison Company, The Cleveland Electric)
Illuminating Company, and The Toledo) Case No. 18-1647-EL-RDR
Edison Company for Review of Rider)
AMI (2019))

In the Matter of the Application of Ohio)
Edison Company, The Cleveland Electric)
Illuminating Company, and The Toledo) Case No. 19-1903-EL-RDR
Edison Company for Review of Rider)
AMI (2020))

In the Matter of the Application of Ohio)
Edison Company, The Cleveland Electric)
Illuminating Company, and The Toledo) Case No. 20-1672-EL-RDR
Edison Company for Review of Rider)
AMI (2021))

**POST HEARING BRIEF OF OHIO EDISON COMPANY, THE CLEVELAND
ELECTRIC ILLUMINATING COMPANY, AND THE TOLEDO EDISON COMPANY**

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I. INTRODUCTION

The second phase of the Companies’¹ distribution grid modernization plan (“Grid Mod II”), as modified by the Stipulation and Recommendation filed in these proceedings (the “Stipulation”), will allow the Companies’ customers to achieve parity with customers of the Companies’ in-state peers and enable the Companies to make meaningful progress towards modernizing the distribution system. The Stipulation will permit the Companies to complete deployment of advanced metering infrastructure (“AMI”) throughout their service territories, and it includes a number of specific programs designed to capitalize on the unique capabilities of AMI meters. These provisions, in conjunction with the enhanced customer protections and performance tracking and evaluation processes contemplated by the Stipulation, will empower customers to take advantage of the full benefits associated with AMI.

As agreed by fourteen of the nineteen parties to this proceeding, the Stipulation presents a reasonable compromise that balances competing interests. The Stipulation also provides substantial benefits to customers and other stakeholders while simultaneously advancing state policy. Indeed, only one party (the Office of the Ohio Consumers’ Counsel) offered testimony in opposition to the Stipulation. In light of this widespread support and extremely limited opposition, the Stipulation should be approved as proposed.

II. SUMMARY OF THE STIPULATION

The Stipulation represents a balanced resolution of the Companies’ Grid Mod II application, as well as all issues raised in the Rider AMI Audit Cases.² As modified by the Stipulation, Grid Mod II will enable the Companies to complete their advanced meter deployment,

¹ “Companies” refers to Ohio Edison Company (“OE”), The Cleveland Electric Illuminating Company (“CEI”) and The Toledo Edison Company (“TE”).

² “Rider AMI Audit Cases” refers to Case Nos. 18-1647-EL-RDR, 19-1903-EL-RDR, and 20-1672-EL-RDR.

allowing the Companies' customers to achieve parity with customers of the Companies' in-state peers. The Stipulation also includes programs that will empower customers and other stakeholders to take advantage of the full capabilities of smart meters.

Key Stipulation provisions include:

- 1) **Total Capital Cost:** The total estimated capital cost for Grid Mod II is reduced from \$626 million to approximately \$421 million.³
- 2) **Legacy Meter Costs:** Legacy meter costs associated with Grid Mod II deployment will not be included in Rider AMI and will instead be deferred as a regulatory asset, with carrying charges at the current approved cost of long-term debt.⁴
- 3) **CEI Pilot:** A credit will be provided in Rider AMI to return to customers certain revenue requirements associated with CEI Pilot costs.⁵
- 4) **Advanced Metering Infrastructure:** The Companies will install the remaining estimated 1.4 million advanced meters, along with the necessary supporting communications infrastructure, and will expand the existing meter data management system and associated systems and processes.⁶
- 5) **Hosting Capacity:** The Companies will initially implement a circuit-level solar accommodation map and then develop and make available to the public a circuit capacity hosting "heat map" that will provide power capacity ratings for each distribution circuit.⁷
- 6) **Time-Varying Rates ("TVR"):** The Companies will make efforts to increase

³ Stipulation and Recommendation (Apr. 12, 2024) ("Stipulation") (Companies Ex. 1), at 5.

⁴ *Id.*

⁵ *Id.* at 6.

⁶ *Id.* at 7.

⁷ *Id.* at 7-8.

customer awareness and understanding of their TVR options. The Companies will continue working with the Grid Mod Collaborative to evaluate and consider potential enhancements to the design and marketing plans for those rates. Further, consistent with the Companies' commitment in Grid Mod I, if certain conditions are met, the Companies will seek Commission approval to withdraw their Standard Service Offer ("SSO") TVR offering.⁸

- 7) **Smart Thermostat Rebates ("STR"):** The Companies will budget \$3 million per year for the STR program during the term of Grid Mod II. The STR program rebates will be available to eligible residential customers, including low-income residential customers.⁹
- 8) **Customer Energy Management ("CEM"):** The Companies are proposing a CEM program which will provide updates and reports to customers to provide education and awareness regarding the customer's energy usage and to encourage energy efficiency and conservation.¹⁰
- 9) **Grid Mod Performance:** For Grid Mod II, the Companies will implement the recommendations from the Grid Mod I Operational Benefits Assessment ("OBA") report, will report operational savings and customer benefits from Grid Mod I and Grid Mod II investments to the Grid Mod Collaborative, and will undergo an OBA of Grid Mod II.¹¹
- 10) **Data Access:** The Companies will make available to PUCO-certified competitive retail electric service ("CRES") providers that are retail electric generation providers and to

⁸ *Id.* at 8-9.

⁹ *Id.* at 10-12.

¹⁰ *Id.* at 13-14.

¹¹ *Id.* at 14-18.

large governmental aggregators certain hourly interval data for residential customers through the Companies' Supplier Portal and EDI transactions.¹²

11) **Rider AMI:** The Companies will incorporate several modifications to the recovery of Grid Mod I and Grid Mod II costs included in Rider AMI, including removal of incentive compensation and CEI Pilot costs, and will ensure that all recommendations from the Staff Reports for the Rider AMI Audit Cases are addressed.¹³

12) **Electric Vehicles:** The Companies will propose tariff revisions applicable to publicly available electric vehicle charging customers in the Companies' currently pending base rate case.¹⁴

13) **Distributed Energy Resource Management System ("DERMS"):** In Years 2 and 4 of Grid Mod II, the Companies will work with Staff to file a report regarding the deployment of DERMS, including progress and lessons learned.¹⁵

14) **Federal Funding:** The Companies will examine whether federal funding is available for any aspect of Grid Mod II and present the results of their findings to the Grid Mod Collaborative. To the extent the Companies receive federal funding specifically for Grid Mod II projects, there will be a corresponding offset in Grid Mod II costs.¹⁶

15) **Withdrawn Programs:** The Companies have agreed to withdraw several of the programs proposed in their Grid Mod II application.¹⁷

¹² *Id.* at 19-25.

¹³ *Id.* at 25-27.

¹⁴ *Id.* at 27. *See also*, Case Nos. 24-0468-EL-AIR, *et al.*, Application to Increase Electric Distribution Rates (May 31, 2024) at 7, where the Companies proposed an EV Commercial Charging Tariff.

¹⁵ Stipulation at 27.

¹⁶ *Id.* at 28.

¹⁷ *Id.* at 6 (withdrawing the distribution automation ("DA"), integrated volt var control ("IVVC"), optimization, and advanced distribution management system ("ADMS") proposals); *Id.* at 27 (withdrawing the electric vehicle charging pilot, front-of-the-meter battery energy storage system ("FTM BESS") pilot, and lateral electronic circuit protection pilot ("LECP") programs).

III. LEGAL STANDARD

Ohio Administrative Code 4901-1-30(A) authorizes parties to Commission proceedings to enter into a stipulation, providing that “[a]ny two or more parties may enter into a written or oral stipulation concerning issues of fact, the authenticity of documents, or the proposed resolution of some or all of the issues in a proceeding.”¹⁸ The Commission has discussed the standard of review for considering the reasonableness of a stipulation.¹⁹ The ultimate issue for the Commission’s consideration is whether the agreement, which embodies considerable time and effort by the signatory parties, is reasonable and should be adopted.²⁰ The question is not whether any individual issue or component, on a stand-alone basis, passes the test.²¹ Rather, the only issue for the Commission to decide at this juncture is whether the totality of the settlement, as a package, is reasonable.

In considering the reasonableness of a stipulation, the Commission has used the following criteria:

- i. Is the settlement a product of serious bargaining among capable, knowledgeable parties?
- ii. Does the settlement, as a package, benefit ratepayers and the public interest?
- iii. Does the settlement package violate any important regulatory principle or practice?

Although not binding on the Commission, the terms of a stipulation are “accorded

¹⁸ O.A.C. 4901-1-30(A).

¹⁹ See, e.g., *In re Cincinnati Gas & Elec. Co.*, Case No. 91-410-EL-AIR, Order on Remand (Apr. 14, 1994); *In re Western Reserve Telephone Co.*, Case No. 93-230-TP-ALT, Opinion and Order (Mar. 30, 1994); *In re Ohio Edison Co.*, Case No. 91-698-EL-FOR, et al., Opinion and Order (Dec. 30, 1993); *In re Cleveland Elec. Illum. Co.*, Case No. 88-170-EL-AIR, Opinion and Order (Jan. 31, 1989); *In re Restatement of Accounts and Records*, Case No. 84-1187-EL-UNC, Opinion and Order (Nov. 26, 1985).

²⁰ See e.g., *In the Matter of the Application of Ohio Power Company for an Increase in Electric Distribution Rates*, Case No. 20-585-EL-AIR et al., Opinion and Order (Nov. 17, 2021) at ¶ 95.

²¹ See *id.* at ¶ 131 (“We emphasize that the Commission must evaluate the benefits of the Stipulation as a package and each provision of the Stipulation need not provide a direct and immediate benefit to ratepayers and the public interest.”)

substantial weight” by the Commission.²² The Supreme Court of Ohio has endorsed the Commission’s use of these criteria to resolve cases in a manner economical to ratepayers and public utilities, and has affirmed that the Commission may place substantial weight on the terms of a stipulation.²³ As explained below, the record clearly demonstrates that the Stipulation satisfies this three-part test.

IV. ARGUMENT

A. The Stipulation is a product of serious bargaining among capable, knowledgeable parties.

The evidentiary record in this proceeding is replete with evidence that the Stipulation is the result of serious bargaining among the Signatory Parties,²⁴ and that all nineteen parties to the case were included in negotiations. The Signatory Parties represent a wide range of stakeholders, each of which have an extensive history of participation and experience in matters before the Commission and are represented by experienced and competent counsel.²⁵ The Signatory Parties to the Stipulation encompass all stakeholder interests impacted by this proceeding, including commercial and industrial customer advocates, residential and small business customers, environmental advocates, and CRES providers.²⁶ These parties and their counsel are highly knowledgeable in regulatory matters concerning electric distribution utilities within Ohio, including the implementation and development of such utilities’ grid modernization plans.

The settlement process facilitated serious bargaining between all of the parties to this

²² *Office of Consumers’ Counsel v. Pub. Util. Comm.*, 64 Ohio St.3d 123, 125 (1992) (citing *City of Akron v. Pub. Util. Comm.*, 55 Ohio St.2d 155, 157(1978)).

²³ *Indus. Energy Consumers of Ohio Power Co. v. Pub. Util. Comm.*, 68 Ohio St.3d 559 (1994) (citing *Consumers’ Counsel* at 126).

²⁴ The Signatory Parties include: the Companies, Citizens Utility Board of Ohio, Environmental Law & Policy Center, Interstate Gas Supply, LLC., The Kroger Co., Northeast Ohio Public Energy Council (“NOPEC”), Ohio Energy Group, Ohio Energy Leadership Council, Ohio Environmental Council, The Ohio Manufacturers’ Association Energy Group, Retail Energy Supply Association, and Walmart Inc.

²⁵ Direct Testimony of Matt Quirk in Support of the Stipulation (May 3, 2024) (“Quirk Testimony”) (Companies Ex. 2), at 7.

²⁶ *Id.*

proceeding. In the months preceding the filing of the Stipulation, the Companies met with intervening parties on numerous occasions to discuss the issues raised in this proceeding.²⁷ All parties were invited to a series of settlement discussions conducted on October 3, 2023, November 22, 2023, December 13, 2023, December 21, 2023, January 16, 2024, February 22, 2024, March 28, 2024, and April 11, 2024.²⁸ To the extent that the Companies engaged in individual discussions with certain parties, any results of those communications were shared with the entire group of intervenors.²⁹ The robust settlement discussions that took place during these meetings culminated in the development of this Stipulation with the Signatory Parties.

B. As a package, the Stipulation benefits ratepayers and is in the public interest.

1. Complete deployment of AMI infrastructure throughout the Companies' service territories will provide numerous benefits to customers.

In Grid Mod I, the Companies deployed approximately 713,000 advanced meters, reaching approximately one-third of the customers they serve.³⁰ Under the Companies' initial Grid Mod II proposal, the Companies would have deployed approximately 700,000 additional advanced meters, meaning that their total deployment of advanced meters across Grid Mod I and Grid Mod II would have only extended to approximately two-thirds of their customers.³¹ In comparison, the Stipulation will enable the Companies to complete their AMI deployment, bringing advanced meters to all customers served by the Companies and enabling these customers to take advantage of the same opportunities and benefits that are already afforded to a majority of electric distribution customers across Ohio.³²

The current status of the Companies' AMI deployment falls far behind that of other Ohio

²⁷ *Id.* at 3, 7.

²⁸ Stipulation at 3.

²⁹ Quirk Testimony at 3.

³⁰ *Id.* at 9.

³¹ *Id.* at 9-10.

³² *Id.*

electric utilities, all of which have already received Commission approval to deploy advanced meters across most or all of their systems. Specifically, AEP Ohio and Duke Energy Ohio have already received Commission approval to deploy advanced meters to all of their customers, while AES Ohio has received approval to deploy advanced meters to 95% of their customers.³³ Therefore, approving the Stipulation will bring the Companies in line with the AMI deployments of other Ohio electric distribution utilities, promoting consistency across the utilities and allowing the Companies' customers to achieve parity with their in-state peers.³⁴

Additionally, the completed deployment of advanced meters contemplated by the Stipulation will position the Companies' customers to take advantage of the meters' unique capabilities. Compared to current metering equipment, AMI technologies provide significantly more detail in measuring customer energy consumption for billing purposes and give customers the ability to view and download their usage data from the Companies' Customer Portal.³⁵

Expanding customer access to advanced meters will also enhance the customer experience in at least four ways. First, by making available to customers more granular information about their usage, the proposed AMI deployment will allow more customers to better understand how they use energy and how different behaviors impact their energy consumption. This information will empower customers to make more informed decisions about their usage – and ultimately save money on their bills.³⁶ Second, AMI meters utilize sophisticated algorithms and tamper detection technology that ensure consumption is recorded accurately and that tampering and theft are identified quickly.³⁷ These capabilities facilitate more accurate billing and reduce the costs

³³ See Tr. Vol. II at 231-232.

³⁴ Quirk Testimony at 10.

³⁵ *Id.* at 11, 12.

³⁶ See *id.* at 10.

³⁷ *Id.* at 12.

customers may have to pay for stolen service.³⁸ Third, advanced meter deployment will also provide service outage management benefits, allowing the Companies to quickly identify customers who are experiencing outages, begin targeted restoration activities, and assess whether further action is needed to resolve outages.³⁹ Fourth, completing the Companies' AMI deployment will allow all customers to have access to the same technologies and opportunities, avoiding differences between similarly situated customers.

Increasing the number of advanced meters throughout the Companies' service territories will better enable the deployment of programs and technologies that will reduce stress on the grid, furthering the development of a reliable and resilient grid for the benefit of all customers.⁴⁰ Such opportunities include, but are not limited to, the use of Home Area Network ("HAN") devices and smart thermostats, which help customers better understand and manage their energy usage, as well as time-varying rates, which encourage customers to decrease usage during peak periods. The completion of the Companies' AMI deployment will better enable the Companies to monitor and optimize distribution grid operations through the use of AMI voltage and event data, which allows for targeted future electric distribution grid modernization investments⁴¹ that will further promote reliability and resiliency of the Companies' distribution system, including distribution automation ("DA") and integrated volt var control ("IVVC").⁴²

Lastly, the AMI proposal will enhance customer choice and the competitive market.⁴³ Because they capture interval usage data, advanced meters are a foundational technology necessary

³⁸ *Id.* at 13.

³⁹ *Id.* at 12.

⁴⁰ *See id.* at 8.

⁴¹ *Id.*

⁴² *See* Stipulation at 6.

⁴³ Direct Testimony of Edward C. Miller (May 3, 2024) ("Miller Testimony") (Companies Ex. 3), at 13; Tr. Vol. I at 70.

for CRES providers to develop and offer innovative products and services to customers.⁴⁴ Once all customers within the Companies’ service territories have AMI meters, CRES providers, governmental aggregators, and other solutions providers will have the ability to offer a more diverse array of products and services.⁴⁵ For example, CRES providers can pair customer interval usage data with granular pricing. This better aligns customer behavior with underlying costs and allows customers to select rate structures such as time-varying rates and customized fixed rate products based on customer-specific energy usage.⁴⁶ Advanced meter capabilities will also facilitate development of new demand side management opportunities in the competitive market as well as other innovative solutions, such as behind-the-meter energy storage, internet connected devices that control load (*e.g.*, smart thermostats, water heaters, and smart appliances), and discounted rates or credits for electric vehicle charging.⁴⁷

2. The Stipulation contains additional provisions that will build upon AMI deployment and modernize the distribution grid.

The Stipulation does not merely provide for a complete AMI deployment. It also includes a comprehensive package of programs and other provisions designed to build upon the capabilities of advanced meters and facilitate a modern grid. This includes the (a) Customer Energy Management (“CEM”), (b) Smart Thermostat Rebates (“STR”), (c) Time-Varying Rates (“TVR”), (d) Data Access, and (e) Hosting Capacity provisions of the Stipulation.

a. The CEM program’s reports and updates will help customers engage with and understand the capabilities of their advanced meters and reduce energy usage.

As discussed in the testimony of Companies’ witness Miller, the Stipulation includes

⁴⁴ Direct Testimony of Andrew Dierksheide (May 3, 2024) (“Dierksheide Testimony”) (RESA/IGS Joint Ex. 1), at 9; Tr. Vol. I at 155-56.

⁴⁵ Miller Testimony at 13; Dierksheide Testimony at 8.

⁴⁶ Dierksheide Testimony at 16.

⁴⁷ *Id.*

certain programs designed to leverage the energy savings benefits of AMI meters. Through the CEM program, AMI-enabled residential customers will regularly receive Energy Updates (“Updates”) and CEM Reports (“Reports”) containing customized information about their electricity usage and suggestions for how to reduce their usage using their AMI data.⁴⁸ The Updates will provide customers with easily understood information that engages and educates them regarding their energy usage, such as by day of the week or time of day. The Reports will expand the customer education to include comparisons of the customer’s energy usage to prior periods, include education on key contributors to their energy usage such as air-conditioning, and provide recommendations on how to save energy and money.⁴⁹ Through this program, customers can use the Updates and Reports to better understand their energy usage – including the key contributors and other factors that impact it. This will empower customers to make adjustments (e.g., modifying heating or air-conditioning use or shifting activities to different times of the day) to better enable them to save energy and money.⁵⁰

b. The STR program will remove cost barriers for important AMI-enabling devices and drive energy savings and lower customer bills.

The STR program will create similar opportunities for customers to understand and manage their energy usage. This program will provide eligible active and new AMI-enabled residential customers with a rebate opportunity for the purchase of a qualifying smart thermostat, helping customers to overcome the initial cost barrier for purchasing such devices.⁵¹ While the STR program was proposed as part of the Companies’ Grid Mod II application, the Stipulation includes modifications to increase the program’s effectiveness, including enhanced incentives for both low-

⁴⁸ Miller Testimony at 3.

⁴⁹ *Id.*

⁵⁰ *Id.* at 4.

⁵¹ *Id.* at 8.

income and non-low-income customers, as well as a requirement that eligible non-low-income customers participate in either a time-varying rate option or demand response program.⁵² Combining a smart thermostat with AMI gives customers greater ability to manage their energy usage, reduce peak demand and total energy consumption, as well as provides the opportunity to save on their bills.⁵³ Those customers who combine the STR program with participation in demand response or time-varying rate offerings will have the opportunity for additional savings.⁵⁴

c. Advanced meters enable time-varying rates that can lead to energy and bill savings.

The AMI deployment contemplated in the Stipulation will enable TVR offerings from CRES providers. In addition, the Companies will continue to promote customer adoption of TVR throughout their service territories. Specifically, the Companies will make efforts to increase awareness and understanding of the Companies' TVR option, including through continued discussions with the Grid Mod Collaborative regarding rate design and marketing.⁵⁵

Time-varying rates are dependent on AMI and can lead to energy and bill savings for customers. The benefits of TVR include energy savings, generation capacity savings, avoided transmission and distribution investments, and carbon emissions reductions.⁵⁶ Further, continued promotion of the Companies' TVR during the Grid Mod II period will provide non-shopping customers with the opportunity to save on their monthly electric bill compared to what they would have paid under the Companies' flat SSO rate.⁵⁷

⁵² *Id.* at 9.

⁵³ *Id.* at 8.

⁵⁴ *Id.* at 10.

⁵⁵ Stipulation at 8.

⁵⁶ Miller Testimony at 12.

⁵⁷ *Id.*

d. Enhancing access to the customer interval data enabled by advanced meters will improve customer choice options in the competitive market.

The Stipulation includes several provisions designed to clarify and enhance access to the granular interval usage data that advanced meters provide. First, PUCO-certified CRES that are retail electric generation service providers will be able to access hourly interval data for their enrolled residential customers through the System-to-System Historical Interval Usage and System-to-System Rolling 10-Day functionalities on the Companies' Supplier Portal and through EDI.⁵⁸ As approved by the Commission in Grid Mod I, the Companies are utilizing residential customer hourly interval data from advanced meters for wholesale settlement at PJM,⁵⁹ and PJM uses this residential hourly interval data when it bills CRES that are retail electric generation service providers each month.⁶⁰ The Signatory Parties agree that this hourly interval data is being utilized for billing purposes for all shopping residential customers with AMI meters, rendering that data "required for billing purposes" and bringing it within the exceptions to non-disclosure in Ohio Adm.Code 4901:1-10-24(D)(3).⁶¹ If the Commission disagrees with the Signatory Parties that the hourly interval data is being utilized for billing purposes, the Signatory Parties request the Commission waive the consent requirement in Ohio Adm.Code 4901:1-10-24(D)(3).⁶² Providing residential shopping customers' interval data to their CRES providers in a batched, systematic way – as opposed to requiring the CRES to use a time consuming customer-by-customer authorization process – is essential to the development of innovative products and services in the market, including CRES-sponsored time-varying rates.⁶³ In turn, the development of CRES time-varying

⁵⁸ Stipulation at 19-21.

⁵⁹ *Id.* at 20.

⁶⁰ Dierksheide Testimony at 8-10; Tr. Vol. I at 132-134.

⁶¹ Stipulation at 20-21; Notice of Errata to Stipulation and Recommendation filed May 21, 2024.

⁶² *Id.*

⁶³ Quirk Testimony at 17; Dierksheide Testimony at 9-16; Tr. Vol. I at 154-155.

rates for the Companies' shopping customers is critical to achieving the time-of-use adoption rate estimated in the Grid Mod II cost-benefit analysis.

Second, the Signatory Parties request that the Commission waive the consent requirement in Ohio Adm.Code 4901:1-10-24(D)(3)⁶⁴ for NOPEC (as well as other similarly situated governmental aggregators)⁶⁵ and allow: (1) the Companies to provide hourly interval data for aggregated customers through System-to-System Historical Interval Usage, System-to-System Rolling 10-Day, and/or EDI; and (2) NOPEC's PUCO-certified CRES generation supplier to provide NOPEC with hourly interval data for its aggregated customers.⁶⁶ Providing interval usage data to NOPEC and other large, sophisticated governmental aggregation programs will further facilitate the development of innovative products and services, including time-varying rates for the Companies' customers,⁶⁷ which could help achieve the time-of-use adoption rate estimated in the Grid Mod II cost-benefit analysis.

Third, the Companies will continue working with interested stakeholders through the Grid Mod Collaborative to discuss access to smart meter data, including access to data for prospective residential customers and data access for other service providers such as third-party aggregators.⁶⁸ The Companies will also continue to convene Data Access Collaborative meetings, which will include discussions on providing 15-minute interval data.⁶⁹

Finally, the Companies will maintain the current ability of commercial and industrial customers to access their interval data through the Companies' customer portal.⁷⁰

⁶⁴ Notice of Errata to Stipulation and Recommendation filed May 21, 2024.

⁶⁵ See Tr. Vol. I at 34 (cross-examination of Companies' witness Miller, explaining that the Companies are open to offering the same level of data access to other governmental aggregators outside of NOPEC).

⁶⁶ Stipulation at 21-22.

⁶⁷ Quirk Testimony at 17.

⁶⁸ Stipulation at 23-34.

⁶⁹ *Id.* at 24.

⁷⁰ *Id.* at 25.

e. The hosting capacity map will facilitate a modern grid.

To help advance projects that will support the development of a cleaner and more reliable electric grid, the Signatory Parties agree that, within six months after approval of Grid Mod II, the Companies will implement a circuit-level solar accommodation map.⁷¹ Then, within two years after Grid Mod II approval, the Companies will develop and make available to the public a circuit capacity hosting “heat map.”⁷² This heat map will provide power capacity ratings, planned customer load in excess of 2MW, and additional distributed energy resources (“DERs”) or other customer equipment that would reduce circuit load.⁷³ The heat map will display available circuit hosting capacity for new load to support economic development,⁷⁴ and will enable current and prospective customers to quickly check the availability of capacity for potential expansion of load.⁷⁵ For example, a customer considering the installation of an electric vehicle charging station would be able to make a preliminary determination as to whether there is available capacity on their circuit to serve that charging station.⁷⁶ A publicly available hosting capacity map will also provide greater transparency into the ability of the grid to host DERs, as well as identify where DERs can alleviate or aggravate grid constraints.

3. The Stipulation’s resolution of the Rider AMI Audit Cases will result in a credit to customers and promote administrative efficiency.

The Stipulation not only resolves the Companies’ Grid Mod II proceeding, but also resolves the Rider AMI Audit Cases – resulting in additional substantive and administrative benefits for customers. As discussed in the testimony of Companies’ witness McMillen, the Companies commit to ensuring that all recommendations from the Staff Reports for these audits

⁷¹ *Id.* at 7.

⁷² *Id.* at 7-8.

⁷³ *Id.*

⁷⁴ *See id.*

⁷⁵ Quirk Testimony at 16.

⁷⁶ *Id.*

are implemented.⁷⁷ This includes removing and reconciling the costs of incentive compensation from Rider AMI, and providing a credit in Rider AMI to return to customers the revenue requirements associated with (1) new CEI Pilot capital costs incurred between January 1, 2019 and June 1, 2019, and (2) new CEI Pilot costs incurred after June 1, 2019.⁷⁸ These provisions will reduce costs customers pay and clarify the status of Staff's recommendations in these audits.⁷⁹ Moreover, resolution of the Rider AMI Audit Cases will conserve the resources of the Commission, the Companies, and other stakeholders, avoiding potentially costly litigation in those cases.⁸⁰

4. The Stipulation incorporates a number of modifications recommended by Staff.

The Stipulation also addresses concerns raised by Staff in their pre-filed testimony discussing the Companies' Grid Mod II application, including the appropriateness of the Companies' initial proposals for the (1) DA, (2) IVVC, (3) electric vehicle charging pilot, and (4) lateral electronic circuit protection pilot ("LECP") programs. Though Staff did not join the Stipulation, the Stipulation modifies the Companies' application to address the positions Staff took in testimony by withdrawing all four of these programs from Grid Mod II.⁸¹ In addition, the Stipulation incorporates Staff's recommendations regarding other programs (*i.e.*, periodically evaluating STR and CEM participation and considering possible modifications or phase out of the programs).⁸²

5. The Companies' cost-benefit analysis demonstrates that the benefits of Grid Mod II, as modified by the Stipulation, far exceed its costs.

The benefits described above are fully supported by the record, and will far exceed the

⁷⁷ Direct Testimony of Brandon S. McMillen (May 3, 2024) ("McMillen Testimony") (Companies Ex. 4), at 4.

⁷⁸ *Id.*

⁷⁹ *Id.*

⁸⁰ See Quirk Testimony at 8.

⁸¹ See *id.* at 18-19.

⁸² Miller Testimony at 6 (CEM Program); *Id.* at 11 (STR Program).

costs of Grid Mod II, as modified by the Stipulation. Indeed, the Companies' cost-benefit analysis demonstrates that Grid Mod II will result in an estimated \$762 million of net benefits to customers in excess of the associated costs over 20 years, or over \$149 million on a net present value basis.⁸³ This conclusion is supported by a wide range of quantitative benefits, as well as qualitative benefits not captured by the cost-benefit analysis.

The Companies' AMI proposal will result in substantial operational savings, totaling approximately \$473 million over a 20-year period.⁸⁴ These estimated operational savings are associated with (1) reduced meter reader employees and metering services (tied to AMI's enablement of remote meter readings), (2) reduced back office functions (tied to a reduction of full-time employees), and (3) the revenue assurance benefits of AMI (which include more accurate consumption recording and the ability to quickly identify and resolve instances of theft).⁸⁵ To protect customers, for the second through seventh years of Grid Mod II, customers will receive guaranteed credits equal to the estimated operational savings set forth in the Stipulation.⁸⁶ Further, the Grid Mod II OBA, which will commence three years following Commission approval of Grid Mod II, will include a review of and possible increase to the level of operational savings credited to Rider AMI, ensuring that customers continue to benefit from these cost savings.⁸⁷

As discussed above, the Companies' AMI proposal will also result in service outage management benefits for customers.⁸⁸ Through integration with the Companies' ADMS, AMI technology allows each individual meter to report to operational systems if they have experienced

⁸³ Quirk Testimony at 19.

⁸⁴ Quirk Testimony, Exhibit A (estimating operational savings at \$473,816,893, or \$209,993,438 on a net present value basis).

⁸⁵ *See id.*

⁸⁶ Quirk Testimony at 13-14; McMillen Testimony at 3-4.

⁸⁷ Stipulation at 18.

⁸⁸ *See* Quirk Testimony, Exhibit A.

an outage, enabling the Companies to begin targeted restoration activities faster.⁸⁹ Further, advanced meters can be dynamically pinged to assess if the entirety of an outage has been restored, or whether nested outages require further restoration.⁹⁰

In addition, Grid Mod II, through its inclusion of programs designed to help customers understand and manage their electric usage (such as TVR and the CEM program), will create substantial energy and demand savings.⁹¹ As discussed by Companies' witness Miller at hearing, time-varying rates, as well as other behavioral programs, are highly recognized in the industry for producing these types of savings.⁹² The benefits of such programs also include tangible generation capacity savings and avoided transmission and distribution investments.⁹³ By facilitating solutions that will decrease demand and reduce stress on the grid, particularly during peak periods, these programs will reduce the need for the Companies to make improvements to their transmission and distribution system as well as provide capacity savings associated with such reduced demand, decreasing overall costs for customers.

Also related to the energy savings potential of Grid Mod II are material reductions in carbon emissions.⁹⁴ Carbon emission reductions are an industry recognized benefit, combating the threat of climate change, improving the air we breathe, and creating positive health impacts.⁹⁵ These benefits can be directly translated into economic benefits for customers.⁹⁶ In fact, the U.S. EPA quantifies the financial value of carbon reduction in the *Technical Support Document: Social*

⁸⁹ Quirk Testimony at 12.

⁹⁰ *Id.*

⁹¹ *See* Quirk Testimony, Exhibit A.

⁹² *See* Tr. Vol. I at 76, 78.

⁹³ *See* Quirk Testimony, Exhibit A.

⁹⁴ *See id.*

⁹⁵ Miller Testimony at 14-15.

⁹⁶ *Id.*

*Cost of Carbon, Methane, and Nitrous Oxide.*⁹⁷ Relying on this nationwide standard, the carbon emissions reductions associated with Grid Mod II are expected to provide substantial economic benefits for customers throughout Ohio.

In addition to these quantitative benefits are numerous qualitative benefits that are not captured by the Companies' cost-benefit analysis. These benefits include, but are not limited to, improving customer satisfaction with AMI and the customer experience by providing customers with more information about and control over their usage, as well as allowing for the Companies to study and evaluate the impact of emerging technologies on the operation of the distribution grid.⁹⁸ Moreover, the Stipulation will result in administrative benefits for the Commission, the Companies, and other stakeholders by establishing a just and reasonable resolution to contested issues across four different Commission proceedings, thereby conserving the resources of the parties and avoiding potentially costly, extended litigation.⁹⁹

For these reasons, the record demonstrates that Grid Mod II is cost-effective, consistent with the Companies' peer utilities in Ohio, and accordingly will provide benefits far in excess of its costs.

C. The Stipulation does not violate any important regulatory principle or practice.

The Stipulation satisfies the third prong of the Commission's stipulation test, promoting important regulatory principles and practices. In crafting the Grid Mod II proposal, as well as agreeing to the Stipulation's modifications, the Companies placed great importance on including customer protections that will limit rate impacts and promote transparency and accountability.

⁹⁷ *Id.* (citing Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990" available at: https://www.whitehouse.gov/wpcontent/uploads/2021/02/TechnicalSupportDocument_SocialCostofCarbonMethaneNitrousOxide.pdf.)

⁹⁸ Quirk Testimony at 19; Miller Testimony at 2.

⁹⁹ Quirk Testimony at 8.

Through the continuation of Rider AMI on a modified basis, Grid Mod II will promote rate certainty, stability, and predictability for customers in several ways. First, as in Grid Mod I, Rider AMI will be subject to caps on the recovery of capital expenditures and incremental operation and maintenance expense.¹⁰⁰ This will provide certainty and minimize rate impacts by placing a hard limit on the amounts which the Companies can recover from customers. Second, Rider AMI will be credited with deemed operational savings, which will reduce the costs customers pay for Grid Mod II and provide certainty as to the levels of credits customers can expect to receive.¹⁰¹ Third, Rider AMI will use the Companies' currently approved rate of return (which will be updated following completion of the Companies' pending base rate case¹⁰²), providing certainty to customers and ensuring recovery will align with the most recent Commission approval. Fourth, as a result of the Stipulation, the Companies will eliminate the use of projected costs in their Rider AMI calculations. Eliminating this forecasting component will avoid the need to project Grid Mod II spending, reduce the volume of supporting workpapers for Rider AMI calculations, and streamline the Rider AMI audit process.¹⁰³ Lastly, Rider AMI will continue to undergo annual financial audits and reconciliation which will evaluate the prudence of Grid Mod II investments, permit customer refunds, where applicable, and better align cost recovery with the Companies' actual spending.¹⁰⁴ These features, taken together, will ensure rates remain affordable and predictable for the Companies' customers.

In addition, the Stipulation affirms the Companies' commitment to transparency and accountability and provides mechanisms to assure that the costs and benefits of the plan are

¹⁰⁰ *Id.* at 20.

¹⁰¹ McMillen Testimony at 3-4.

¹⁰² Case No. 24-0468-EL-AIR.

¹⁰³ McMillen Testimony at 3.

¹⁰⁴ *Id.*

consistent with the Stipulation. For example, Grid Mod II will be subject to numerous improved metrics to measure and monitor the status and performance of Grid Mod II investments.¹⁰⁵ This includes the Companies' adoption of all of the modifications to the stipulated Grid Mod I metrics and other recommendations of the auditor in the Grid Mod I OBA.¹⁰⁶

As with Grid Mod I, Grid Mod II will also be subject to its own OBA. The Grid Mod II OBA will commence three years following Commission approval of Grid Mod II and will be completed no later than one year following completion of Grid Mod II deployment.¹⁰⁷ This OBA will provide a rigorous assessment of the Grid Mod II assets' operational performance, enabling the Companies to further build upon the benefits of grid modernization, both with respect to Grid Mod II and future grid modernization filings before the Commission.¹⁰⁸

In addition to this comprehensive assessment, Grid Mod II will include various opportunities for feedback from stakeholders during (and after) the deployment period through the continuation of the Grid Mod Collaborative. The Companies will continue to provide the Grid Mod Collaborative with quarterly updates on the status of Grid Mod II deployment and create opportunities for customer and other interested stakeholder feedback, including input on ways to enhance customer benefits.¹⁰⁹ The Companies will also report on the operational savings and customer benefits from both Grid Mod I and Grid Mod II investments.¹¹⁰ This will include increased tracking and sharing of information regarding the total energy savings, total capacity savings, and participation in the CEM and STR programs,¹¹¹ as well as periodic assessments to

¹⁰⁵ See Stipulation at 14-18.

¹⁰⁶ Quirk Testimony at 18.

¹⁰⁷ *Id.*

¹⁰⁸ *Id.*

¹⁰⁹ See *id.* at 11.

¹¹⁰ *Id.* at 18.

¹¹¹ Miller Testimony at 5 (CEM Program); *Id.* at 9 (STR Program).

evaluate (and potentially modify or even phase out) these programs.¹¹² With respect to time-varying rates, the Companies will continue to work with the Collaborative to evaluate and consider potential enhancements to the design and marketing plans for the SSO TVR.¹¹³ Additionally, the Companies commit to working with the Collaborative to develop a plan to provide customers with information to better compare TVR and SSO rates.¹¹⁴ The Companies will also host semi-annual working group meetings where smart thermostat vendors and other stakeholders can collaborate on ways to maximize the STR program's benefits.¹¹⁵ This regular reporting of results and collaboration on improvements to Grid Mod II will further increase the transparency, accountability, and success of the Companies' efforts.

Grid Mod II, as modified by the Stipulation, also advances state policies outlined in R.C. 4928.02 and R.C. 4905.70. With respect to R.C. 4928.02(A), Grid Mod II will ensure the availability of adequate, safe, reliable, and efficient retail electric service by enabling proactive investments for the benefit of the Companies' distribution system.¹¹⁶ The numerous consumer safeguards built into the design of Rider AMI, including the proposed revenue caps, reconciliations, and audit requirements, also contribute to advancing this policy and encourage cost-effective and efficient access to information regarding the operation of the Companies' distribution system.¹¹⁷ Consistent with R.C. 4928.02(L), Grid Mod II supports the Companies' most at risk customers, including through the provision of enhanced rebates for qualifying low-income customers.¹¹⁸

In addition, Grid Mod II advances state policies set forth in R.C. 4928.02(D) and (O). By

¹¹² *Id.* at 6 (CEM Program); *Id.* at 11 (STR Program).

¹¹³ *Id.* at 13.

¹¹⁴ *Id.*

¹¹⁵ *Id.* at 11.

¹¹⁶ *See* Quirk Testimony at 7-8.

¹¹⁷ *See id.*

¹¹⁸ *See* Miller Testimony at 9.

completing the deployment of AMI meters throughout the Companies' service territories and improving access to residential customer interval data, the Stipulation encourages innovation and access to the competitive market.¹¹⁹ Further, these Stipulation provisions encourage cost-effective, timely, and efficient access to and sharing of customer energy usage data with customers, competitive generation suppliers, and large, sophisticated governmental aggregators to promote customer choice and grid modernization.¹²⁰

Finally, Grid Mod II capitalizes on AMI's energy savings benefits, through the CEM and STR programs as well as the promotion of the Companies' TVR offering. Therefore, Grid Mod II furthers the State policy outlined in R.C. 4905.70, which encourages the Commission to initiate programs that will promote and encourage conservation of energy, reduce the growth rate of energy consumption, and promote economic efficiencies.

Based on the foregoing, Grid Mod II, as modified by the Stipulation, will advance important state policies.

V. CONCLUSION

The Stipulation is a comprehensive package representing a reasonable compromise of competing interests. It substantially benefits customers and other stakeholders and advances important state policies. For the reasons set forth above, the Commission should approve the Stipulation without modification.

¹¹⁹ See R.C. 4928.02(D).

¹²⁰ See R.C. 4928.02(O).

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CERTIFICATE OF SERVICE

I certify that the foregoing was filed electronically through the Docketing Information System of the Public Utilities Commission of Ohio on this 31st day of July, 2024. The Commission's e-filing system will electronically serve notice of the filing of this document on the following parties.

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