BEFORE THE
PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Filing by Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company of a Grid Modernization Business Plan	)	Case No. 16-481-EL-UNC
In the Matter of the Filing by Ohio Edison Company, The Cleveland Electric Illuminating Company and The Toledo Edison Company Application for Approval of a Distribution Platform Modernization Plan	)	Case No. 17-2436-EL-UNC
In the Matter of the 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	)	Case No. 18-1604-EL-UNC
In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company for Approval of a Tariff Change	)	Case No. 18-1656-EL-ATA

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

TABLE OF CONTENTS

INTRODUCTION

The Commission should approve the Stipulation and Recommendation, as modified by the Supplemental Stipulation and Recommendation (collectively, the "Stipulation"), proposed by Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company (collectively, the "Companies"), Staff of the Public Utilities Commission of Ohio ("Staff"), Industrial Energy Users-Ohio ("IEU-Ohio"), Ohio Energy Group ("OEG"), Direct Energy Services, LLC and Direct Energy Business, LLC (collectively, "Direct"), Ohio Cable Telecommunications Association ("OCTA"), Environmental Defense Fund ("EDF"), Ohio Hospital Association ("OHA"), Interstate Gas Supply, Inc. ("IGS"), The Office of the Ohio Consumers' Counsel ("OCC"), The Northeast Ohio Public Energy Council ("NOPEC"), and Ohio Partners for Affordable Energy ("OPAE") (collectively, the "Signatory Parties").[1] In resolving the above-captioned proceedings, the Stipulation provides for all tax savings associated with the Tax Cuts and Jobs Act of 2017 ("TCJA") to flow back to customers, and the implementation of electric distribution grid modernization plans so that customers in all three of the Companies' service areas will benefit from grid modernization investments. The Stipulation is the result of a cooperative effort engaged in by the Companies and a diverse group of interested parties representing various customer groups, industries and sectors who have agreed, following serious bargaining, to resolve these four proceedings on the terms set out in the Stipulation. The Stipulation provides a comprehensive set of benefits for all customers, and it complies with all applicable statutory and regulatory criteria.

[1] OCC, NOPEC, and OPAE are Signatory Parties that agree to all terms and conditions of the Stipulation, except they have agreed not to oppose Sections V.B through V.I of the Stipulation related to grid modernization. *See* Supplemental Stipulation and Recommendation filed on January 25, 2019 ("Supp. Stip."), p. 2.

The Companies, the Signatory Parties, and the few parties opposing the Stipulation (the "Opposing Intervenors")[2] are all knowledgeable, experienced parties who have investigated, debated and openly negotiated the issues set forth in the Stipulation for many months (and, with regard to grid modernization, for years).[3] No party was excluded from this process. Indeed, all parties worked diligently to fashion an agreement that will, among other things, improve distribution system reliability, enable faster restoration of service after outages, allow customers to make more informed choices about energy usage, facilitate the organic development of innovative products and services that will enhance the customer's electricity experience, and return substantial tax savings to customers. Timely approval of the Stipulation by the Commission is the final step toward maximizing these considerable benefits to customers, stakeholders, and the general public.

The Stipulation benefits ratepayers and the public interest. With respect to tax savings under the TCJA, the Companies' customers already have been receiving nearly $40 million in annual tax savings since early 2018. The Stipulation will provide the remainder of all tax savings to the Companies' customers, bringing the total amount of customer savings to approximately $900 million. The Stipulation also authorizes the first phase of grid modernization (known as "Grid Mod I") to direct substantial investment in various grid modernization technologies such as Advanced Metering Infrastructure ("AMI"), Distribution Automation ("DA"), Integrated Volt-

[2] The Opposing Intervenors are the Environmental Law & Policy Center ("ELPC"), Natural Resources Defense Council ("NRDC"), Ohio Environmental Council ("OEC"), The Kroger Co. ("Kroger"), Ohio Manufacturers' Association Energy Group ("OMAEG") and the Smart Thermostat Coalition ("STC").

[3] Unlike every other party to these proceedings, STC did not participate in many of these debates and negotiations because it did not seek to intervene in any of these proceedings until December 28, 2018 – i.e., more than a month after the established intervention deadline, over two months after the Original Stipulation and Recommendation was filed on November 9, 2018, and nearly three years after the first of the proceedings addressed by the Stipulation was initiated.

VAR Control ("IVVC"), and an Advanced Distribution Management System ("ADMS"), which will improve reliability and encourage innovation and market access. Indeed, Grid Mod I advances the two pillars of the Commission's PowerForward Roadmap: "(i) innovation; and the concept that this innovation should serve to (ii) enhance the customer electricity experience."[4] Grid Mod I meets the Commission's objectives of a strong, modern grid that serves as a secure, open-access platform supporting market-based, innovative products and services that will enhance the customer experience.[5] The Stipulation also establishes robust protections for customers, implements procedures for oversight and monitoring of Grid Mod I investment, and sets up an inclusive, collaborative process for any interested stakeholder to discuss and evaluate future phases of grid modernization.

The Stipulation also does not violate any important regulatory principle or practice. To the contrary, the Stipulation resolves all outstanding regulatory issues related to the Companies' implementation of the TCJA in Case Nos. 18-47-AU-COI (the "TCJA Investigation"), 18-1604-EL-UNC, and 18-1656-EL-ATA (collectively, the "TCJA Cases"). The Stipulation also resolves the Companies' Grid Modernization Business Plan ("Business Plan") proceeding, Case No. 16-481-EL-UNC, and the Companies' Distribution Platform Modernization Plan ("DPM Plan") proceeding, Case No. 17-2436-EL-UNC (collectively, the "Grid Modernization Cases"). As such, the Stipulation promotes judicial economy and conserves the resources of the Commission and all interested parties by establishing a just and reasonable resolution of all the contested issues raised

---

[4] Public Utilities Commission of Ohio, *PowerForward Ohio: A Roadmap to Ohio's Electricity Future*, p. 4 (Aug. 29, 2018) ("PowerForward Roadmap") (administrative notice taken at Tr. Vol. I at 85), accessed Feb. 6, 2019, at https://www.puco.ohio.gov/industry-information/industry-topics/powerforward/powerforward-a-roadmap-to-ohios-electricity-future/.

[5] *Id.*, p. 9.

in the TCJA Cases and the Grid Modernization Cases. The Stipulation also furthers state policy by, among others, encouraging "innovation and market access for cost-effective supply- and demand-side retail electric service including . . . smart grid programs, and implementation of advanced metering infrastructure."[6]

The record evidence demonstrates that the Stipulation is the product of serious bargaining among capable and knowledge parties, benefits ratepayers and promotes the public interest, and does not violate any important regulatory principle or precedent. Thus, the Signatory Parties urge the Commission to approve the Stipulation as proposed without modification.

ARGUMENT

I. Applicable Law.

O.A.C. 4901-1-30 authorizes parties to Commission proceedings to enter into a settlement, such as the Stipulation submitted here. The terms of a stipulation are accorded substantial weight.[7] The Commission's determination is focused on whether the stipulation is reasonable and should be adopted.[8] To do so, the Commission considers the following criteria:

(1) Is the stipulation the product of serious bargaining among capable, knowledgeable parties?

(2) Does the stipulation, as a whole, benefit ratepayers and the public interest?

(3) Does the stipulation violate any important regulatory principle or practice? [9]

The Stipulation satisfies each criterion and, therefore, should be approved.

---

[6] R.C. 4928.02(D). As discussed below, the Stipulation also advances the state policies in divisions (A) and (B) of R.C. 4928.02.

[7] *Consumers' Counsel v. Pub. Util. Comm.*, 64 Ohio St.3d 123, 125 (1992), *citing Akron v. Pub. Util. Comm.*, 55 Ohio St.2d 155 (1978).

[8] *Id.*

[9] *Indus. Energy Consumers of Ohio Power Co. v. Pub. Util. Comm.*, 68 Ohio St.3d 559, 629 N.E.2d 443 (1994).

II. The Stipulation Is the Product of Serious Bargaining Among Capable and Knowledgeable Parties.

The Stipulation represents a settlement among a diverse group of capable and knowledgeable parties in several complex regulatory proceedings before the Commission. The Signatory Parties devoted significant time and effort to shaping and developing the Stipulation.[10] Although the Stipulation resulted from a series of negotiations and meetings spanning several months, the actual origins of the Stipulation can be traced back to the Grid Modernization Cases initiated by the Companies in February 2016 and December 2017 and the Commission's TCJA Investigation commenced in January 2018.[11] From those cases and others, the Signatory Parties gained significant experience and knowledge, which informed the Signatory Parties in the extensive negotiations that eventually produced the Stipulation.

After the Companies filed their Business Plan in February of 2016, most participants in these proceedings, including many of the Opposing Intervenors, intervened.[12] The Companies responded to numerous discovery requests concerning the Companies' Business Plan.[13] Similarly, when the Companies filed their DPM Plan in December 2017, most of the parties in these proceedings (again, including many of the Opposing Intervenors) intervened.[14] The Companies then provided intervenors information in discovery concerning their DPM Plan.[15] Indeed, over

---

[10] Direct Testimony of Santino L. Fanelli ("Fanelli Direct"), pp. 7-8. Supplemental Testimony of Santino L. Fanelli ("Fanelli Supp."), pp. 3-4.

[11] Fanelli Direct, pp. 3-6.

[12] ELPC, EDF, OEC, OCC, OPAE, OEG, OHA, Direct, and OMAEG moved to intervene in the Business Plan proceeding. *Id*., p. 5.

[13] *Id*., p. 5.

[14] Specifically, ELPC, OEC, OCC, OEG, EDF, NOPEC, IEU-Ohio, OHA, IGS, and others moved to intervene in the DPM Plan proceeding. *Id*., pp. 5-6.

[15] *Id*., p. 6.

the last three years, the Companies have consistently supplied parties with detailed information about many of the grid modernization proposals described in the Stipulation. What is more, many intervenors actively participated in all three phases of the Commission's PowerForward Initiative, which similarly touched on many of the grid modernization issues described in the Stipulation.[16] Accordingly, most of the parties in these proceedings have long been familiar with and knowledgeable of the grid modernization issues underlying the Stipulation.

Not only were the parties knowledgeable of the Companies' grid modernization plans, they also possess significant experience with and knowledge of the tax issues associated with the TCJA.[17] After the Commission initiated the TCJA Investigation to consider the impact of the TCJA on regulated utilities in Ohio, several parties in these proceedings (e.g., OCC, OPAE, OMAEG, Kroger, OCTA, OEG, IEU-Ohio, IGS, NOPEC, and EDF) moved to intervene and/or filed comments in that proceeding.[18] Indeed, many of the Signatory Parties gained valuable experience negotiating a similar TCJA-related stipulation involving AEP Ohio in Case Nos. 18-1007-EL-UNC and 18-1451-EL-ATA ("AEP TCJA Stipulation").[19] As such, most parties already were very familiar with and knowledgeable of the two major issues underlying the Stipulation – i.e., TCJA refunds to customers and grid modernization.

With that backdrop in mind, as early as June 2018, the Companies began meeting with Staff to discuss the possibility of entering into a settlement agreement that would resolve the Grid Modernization Cases and the TCJA Cases in a single, consolidated proceeding.[20] Those meetings

---

[16] *Id*., p. 5.

[17] *Id*., pp. 3-4.

[18] *Id*. *See* docket for Case No. 18-47-AU-COI.

[19] Fanelli Direct, p. 4.

[20] Hearing Transcript ("Tr.") Volume ("Vol.") I at 34.

and discussions continued over the course of the next four months.[21] On October 31, 2018, the Companies invited stakeholders to a group settlement meeting held on November 1, 2018.[22] At that initial group meeting, the Companies and Staff presented participants with a proposed settlement framework to facilitate inclusive dialogue among the parties.[23] The Companies and Staff also solicited feedback and encouraged participants to ask questions, offer comments, and/or express any concerns.[24] To ensure all potential stakeholders were included in the discussions, the Companies and Staff contacted other parties who did not attend the initial group settlement meeting for additional input.[25]

After organizing this large group meeting, the Companies then met individually and in small group meetings with various stakeholders.[26] Meanwhile, the Companies continued to share supporting information (e.g., estimated bill impacts) with interested parties to build consensus for a stipulation and facilitate transparency.[27] Ultimately, these individual and small-group meetings, as well as two additional "all parties" meetings, resulted in a number of compromises that culminated in the filing of a Stipulation and Recommendation on November 9, 2018 ("Original Stipulation") intended to resolve all disputed issues in these consolidated proceedings.[28]

---

[21] *Id.*

[22] *Id.* at 35. Fanelli Direct, p. 7.

[23] Fanelli Direct, p. 7.

[24] *Id.*

[25] *Id.*

[26] *Id.*

[27] *Id.*

[28] *Id.*, pp. 7-8.

Even with the diverse support of the Original Stipulation from Staff and eight different intervenors, negotiations continued with intervenors who did not sign the Original Stipulation.[29] After several months of additional negotiations, the Supplemental Stipulation was filed on January 25, 2019. Importantly, the Supplemental Stipulation maintained the support of all Signatory Parties to the Original Stipulation and added OCC, NOPEC, and OPAE as Signatory Parties, further underscoring the serious bargaining among the parties to these proceedings.[30]

The numerous and diverse Signatory Parties clearly are capable and knowledgeable.[31] They include the Commission's Staff, along with representatives of residential, commercial and industrial customers, hospitals, small businesses, a trade association for the cable telecommunications industry, an environmental advocate, a coalition of local governments, low and moderate-income customers, and competitive retail electric service ("CRES") providers. All of the Signatory Parties have consistently participated in the Companies' regulatory proceedings, including the Companies' most recent ESP proceeding in Case No. 14-1297-EL-SSO ("ESP IV"), as well as other relevant Ohio utility proceedings such as the TCJA Investigation, the AEP TCJA Stipulation, and the Commission's PowerForward Initiative. Further, the parties to these proceedings have been represented by similarly experienced counsel. The Commission has recognized this type of experience in approving other stipulations.[32]

---

[29] Fanelli Supp., pp. 3-4.

[30] Supp. Stip., pp. 1-2, 9-10. *See* Tr. Vol. I at 39-41 (Company witness Fanelli describing modifications in the Supplemental Stipulation to the Grid Mod I capital investment).

[31] *See* Supp. Stip., p. 10 (signatory page).

[32] *See In the Matter of the Application of Duke Energy Ohio, Inc., to Establish its Fuel and Economy Purchased Power Component of its Market-Based Standard Service Offer for the Period of Jul. 1, 2007, through Dec. 31, 2008,* Case Nos. 07-974-EL-UNC, 07-975-EL-UNC, 2009 WL 3228703, Opinion and Order, p. 8 (Sept. 30, 2009) (approving stipulation and finding first criterion met where "[t]he parties to these cases have been involved in numerous cases before the Commission and have provided extensive and helpful information to the Commission").

Not surprisingly, none of the Opposing Intervenors have presented any evidence to suggest the Stipulation is not the product of serious bargaining among capable and knowledgeable parties. Although ELPC/NRDC/OEC witness Curt Volkmann summarily alleged that "the review and approval process for the Stipulation has been rushed and opaque,"[33] Mr. Volkmann does *not* contend, or present any probative evidence to show, that the Stipulation fails the first criterion.[34] In fact, Mr. Volkmann does not render any assessment whatsoever concerning whether the Stipulation satisfies the Commission's criteria for considering the reasonableness of a Stipulation.[35]

The origin and evolution of the Stipulation demonstrate that it is a product of inclusive and extensive negotiations among knowledgeable and capable parties. It reflects the cooperation and compromise that integrates the Signatory Parties' diverse interests and establishes a comprehensive framework for modernizing the Companies' distribution system and returning tax savings to customers. Thus, the Stipulation is the result of serious bargaining by capable, knowledge parties.

III. The Stipulation Benefits Ratepayers and the Public Interest.

The record in these proceedings is replete with evidence of substantial, long-term benefits to ratepayers, stakeholders, and the general public if the Stipulation is approved by the Commission. As a result of the Stipulation, customers will benefit from total tax savings of approximately $900 million and the Companies will dedicate substantial investment toward modernizing the distribution grid.[36] The investment in grid modernization will not only improve

---

[33] Direct Testimony of Curt Volkmann ("Volkmann Direct"), p. 3.

[34] *Id*., p. 4.

[35] *Id*.

[36] *See, generally,* Stipulation. *See* Fanelli Direct, p. 3. *See also* ELPC Ex. 27-C.

system reliability and enable faster restoration of service after outages, it will also enhance the customer experience by facilitating the organic development of innovative products and services that will allow customers to more efficiently manage their energy use.[37] Further benefitting customers and the public interest, the Stipulation incorporates robust consumer protections, requires rigorous third-party oversight and monitoring, and establishes a collaborative, inclusive process whereby all stakeholders may participate in modernizing the grid.[38] Altogether, the Stipulation benefits ratepayers and the public interest, and, thus, satisfies the second criterion of the Commission's review.

A. With the Stipulation, Customers Will Realize Total TCJA-Related Tax Savings of Approximately $900 Million.

The Stipulation assures that approximately $900 million associated with the TCJA will be returned to customers – an enormous financial benefit to ratepayers that advances the public interest.[39] Because of steps proactively taken by the Companies, their customers have been receiving nearly $40 million in annual tax savings since early 2018 because of rider adjustments.[40] However, as authorized by the Commission in ESP IV, the Companies' base distribution rates are frozen through May 31, 2024.[41] In the Stipulation, the Companies have committed to refund all

---

[37] Fanelli Direct, pp. 9-10. *See* Tr. Vol. I at 49, 84, 103; PowerForward Roadmap, p. 9.

[38] Fanelli Direct, pp. 10-11; Fanelli Supp., pp. 4-6; Direct Testimony of Krystina Schaefer ("Schaefer Direct"), pp. 4-6; Direct Testimony of Wm Ross Willis ("Willis Direct"), pp. 6-7.

[39] *See* Original Stipulation ("Orig. Stip."), p. 2; Fanelli Direct, p. 3.

[40] Fanelli Direct, p. 3. *See* ELPC Ex. 26-C. *See also In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company, to Modify Rider DMR Rates*, Case No. 17-2280-EL-RDR, Finding and Order (Feb. 28, 2018).

[41] *In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company and The Toledo Edison Company for Authority to Provide for a Standard Service Offer Pursuant to R.C. 4928.143 in the Form of an Electric Security Plan*, Case No. 14-1297-EL-SSO, Opinion and Order, pp. 92-93 (Mar. 31, 2016).

tax savings associated with the TCJA that are not reflected in riders,[42] and the return over time of all of the normalized and non-normalized excess accumulated deferred income tax ("EDIT"), from January 1, 2018.[43] In short, customers will see two basic types of tax savings upon Commission approval of the Stipulation: 1) savings in federal income tax expenses (due to the reduction in federal corporate income tax rate from 35% to 21% per the TCJA); and 2) the savings associated with EDIT.[44]

To flow back all remaining tax savings not reflected in riders as of January 1, 2018, the Companies will establish in Case No. 18-1656-EL-ATA a new credit mechanism, which will be reconciled annually.[45] Supplemental Attachment A to the Stipulation provides a template for the new credit mechanism, and Attachment E to the Stipulation shows how tax savings will be allocated to residential and non-residential rate schedules under the new credit mechanism.[46] After the credit mechanism is applied, customers will see a credit on their bill calculated on the basis of dollars per kWh.[47]

The Stipulation's TCJA provisions will confer substantial benefits on customers. Tellingly, not a single party to these proceedings has provided testimony opposing or challenging

---

[42] Tax savings include $35 million annually as a result of federal income tax reductions not otherwise accounted for in current riders. Orig. Stip., p. 8, fn. 7. Further, the treatment of tax savings not reflected in riders will commence effective January 1, 2018, and will continue until new base distribution rates become effective upon the filing of the Companies' next distribution rate case. *Id*., p. 8.

[43] *Id*., pp. 7-8. Normalized EDIT is comprised of balances that are required to be amortized in accordance with the average rate assumption model ("ARAM"). *Id*., p. 7, fn. 5. Non-normalized EDIT is comprised of balances that do not have any IRS limitation placed on amortization. *Id*. The treatment of the EDIT balances will commence effective January 1, 2018 and will continue until the balances have been fully amortized. *Id*., p. 9.

[44] Direct Testimony of Jonathan J. Borer ("Borer Direct"), p. 3.

[45] *See id*. *See also* Fanelli Direct, p. 4.

[46] *See* Supp. Stip., p. 2, Supplemental Attachment A and Attachment E. Note that Section V.A.e.-f. of the Supplemental Stipulation superseded Section V.A.e.-f. of the Original Stipulation.

[47] Supp. Stip., p. 2.

any of the TCJA portions of the Stipulation. Even the Opposing Intervenors recognize that the Companies' commitment to return some $900 million in TCJA-related tax savings to customers is an obvious benefit to ratepayers and the public interest. Thus, the Stipulation provides substantial financial benefits to customers and advances the public interest.

B. The Stipulation Provides for Substantial Investment in Grid Modernization That Will Benefit Ratepayers and the Public Interest.

The Stipulation provides a critical step toward modernizing the Companies' electric distribution system through the implementation of Grid Mod I.[48] As explained above, the Grid Mod I component of the Stipulation is the product of extensive discussions between the Companies and other stakeholders over the last three years.[49] Beginning with the filing of the Companies' Business Plan in February 2016, the Companies set the path for future phases of grid modernization investment in their distribution system.[50] Specifically, the Business Plan provided scenarios for the Companies to achieve complete smart meter installation, as well as other grid modernization investments like DA and IVVC.[51] Then, in December 2017, the Companies filed their DPM Plan as a complement to the PowerForward Initiative.[52] The DPM Plan was designed to be completed over a three-year period to provide enhanced reliability and more timely outage restoration.[53]

---

[48] Although the Stipulation provides for an initial phase of significant grid modernization investment, the Companies have been studying and deploying various grid modernization investments as part of a pilot program since 2009. Tr. Vol. I at 48, 49, 53, 90, 102, 103. As part of that program, the Companies invested in a pilot area located in The Cleveland Electric Illuminating Company's service territory to study the impact of certain grid modernization investments, some of which are similar to those that would be deployed in Grid Mod I if approved by the Commission. *Id. See also* Business Plan, p. 3 (describing pilot program). Administrative notice was taken of the Business Plan and the DPM Plan at Tr. Vol. I at 28.

[49] Fanelli Direct, p. 6.

[50] *Id*. Although the Commission did not initiate the first of its PowerForward work sessions until April 2017, the Business Plan was consistent with the Commission's objectives later identified in the PowerForward Initiative.

[51] Business Plan, p. 13. *See* Fanelli Direct, p. 5; Orig. Stip., pp. 5-6.

[52] Orig. Stip., p. 3; Fanelli Direct, p. 5.

[53] DPM Plan, p. 1.

The Signatory Parties agreed to combine aspects from both the Business Plan and the DPM Plan to design the first phase of an ambitious grid modernization plan – i.e., Grid Mod I – that has garnered widespread support from a diverse cross-section of stakeholders representing various industries, sectors, and interests.[54] Under the Stipulation, Grid Mod I will be constructed over a three-year budget period, with the Companies authorized to recover the costs of capital investment in grid modernization of up to $516 million through the Advanced Metering Infrastructure/Modern Grid Rider ("Rider AMI").[55]

As part of Grid Mod I, the Companies will install 700,000 advanced meters, along with the necessary supporting communications infrastructure, a Meter Data Management System ("MDMS"), and associated systems and processes.[56] Additionally, the Companies will install DA on at least 200 circuits and IVVC on at least 202 circuits.[57] The deployment of DA will improve reliability and outage management through remote fault isolation and diagnostics, automated feeder switching, outage status monitoring and notification, and optimized restoration operations.[58] Similarly, deploying IVVC will improve voltage conditions on the distribution system through real-time load balancing, automated power factor corrections, automated voltage regulation, and conservation voltage reduction.[59] In total, investing in DA and IVVC as part of Grid Mod I will improve reliability and enable faster restoration of outages for customers – an indisputable, enduring benefit to ratepayers.[60]

---

[54] Orig. Stip., p. 3. Three Signatory Parties agreed not to oppose Grid Mod I. Supp. Stip., p. 10.

[55] Orig. Stip. at 10-11.

[56] *Id*. at 14.

[57] *Id*. at 19.

[58] *Id*. at 20.

[59] *Id*.

[60] Schaefer Direct, p. 7.

Importantly, the Stipulation will build upon the Companies' already robust distribution system reliability through grid modernization. The Companies have agreed to file an application to revise their reliability performance standards within six months of a final Commission order approving the Stipulation.[61] Not only that, the Companies will file a subsequent application to revise their reliability standards within one year after Grid Mod I deployment is completed.[62] In so doing, the Stipulation promises that the Companies will be held to reliability performance standards that reflect the impact of Grid Mod I.

In addition to providing substantial benefits to customers through improved system reliability, the Stipulation will credit to customers the operational savings earned from deploying these investments (e.g., reduced meter reading expenses, increased distribution revenue from theft detection and meter accuracy, and other improved operational efficiencies).[63] Specifically, the Companies will credit operational savings against the revenue requirement for Rider AMI during the quarterly update and reconciliation process.[64] For the first three years, the amount of operational savings credits will be fixed (i.e., \$0.05 million, \$0.90 million, and \$3.28 million, respectively) and subject to review by a third-party consultant halfway through Grid Mod I.[65] If by the start of the fourth year there is no approved Grid Mod II plan and until such time as there is an approved Grid Mod II, which incorporates the incremental O&M costs and operational savings from Grid Mod I, or if there is no adopted recommendation from the third party consultant review, then the amount of operational savings from Grid Mod I will continue in years four, five, and six

---

[61] Orig. Stip., p. 21.

[62] *Id*.

[63] Schaefer Direct, p. 4.

[64] Orig. Stip., p. 23.

[65] *Id*. Supp. Stip., p. 5.

as follows: $8.58 million, $9.68 million, and $9.82 million, respectively.[66] In addition, the Companies will allocate another $1 million to residential customers in years four, five and six as credits in Rider AMI, which will not be subject to cost recovery.[67] Finally, the Companies will give residential and small commercial customers a credit for all actual salvage or sale net proceeds from retired meters as a result of AMI deployment.[68] Crediting these substantial savings to customers ensures that customers receive their fair share of the benefits associated with grid modernization.

The Stipulation dedicates substantial resources to invest in smarter technologies that will strengthen and modernize the Companies' distribution system. In return, the Companies will file applications to revise their reliability performance standards and will share with customers the operational savings associated with the deployment of grid modernization projects. As a result, Grid Mod I will confer substantial benefits on customers and the general public.

C. Grid Mod I Will Produce Direct Benefits to Customers and the Retail Electric Market by Providing Customers Access to Innovative Products and Services.

The Stipulation contains numerous provisions that will advance the retail electric market in Ohio, as well as the Commission's PowerForward Initiative, by providing new technological capabilities that will allow CRES providers to offer innovative products and services that will

---

[66] Supp. Stip., p. 6.

[67] *Id*.

[68] Fanelli Supp., pp. 4-5; Supp. Stip., pp. 4-5. *See* Orig. Stip., pp. 18-19. The Companies will use best efforts to maximize actual salvage or sale net proceeds and will solicit recommendations from the Grid Mod collaborative group to maximize actual salvage or sale net proceeds. Supp. Stip., p. 5. The Companies' efforts and calculations to maximize the salvage or sale net proceeds from retired meters will be tracked under the performance metrics and reviewed during the midterm review of Grid Mod I. Fanelli Supp., p. 5; Supp. Stip., p. 5. The results of the evaluation may include a recommendation on the Companies' efforts to maximize actual salvage or sale net proceeds going forward. Supp. Stip., p. 5.

incentivize customers to more efficiently manage their energy usage.[69] Similarly, the Stipulation will enable CRES providers to move away from utilizing generic load profiles to actual energy usage information, which will allow for more efficient and accurate calculations of wholesale market settlements.[70]

As part of the AMI deployment in Grid Mod I, the Companies will implement an MDMS, which enables the validation, editing, and estimating ("VEE") of meter data for billing purposes.[71] The AMI deployment will also use necessary and generally accepted standards to implement a Home Area Network ("HAN"), which is a network within a customer's residence that connects multiple smart devices (e.g., smart appliances, smart thermostats, in-home displays of energy usage, etc.) for the purposes of communication and data exchange.[72] By utilizing generally accepted standards, providers with qualified devices can offer customers options for in-home or mobile app displays of home energy usage in near real-time, thus empowering customers to adjust their usage to lower their electric bills.[73] Further, customers will be able to access their energy usage data through a web portal.[74] The web portal will allow system-to-system access to authorized third-parties through the current standardized format, which, in turn, will allow customer interval data to be automatically accessed.[75] And the Companies will not charge any

[69] Direct Testimony of Brandon Childers ("Childers Direct"), pp. 3-7.

[70] *Id*. at 3-6.

[71] Orig. Stip., pp. 14.

[72] *Id*. *See also* Childers Direct, p. 8.

[73] Childers Direct, p. 8.

[74] *Id*.

[75] Orig. Stip., p. 16.

fees to customers or suppliers for individual access to or requests for any of this data provided via electronic data interchange ("EDI"), customer portal, or supplier portal.[76]

By providing these innovative technological capabilities, the Stipulation accomplishes one of the principal objectives of the Commission's PowerForward Initiative, namely to create a robust marketplace that "allows for innovative products and services to arise organically and be delivered seamlessly to customers by the entities of their choosing."[77] Rather than relying on generic load profiles, the Stipulation invests in the technology that will allow CRES providers to calculate and use an individual customer's actual hourly energy usage,[78] which, in turn, facilitates the organic development of innovative products and services by CRES providers. As one leading CRES provider explained, "the more granular the data, the easier it will be for CRES providers to offer innovative products to customers."[79] Here, by investing in this new technology and giving customers or suppliers access to EDI without charge, CRES providers will be able to offer a variety of products and services, such as energy monitoring dashboards to aid in behavior changes, behind-the-meter energy storage, and internet connected devices (e.g., smart thermostats or appliances).[80] In such a market-friendly environment, innovative products and services will be created organically and delivered seamlessly to customers just as the Commission envisioned in PowerForward.[81]

---

[76] Supp. Stip., p. 4.

[77] PowerForward Roadmap, p. 9.

[78] Orig. Stip., p. 15.

[79] Childers, p. 6.

[80] *Id*.

[81] Tr. Vol. I at 49, 103. *See* PowerForward Roadmap, p. 9.

Not only will this technology spur innovation of new products and services for customers, it will also provide necessary upgrades for wholesale market settlements by moving from the use of generic load profiles to actual customer energy usage information.[82] The Companies also will develop a process for CRES providers to provide customer consent for data access and, working with the Grid Mod collaborative, will identify ways to make the customer authorization process easy for customers.[83] Making wholesale market settlements more accurate and efficient benefits customers, CRES providers, electric distribution utilities ("EDUs"), and the general competitive retail electric market in Ohio.[84]

In sum, the Stipulation facilitates critical investment in new technology that will organically stimulate innovation in the competitive market, promote customer choice, enhance the customer electricity experience by incentivizing customers to more efficiently manage their usage, and generate more efficient and accurate calculations of wholesale market settlements to the collective benefit of customers, CRES providers, EDUs, and other stakeholders.

D. The Stipulation Establishes Robust Protections for Customers and Requires Third-Party Oversight and Monitoring of Grid Mod I.

Given the scale and transformative potential of Grid Mod I, the Stipulation contains layers of robust consumer protections and rigorous third-party oversight of the Companies' investments in and deployment of Grid Mod I assets.

First, the Signatory Parties created a mutually-agreeable set of performance metrics[85] by which the Companies will routinely monitor, measure, and report to Staff the status of the

---

[82] Childers, p. 6; Tr. Vol. I at 204; Orig. Stip., 15.

[83] Orig. Stip., pp. 16, 17.

[84] Childers, pp. 4-6; Tr. Vol. I at 204.

[85] *See* Orig. Stip., p. 22 and Attachment C; Supp. Stip., p. 8.

deployment and other related benefits from the grid modernization projects.[86] The Companies will include these performance metric evaluations when submitting workpapers to Staff in support of the Rider AMI quarterly updates.[87] Second, Rider AMI will be subject to rigorous annual audits, which will include, among other things, on-site inspection of Grid Mod I assets and the tracing/verification of related expenses.[88] Third, the audits will include verification that Grid Mod I investments are used and useful and were prudently incurred.[89] If the Companies are unable to resolve any objections within 150 days of the filing of the application, an expedited hearing process will be established in order to allow the parties to present evidence regarding the conformance of the application with the Supplemental Stipulation.[90]

Fourth, halfway through the three-year Grid Mod I deployment period, Staff (or a third-party consultant hired by Staff) will perform an operational benefits assessment and a review of Grid Mod I, which must be completed prior to the implementation of the second phase of grid modernization (i.e., "Grid Mod II"), to evaluate whether the actual functionality and performance of the project is consistent with the planned specifications.[91] This assessment may include an independent cost-benefit analysis of Grid Mod I.[92] Fifth, the Stipulation provides that until an independent Commission audit of Grid Mod I is completed, the Companies may not commence Grid Mod II (i.e., unless the Commission expressly authorizes the Companies to do so subject to

---

[86] Orig. Stip., p. 22.

[87] *Id*.

[88] *Id*., pp. 12-13. The audit process approved by the Commission in Case No. 12-1230-EL-SSO and continued in ESP IV will continue to apply. *Id.*, p. 13.

[89] Supp. Stip., p. 3.

[90] *Id*.

[91] *Id.*, p. 5.

[92] *Id*.

the results of the independent audit).[93] In so doing, the Stipulation guarantees that a full-examination of the cost-effectiveness of Grid Mod I occurs before customers are charged for any subsequent grid modernization phases or projects.[94]

Not only does the Stipulation provide transparency and robust third-party oversight, it also contains several safeguards for customers. For instance, the Stipulation sets a ceiling on the amount of capital costs the Companies may recover from customers – $516 million.[95] Of the $516 million, the Stipulation also imposes a ceiling of $66 million on the capital investments in other related Grid Mod I investments, which includes up to $16 million for AMI-related expenditures and up to $50 million in distribution platform modernization work as outlined in the DPM Plan.[96] In addition to capping recovery of capital costs, the Stipulation limits recovery of incremental operation and maintenance ("O&M") costs associated with Grid Mod I to an aggregate of $139 million for the first three years of deployment.[97] Further, if there is no approved Grid Mod II by the start of the fourth year and until such time as there is an approved Grid Mod II, the incremental O&M will continue to be subject to a cap through the sixth year, as follows: $15.2 million in year 4; $10.3 million in year 5; and $10.5 million in year 6.[98] The Stipulation also caps the Companies' return on equity when calculating the revenue requirement for Grid Mod I investments recovered

---

[93] *Id*., pp. 5-6.

[94] Willis Direct, pp. 6-7.

[95] Orig. Stip., pp. 10-11.

[96] Supp. Stip., p. 7. *See* DPM Plan, pp. 2-7 (describing circuit ties, reconductoring, remote controlled reclosers, and supervisory control and data acquisition systems). To be clear, the Companies' spending of the $66 million discussed above is included within the $516 million spending cap. Supp. Stip., p. 7. Also, the Stipulation expressly precludes the Companies from using any of the $516 million for Grid Mod I assets to fund Distributed Energy Resources ("DER") services located on the customer side of the meter. *Id*. at 2-3.

[97] Orig. Stip., pp. 11-12.

[98] *Id*.

under Rider AMI at 10.38% during the three-year Grid Mod I deployment period.[99] And, as mentioned above, the Companies will credit deemed operational savings to customers and file applications to revise their reliability standards.[100] Therefore, the Stipulation provides additional benefits to customers in the form of safeguards related to the costs of Grid Mod I.[101]

Finally, the Stipulation provides an inclusive process for stakeholders to oversee and participate in the development of Grid Mod I. The Stipulation creates a grid modernization collaborative group ("Collaborative Group") to provide insight, experience, and advice from interested stakeholders throughout the implementation of Grid Mod I.[102] Once per quarter, the Companies will facilitate a group to obtain stakeholder input associated with data access systems and processes.[103] The Companies will also consult with the Collaborative Group to develop the technical eligibility requirements for those qualified devices that will connect to the HAN (e.g., smart thermostats, in-home displays, etc.).[104] Similarly, the Companies will solicit recommendations from the Collaborative Group to maximize any actual sale/salvage net proceeds associated with the retirement and replacement of retired meters.[105] Still further underscoring its inclusivity, without limiting the participation of other potential stakeholders to join and participate in the Collaborative Group, the Collaborative Group will include the statutory representative for all residential customers in Ohio (i.e., OCC) and the non-profit organization representing local

---

[99] Supp. Stip., p. 3.

[100] Supp. Stip., p. 6; Orig. Stip., p. 21.

[101] Fanelli Supp., pp. 4-5.

[102] Orig. Stip., p. 14; Supp. Stip., p. 4.

[103] Orig. Stip., pp. 14-15.

[104] Orig. Stip., pp. 14, 15.

[105] Supp. Stip., pp. 4, 5.

municipal governments across northeast Ohio (i.e., NOPEC).[106] In short, the Collaborative Group will further promote transparency and accountability while fostering meaningful, proactive stakeholder involvement throughout the grid modernization process.

The Stipulation includes robust safeguards and precautionary measures to ensure transparency, collaboration, oversight, and accountability throughout the Grid Mod I process – an undeniable benefit to customers, stakeholders, and the public.

E. The Stipulation Produces Substantial Benefits to Customers and the Public Interest.

As mentioned previously, no party to these proceedings opposes or otherwise contests the overwhelmingly positive benefit of returning approximately $900 million in TCJA-related tax savings to customers. Further, Grid Mod I under the Stipulation produces a positive cost-benefit analysis ("CBA") result.[107] And all parties, even the Opposing Intervenors, generally support Grid Mod I. Of the two opposition witnesses, STC witness Dzubay seeks only to add a smart thermostat program to Grid Mod I.[108] Meanwhile, ELPC/NRDC/OEC witness Volkmann is "not opposed to the proposed elements of Grid Mod I,"[109] but merely raises questions about the CBA supporting Grid Mod I.[110] He recognized that he lacked the answers and sought only delay.[111] No party offered probative evidence that would justify rejecting the CBA and delaying approval of the Stipulation.

---

[106] Tr. Vol. I at 118, 119; Supp. Stip., p. 4.

[107] *See* Orig. Stip., p. 10 and Attachment B.

[108] Dzubay Direct, p. 2.

[109] Volkmann Direct, p. 6.

[110] *Id.*, pp. 6, 8-20.

[111] Volkmann Direct, p. 17 (admitting his questions are based only on a "brief review", that his analysis may be incorrect, that he doesn't know what the correct values are to use in the CBA); Tr. Vol. II at 246 (agreeing that he is not offering an opinion concerning the correct SAIDI and SAIFI numbers that should be used in the ICE calculation).

Attachment B to the Original Stipulation provides the results of the CBA for Grid Mod I. The CBA was developed by the Companies in collaboration with Staff.[112] Staff reviewed and generally agreed with all the assumptions used in the CBA.[113] The underlying calculations were provided to parties in discovery, with Mr. Volkmann receiving them in mid-November.[114] The CBA includes estimated capital and incremental O&M costs, offset by operational savings, which are then compared to estimated benefits to customers and the public resulting from the Grid Mod I investments.[115] As reflected in Attachment B, Grid Mod I is estimated to result in substantial net benefits to customers in excess of the associated costs totaling nearly $1.1 billion over 20 years (or over $230 million on a net present value basis).[116] The CBA for Grid Mod I, combined with the significant tax savings to be returned to customers, demonstrates that the Stipulation, as a whole, confers substantial benefits on customers and the public.

Mr. Volkmann recognized that Grid Mod I will provide many benefits to customers,[117] but questioned whether the benefits, particularly the benefits of Distribution Automation or "DA", will exceed the costs.[118] However, he lacks the expertise in this area to be considered an expert. First, Mr. Volkmann worked for Pacific Gas & Electric many years ago – between 1984-1993 – and he let his engineering license lapse in 1995.[119] His only experience with DA is as a consultant reviewing three other grid modernization proposals filed by Southern California Edison, Duke

---

[112] Fanelli Direct, p. 10.

[113] Tr. Vol. I at 202.

[114] *See* Tr. Vol. II at 252-53. Portions of the CBA work papers were marked as ELPC Exhibits 23C, 24C and 25C.

[115] Fanelli Direct, p. 10.

[116] *Id*.

[117] Volkmann Direct, p. 7; Tr. Vol. II at 239-40.

[118] Volkmann Direct, pp. 6, 8-20.

[119] *Id*., p. 1; Tr. Vol. II at 230.

North Carolina, and Dominion Virginia.[120] He has no first-hand experience developing or deploying a modern DA system.[121] Moreover, although he questions the Companies' use of the Department of Energy's Interruption Cost Estimate ("ICE") calculator to estimate the economic benefits of expected reliability improvements from DA, as measured by SAIDI and SAIFI, his testimony in these proceedings is the first time he has ever run the ICE tool with actual reliability data provided by a utility (although he purports to have attempted to run the ICE tool once before without a utility's data).[122] And this is only the second occasion he has attempted to identify "outlier data" and remove it from the calculation of SAIDI and SAIFI, and the first time ever he has done so when SAIDI and SAIFI include major storms/events.[123] And he cannot say whether his approach of identifying "outlier data" is consistent with other studies, because no other studies exist that utilized his approach.[124]

Mr. Volkmann's lack of experience is reflected in the limitations in his analysis. He believes DA is less effective during major storm events when there is widespread system damage,[125] but this opinion is not based on any studies he has seen or performed.[126] Instead, he relies on DA proposals he reviewed in North Carolina and Virginia, but (1) only the North Carolina utility reported reliability during major storms and (2) major storms in those states, which experience hurricanes, could produce "widespread system damage" that is much different than in

---

[120] Tr. Vol. II at 231.

[121] Tr. Vol. II at 231-233.

[122] Tr. Vol. II at 239. *See id.* at 238; Volkmann Direct, p. 9. SAIFI is the System Average Interruption Frequency Index, which represents the average number of interruptions per customer. O.A.C. 4901:1-10-10(B)(1). SAIDI is the System Average Interruption Duration Index. *See* O.A.C. 4901:1-10-01(T).

[123] Tr. Vol. II at 240. *See* Volkmann Direct, pp. 13-17.

[124] Tr. Vol. II at 240.

[125] Volkmann Direct, p. 9.

[126] Tr. Vol. II at 235-36, 237.

Ohio.[127] It is no coincidence that one of the first variables the ICE calculator needs is the state in which the utility operates.[128] Mr. Volkmann provided no testimony regarding how major storms in Ohio – typically snow and ice storms that cause widely scattered damage – would affect DA because he has no experience to offer that testimony.

Furthermore, his effort to remove "outliers" from data used to calculate SAIDI and SAIFI improvements (i.e., indexes that assess distribution system reliability) is based on a flawed and untested methodology.[129] He focused on data reflecting reliability during major storms/events, so he is essentially seeking to normalize data that is non-normal. In Mr. Volkmann's view, the comparison between the baseline period and the test period should be based only on years with similar ranges of customer minutes interrupted.[130] This, of course, defeats the purpose of the analysis and predetermines the outcome by ensuring there is little difference between the baseline period data and test period data. Incredibly, Mr. Volkmann discarded a year of data from the test period, and reduced the test period to a three-year average, simply based on his baseless assumption that the reliability data was too good during that year to have resulted from DA.[131] And he discarded a month of data from the baseline period based on his unfounded assumption that the major storms/events during that month were abnormal, despite having no idea whether major storms/events of similar intensity occurred during the study period.[132]

---

[127] *See* Tr. Vol. II at 231, 236, 270-71

[128] Tr. Vol. II at 239.

[129] If offered in an Ohio court, Mr. Volkmann's testimony regarding the CBA undoubtedly would be stricken under Evid.R. 702 on at least two grounds: (1) under Evid.R. 702(B) because he is not "qualified as an expert by specialized knowledge, skill, experience, training, or education regarding" cost-benefit analyses; and (2) under Evid.R. 702(C) because his subjective "outlier" theory is neither "objectively verifiable" or "validly derived from widely accepted knowledge, facts, or principles."

[130] Tr. Vol. II at 246.

[131] Tr. Vol. II at 245-246.

[132] Tr. Vol. II at 243-245; Volkmann Direct, pp. 14, 15.

Remarkably, after cherry-picking the data to get the result he wanted, Mr. Volkmann compared his own SAIDI results – 8% improvement during major storms/events and 16% improvement excluding major storms/events – to the 9.4% SAIDI improvement AEP Ohio experienced, excluding major storms/events, during the first year of its gridSMART phase 1 deployment in 2012.[133] Mr. Volkmann does not include AEP Ohio's 2012 SAIFI, excluding major storms, of 14.1%, as it would compare favorably to the Companies' projected SAIFI, excluding major storms, of 9%.[134] And he does not mention that AEP's gridSMART phase 1 did not include ADMS, while the DA deployed by the Companies' Grid Mod I will benefit from ADMS.[135] And worst of all, Mr. Volkmann neglects to include in his testimony the very next sentence in AEP Ohio's report, which states that "these results were realized prior to more recent efforts to optimize the system with initial 2013 results significantly more favorable than those experienced in 2012."[136]

Still further, Mr. Volkmann neglects to mention the Commission's order approving AEP Ohio's gridSMART phase 2, with the Commission noting "a 20 percent improvement for all Phase 1 DACR circuits in the 2008-2010 pre-deployment period compared with the 2013-2015 post-deployment period" and the projected $1 billion in customer benefits from DA over 15 years.[137] In comparison, the Companies' projected DA benefits of $1.2 billion over 20 years resulting from

---

[133] Volkmann Direct, p. 17; Tr. Vol. II at 241.

[134] *See* Tr. Vol. II at 242-43.

[135] Tr. Vol. II at 233; Orig. Stip., p. 10. *See In the Matter of the Application of Columbus Southern Power Company for Approval of an Electric Security Plan; an Amendment to its Corporate Separation Plan; and the Sale or Transfer of Certain Generating Assets*, Case No. 08-917-EL-SSO, Opinion and Order, pp. 34-36, 37-38 (Mar. 18, 2009) (approving Phase 1 pilot as including only AMI, DA and a HAN).

[136] Tr. Vol. II at 243.

[137] *In the Matter of the Application of Ohio Power Company to Initiate Phase 2 of Its GridSMART Project and to Establish the GridSMART Phase 2 Rider*, Case No. 13-1939-EL-RDR, Opinion & Order, ¶ 54, 64 (Feb. 1, 2017).

Grid Mod I are not an outlier. Mr. Volkmann admits the folly of this exercise in his own testimony when he states that his analysis is based only on his "brief review" of the Companies' CBA (despite having the data for several months), and that "there may be legitimate reasons why the Companies have included this data in the calculations and my analysis is incorrect."[138] Mr. Volkmann further admits that he is not offering an opinion concerning what the correct SAIDI and SAIFI numbers should be in the Companies' ICE calculation.[139] In fact, his recommendation is merely that the Commission, Staff and stakeholders should understand and agree with the assumptions in the CBA.[140] Yet Staff witness Schaefer testified that Staff has no issue with the CBA, and eleven different stakeholders have shown their lack of objection by signing the Stipulation.[141]

In sum, Mr. Volkmann's attack on the CBA for Grid Mod I reflects nothing more than a misguided and flawed understanding of the CBA and the data and assumptions underlying it. As such, the Commission should discard his testimony, and find that the CBA for Grid Mod I, combined with the tax savings to be returned to customers, demonstrate that the Stipulation benefits customers and the public interest.

IV. The Stipulation Does Not Violate Important Regulatory Principles or Precedents.

The Signatory Parties agree that the Stipulation violates no regulatory principle or precedent.[142] To the contrary, the Stipulation provides certainty and stability to the Commission, its Staff, and interested parties, as well as customers, by resolving a number of current and future matters, consistent with state policy, that would otherwise require significant time and resources

---

[138] Volkmann Direct, p. 17; Tr. Vol. II at 253.

[139] Tr. Vol. II at 246.

[140] Volkmann Direct, p. 19.

[141] Tr. Vol. I at 202; Supp. Stip., p. 10. OCC and NOPEC have taken no position on the CBA. Supp. Stip., p. 8.

[142] Orig. Stip., p. 5; Supp. Stip., pp. 1-2.

to resolve. As such, the Stipulation reinforces important regulatory principles and precedent in Ohio, including state policies identified in R.C. 4928.02, the Commission's objectives in PowerForward, and the Commission's directives in the TCJA Investigation.

But for the Stipulation, the disparate issues in these cases would be resolved via a patchwork of proceedings through contested litigation. The Stipulation resolves the Grid Modernization Cases and the TCJA Cases, and it also addresses the Commission's directive in the TCJA Investigation that rate-regulated utilities should file a company-specific proceeding to address TJCA-related issues in an expeditious, timely manner.[143] Resolving these proceedings via a reasonable settlement also advances many of the stated principles and objectives articulated by the Commission in the PowerForward Roadmap, including: 1) to create an environment that fosters technological innovation and organic growth; 2) to develop a distribution system that is reliable and resilient; and 3) to ensure investments create societal benefits and allow for an enhanced customer electricity experience.[144]

The Stipulation also promotes many of the policies set out in R.C. 4928.02 with respect to the provision of electric service.[145] For instance, R.C. 4928.02(B) explains that it is the policy of the state to "[e]nsure the availability of unbundled and comparable retail electric service that provides consumers with the supplier, price, terms, conditions, and quality options they elect to meet their respective needs." The Stipulation achieves that and more by investing in innovative

---

[143] *In the Matter of the Commission's Investigation of the Financial Impact of the Tax Cuts and Jobs Act of 2017 on Regulated Ohio Utility Companies* ("*TCJA Investigation*"), Case No. 18-47-AU-COI, Finding and Order (Oct. 24, 2018), ¶ 29.

[144] PowerForward Roadmap, pp. 8, 9.

[145] Although the state policies identified in R.C. 4928.02 frequently reference "retail electric service", the Commission considers these policies as they apply to the costs of electric distribution infrastructure. *See In the Matter of the Application of Ohio Power Company to Initiate Phase 2 of its GridSMART Project and to Establish the GridSMART Phase 2 Rider*, Case No. 13-1939-EL-RDR, Opinion and Order (Feb. 1, 2017), ¶ 4.

technology that will allow CRES providers to measure an individual customer's actual hourly energy usage, which, in turn, facilitates the organic development of innovative products and services to meet customers' individualized energy usage needs.[146] Not only does this advance an important state policy, it also accomplishes a critical objective set by the Commission in the PowerForward Initiative, i.e., the creation of a robust marketplace that "allows for innovative products and services to arise organically and be delivered seamlessly to customers by the entities of their choosing."[147]

Similarly, it is a state policy to "[e]ncourage innovation and market access for cost-effective supply and demand-side retail electric service including . . . smart grid programs, and implementation of advanced metering infrastructure."[148] Again, the Stipulation advances this policy by making substantial investment in AMI, including 700,000 advanced meters to be deployed throughout the Companies' service territories, and other smart grid technology such as DA, IVVC and an ADMS. The development of this cutting-edge distribution system technology aligns with another significant objective promulgated by the Commission in PowerForward, i.e., the development of a strong, reliable, efficient, and modern distribution grid.[149]

It is also a state policy to "[e]nsure the availability to consumers of adequate, reliable, safe, efficient, nondiscriminatory, and reasonably priced retail electric service."[150] The Stipulation upholds that state policy by allowing customers to receive the benefit of total tax savings of approximately $900 million. The substantial savings that customer will receive on their electric

---

[146] Childers Direct, p. 8.

[147] PowerForward Roadmap, pp. 8, 9.

[148] R.C. 4928.02(D).

[149] PowerForward Roadmap, p. 9.

[150] R.C. 4928.02(A).

bills if the Stipulation is approved is also consistent with the Commission's intent in the TCJA Investigation. The Commission stated its intent that Ohio rate-regulated utilities pass all benefits from the TCJA to customers in an expeditious and orderly manner.[151] Further, as part of the TCJA Investigation, the Commission ordered utilities to address the impact of the TCJA on pole attachment rates.[152] As recognized by OCTA, a leading trade association for the cable telecommunications industry, the Stipulation prevents pole attachment rates from being artificially inflated – an obvious, tangible benefit to all customers.[153]

Importantly, the Opposing Intervenors have presented no credible evidence that the Stipulation infringes on any regulatory policy or precedent. STC witness Tamara Dzubay surmises, without any actual support, that Grid Mod I will not accomplish any of the Commission's PowerForward objectives because it does not include a provision giving customers rebates to purchase smart thermostats.[154] STC bemoans the Signatory Parties' unwillingness to earmark \$30+ million[155] to deploy smart thermostats over a three-year period.[156] According to STC, the Commission should order the Companies to provide consumers with \$100 instant rebates for 210,000 smart thermostats.[157]

---

[151] *TCJA Investigation*, Finding and Order (Oct. 24, 2018), ¶ 29.

[152] *TCJA Investigation*, at ¶ 30.

[153] Direct Testimony of Jonathon L. McGee ("McGee Direct"), pp. 1, 6.

[154] Direct Testimony of Tamara Dzubay ("Dzubay Direct"), pp. 3-20. ELPC/NRDC/OEC witness Volkmann also encourages investments in smart thermostats, although he recognized smart thermostats operate independent of grid modernization programs, performed no analysis of the benefits or costs of adding smart thermostats to Grid Mod I, and customers have many market-based options for obtaining smart thermostats. Volkmann Direct, pp. 23-24; Tr. Vol. II at 247-49.

[155] Ms. Dzubay admitted that STC's proposal may, in fact, cost much more than \$30 million if certain assumptions underlying her proposal turned out to be wrong. Tr. Vol. II at 299, 300.

[156] Dzubay Direct, pp. 3, 4, 19.

[157] Tr. Vol. II at 293; Dzubay Direct, pp. 17-18.

Yet STC's proposal is not only unsupported by record evidence, but also appears to be submitted in the wrong proceeding (or is an attempt to circumvent the Commission's order in a separate proceeding). As an initial matter, Ms. Dzubay confessed that she is not an expert in grid modernization; in fact, she admitted that she has no experience at all working on any aspects of grid modernization.[158] Neither did she perform or conduct any CBA related to grid modernization prior to filing her testimony.[159] And she has no firsthand experience implementing the kind of Commission-ordered smart thermostat rebate program proposed in her testimony.[160] Ms. Dzubay even confessed that she was uncertain if the Commission possessed the legal authority to implement her proposal.[161] Without any real experience, evidence, or legal basis to support the proposal described in her testimony, the Commission should disregard it.

Moreover, Ms. Dzubay evidenced a distinct bias. Her job as an Ecobee employee is to sell smart thermostats to state regulators.[162] And she's seeking subsidies for the more expensive thermostat options available in the market.[163] Her singular interest in these proceedings is to maximize the profits of the two smart thermostat companies that formed STC for purposes of intervening in these proceedings – Ecobee and Google.[164] STC's criticism of the Stipulation solely derives from the Signatory Parties' unwillingness to include a proposal that would effectively pad

---

[158] Tr. Vol. II at 281-282.

[159] Tr. Vol. II at 282; Dzubay Direct, p. 4.

[160] Tr. Vol. II at 289, 290.

[161] Tr. Vol. II at 297, 298.

[162] Tr. Vol. II at 280.

[163] *See* Tr. Vol. II at 284, 289 (Ecobee and Nest smart thermostats both retail at $249, while programmable controllable thermostat deployed in study she relied on cost only $75).

[164] Tr. Vol. II at 281; Dzubay Direct, p. 1.

the coffers of two of the largest players in the smart thermostat industry (Ecobee alone enjoys over one-third of the entire market share for smart thermostats).[165]

Indeed, given the focus of these proceedings on grid modernization, STC's proposal seems oddly out of place. Perhaps as a first-time participant in Ohio Commission proceedings, STC was unaware that smart thermostat programs are addressed in Ohio through the energy efficiency and portfolio plan proceedings of electric utilities.[166] As Staff witness Schaefer noted, the Companies' current Portfolio Plan includes over 60,000 smart thermostats through two different programs.[167] Or perhaps Ms. Dzubay is testifying in support of a $30 million smart thermostat program in these proceedings to circumvent the cap the Commission imposed on the Companies' recovery of energy efficiency/peak demand reduction program costs in Case No. 16-743-EL-POR.[168] Regardless, smart thermostats are customer devices, not smart grid.[169] And except for an indirect benefit if coupled with time-varying rates, smart thermostats do not require grid modernization in order to provide any of their benefits to customers.[170]

---

[165] Tr. Vol. II at 307, 308. Ms. Dzubay refused to disclose the market share of Google LLC, claiming such information was confidential. Tr. Vol. II at 292, 293, 305, 306.

[166] *See* Tr. Vol. I, p. 207 (Staff witness Schaefer referencing her smart thermostat obtained through AEP's Portfolio Plan); *id.* at 211 (Staff witness Schaefer referencing smart thermostats included in the Companies' current Portfolio Plan); *In the Matter of the Application of Dayton Power and Light Company for Approval of its Energy Efficiency and Peak Demand Reduction Program Portfolio Plan for 2018-2020*, Case No. 17-1398-EL-POR, Opinion and Order, ¶ 30 (Dec. 20, 2017) (DP&L commitments regarding smart thermostats); *In the Matter of the Application of Ohio Power Company for Approval of its Energy Efficiency and Peak Demand Reduction Program Portfolio Plan for 2017 through 2020*, Case No. 16-574-EL-POR, Opinion and Order, ¶ 24 (Jan. 18, 2017) (incentive program for smart thermostats).

[167] Tr. Vol. I at 211. *See generally In the Matter of the Application of the Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company for Approval of Their Energy Efficiency and Peak Demand Reduction Program Portfolio Plans for 2017 through 2019*, Case No. 16-743-EL-POR, Opinion and Order, p. 12 (Nov. 21, 2017) ("2017-2019 Portfolio Plan Order").

[168] 2017-2019 Portfolio Plan Order, p. 23.

[169] *See* Tr. Vol. II at 288

[170] Tr. Vol. II at 285. *See* Tr. Vol. II at 247 (smart thermostat programs can be offered without grid modernization).

Thus, no proponent of smart thermostats has demonstrated why the Stipulation violates state policy if it does not include an additional, expensive smart thermostat program to support energy efficiency. In fact, STC's proposal undercuts one of the primary objectives of the Commission's PowerForward Roadmap, i.e., to create an environment that fosters innovation to arise organically in the competitive marketplace, whereas Grid Mod I is consistent with this stated objective.[171] If the Ecobee and Nest thermostats promoted by STC actually do provide the benefits they are marketing here, customers will choose them and the market will provide them. As such, STC's expensive energy efficiency proposal does not belong in these proceedings.

In conclusion, the Stipulation does not violate any important regulatory principle or precedent. Rather, the Stipulation promotes numerous state policies outlined in R.C. 4928.02, supports the Commission's PowerForward objectives, and complies with the Commission's orders in the TCJA Investigation. The Stipulation satisfies the third criterion.

CONCLUSION

In conclusion, the evidence presented in these proceedings clearly demonstrates that the Stipulation is the product of serious bargaining among capable and knowledge parties, benefits ratepayers and promotes the public interest, and does not violate any important regulatory principle or precedent. The Stipulation commits the Companies to flow back to customers all remaining tax savings associated with the TCJA, bringing the total customer savings to approximately $900 million. It also provides substantial investment in distribution grid modernization initiatives that will improve system reliability, enable faster restoration of service after outages, improve voltage conditions, allow customers to make more informed choices about their energy usage, facilitate

[171] *See* PowerForward Roadmap, p. 9.

near-real time access to customer data to cultivate innovative products and services in the competitive marketplace, and better enable the Companies to make future electric distribution grid modernizations. Therefore, the Signatory Parties urge the Commission to approve the Stipulation as proposed without modification.

Respectfully Submitted,

/s/ *Brian J. Knipe*
Brian J. Knipe (0090299) (Counsel of Record)
FirstEnergy Service Company
76 South Main Street
Akron, Ohio 44308
bknipe@firstenergycorp.com
330-384-5795
330-384-3875 (fax)

James F. Lang (0059668)
Mark T. Keaney (0095318)
CALFEE, HALTER & GRISWOLD LLP
The Calfee Building
1405 East Sixth Street
Cleveland, Ohio 44114
(216) 622-8200
(216) 241-0816 (fax)
jlang@calfee.com
mkeaney@calfee.com

ATTORNEYS FOR OHIO EDISON
COMPANY, THE CLEVELAND ELECTRIC
ILLUMINATING COMPANY AND THE
TOLEDO EDISON COMPANY

CERTIFICATE OF SERVICE

I certify that the foregoing Initial Post-Hearing Brief of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company was filed electronically through the Docketing Information System of the Public Utilities Commission of Ohio on this 1st day of March, 2019. The PUCO's e-filing system will electronically serve notice of the filing of this docket on counsel for all parties.

/s/ *James F. Lang*
Attorney for Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company

4819-1789-4537, v. 1