### BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application Seeking	)	
Approval of Ohio Power Company's	)	
Proposal to Enter into an Affiliate Power	)	<b>Case No. 14-1693-EL-RDR</b>
Purchase Agreement for Inclusion in the	)	
Power Purchase Agreement Rider.	)	
In the Matter of the Application of	)	
Ohio Power Company for Approval of	)	<b>Case No. 14-1694-EL-AAM</b>
Certain Accounting Authority	)	

### INITIAL BRIEF IN SUPPORT OF THE JOINT STIPULATION AND RECOMMENDATION ON BEHALF OF OHIO POWER COMPANY

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#### I. EXECUTIVE SUMMARY

This case presents a unique opportunity for the Commission to exercise its statutory authority to promote rate stability while simultaneously facilitating continued development of the competitive markets and protecting the interests of retail consumers and the Ohio economy.

Specifically, Ohio Power Company ("AEP Ohio" or the "Company") and the Signatory Parties to the December 14, 2015 Joint Stipulation and Recommendation ('Stipulation"), including the Commission Staff, propose a plan to populate the previously approved PPA Rider. If approved, the population of the rider will provide an effective hedge against volatile market conditions to the benefit of Ohio retail customers. The offering of the hedge carries with it the benefit of maintaining key economic drivers for different Ohio communities. The Stipulation provides even more benefits including but not limited to commitments by the Company to take specific future actions that help transform AEP Ohio into a utility of the future, pro-competitive incentives for the competitive retail electric service market in Ohio, a significant set of new environmental options for the Commission to consider in its generation portfolio, enhancements to the energy efficiency and peak demand reduction programs, and various other provisions.

AEP Ohio submitted its Amended Application in this docket requesting the Commission's concurrence that it is prudent for the AEP Ohio to enter into a new affiliate power purchase agreement (the "Affiliate PPA") for the output of specific generating units owned by AEP Generation Resources ("AEPGR"). The Stipulation modifies and adopts the Amended Application, that seeks approval for inclusion in the PPA Rider of a modified version of the Affiliate PPA in the PPA Rider; the voluntary changes made to the PPA contract are summarized in Attachment A to the Stipulation and fully reflected with contractual specificity in the redlined version of the PPA entered into the evidentiary record. In addition, the Stipulation recommends inclusion in the PPA Rider of the net impacts of the AEP Ohio's contractual entitlement to a

share of the electrical output of generating units owned by the Ohio Valley Electric Corporation (the "OVEC PPA"). The generating units included within the Affiliate PPA and the OVEC PPA may be collectively referred to as the "PPA Units." The request for relief outlined in the Stipulation that modifies and adopts the AEP Ohio's May 15, 2015 Amended Application may also collectively be referred to as the "PPA Proposal."

As supported in the AEP Ohio's Stipulation testimony and as will be further explained through the AEP Ohio's briefs, the PPA Proposal is a lawful and reasonable way to address all of these concerns and promote rate stability while fully preserving competition and retail choice.

AEP Ohio submits that the purpose of the PPA Proposal is to stabilize rates for both shopping customers and SSO customers alike – by passing through to customers the differential between PJM market prices and a cost-based contractual price, in this case the cost-based prices of the Affiliate and OVEC PPAs.

Indeed, the Commission has already created a solid foundation upon which the Stipulation's PPA Proposal can build. In the *ESP III* decision, the Commission held that rate stability is "an essential component" of an ESP and found that the PPA Rider is authorized under R.C. 4928.143(B)(2)(d) and promotes Ohio energy policy under R.C. 4928.02. Further, the Commission found that a reasonable PPA rider proposal could provide for a significant financial hedge that truly stabilizes rates, particularly during period of extreme weather. Moreover, the Commission found that the PPA Rider has the potential to supplement the benefits derived from staggering and laddering of the SSO auctions and to protect customers from price volatility in the wholesale market.

AEP Ohio applied the Commission's *ESP III* decision by reformulating the PPA approach and making its best efforts to satisfy each of the factors and requirements through the

Amended Application. Then, in negotiating the Stipulation with Staff and supporting intervenors, AEP Ohio agreed to additional modifications of the PPA Proposal that improved the result for customers. In contrast, a few Intervenors continue to delay and openly oppose the basic tenets of the PPA construct approved by the Commission in the *ESP III* decision. The input and positions of those intervenors reflect a basic disagreement with the Commission on legal and policy matters already determined and therefore are counter-productive to the process to populate the approved rider. As such, the parties offering these untimely attacks on the past Commission decision should not be substantively relied upon or incorporated into the Commission's decision in this case. In reality, populating the PPA Rider as recommended in the Stipulation is a unique and impactful regulatory opportunity for the Commission to simultaneously promote rate stability, help preserve generation resource diversity, protect Ohio's economy and facilitate competition.

The Stipulation was developed through intense negotiations among knowledgeable and capable parties including the Commission's Staff. It not only resolves the issues raised in the Amended Application, but it also addresses related ESP matters and makes other commitments and agreements; the settlement constitutes a robust package of terms and conditions that convey benefits to customers and advance the public interest. In short, the Stipulation fulfills the well-established test adopted by the Commission and the Supreme Court of Ohio for use in evaluating adoption of contested settlements – as will be demonstrated in detail below. As part of that demonstration, AEP Ohio shows how the PPA Proposal recommended through the Stipulation satisfies the factors of consideration and related requirements spelled out in the Commission's *ESP III* decision.

#### First Prong of the Test (serious bargaining among capable, knowledgeable parties)

Regarding the first prong of the Commission's three-part test, the record confirms that the Stipulation is the product of serious bargaining among capable, knowledgeable parties.

Throughout this lengthy settlement process, AEP Ohio, the Staff, and the majority of intervening parties, representing a broad cross-section of interests, considered and debated the proposals of each customer class and interested group and ultimately reached agreement on the Stipulation.

The process available for negotiation and understanding of issues in this case was long and abundant. Likewise, the Stipulation is clearly the product of serious bargaining among those parties. In short, the first prong of the test is satisfied.

#### Second Prong of the Test (package settlement benefits customers and public interest)

As a threshold matter under the second prong of the Commission's three-part test, AEP Ohio demonstrates that the Stipulation as a package benefits ratepayers and the public interest. As a threshold part of its showing under the second prong of the test, AEP Ohio has demonstrated that the four factors of consideration outlined in the *ESP III* decision are satisfactorily addressed through the record:

- 1) Financial need of the generating plant: AEP Ohio's forecasts show that the PPA units, including both the Affiliate PPA and OVEC units, have a financial need, at least in the near term especially given the significantly reduced ROE of 10.38%.
- 2) Necessity of the generating facility, in light of future reliability concerns, including supply diversity: AEP Ohio's testifying witnesses are uniform in their conclusions regarding energy market volatility and the very real threat that will undoubtedly be associated with closure of these coal-fired generation facilities because fuel diversity is vital and coal units are a crucial part of a diversified portfolio of generation resources.
- 3) Description of how the generating plant is compliant with all pertinent environmental regulations and its plan for compliance with pending environmental regulations: AEP Ohio provided detailed testimony about the PPA Units' compliance and associated costs relating to six major environmental regulations.
- 4) The impact that a closure of the generating plants would have on electric prices and the resulting effect on economic development within the state: The record shows that the PPA

Units provide economic benefits to Ohio consumers currently and that the state is facing adverse economic impacts because equivalent generation facilities are not being replaced in the state.

Another key part of its showing under the second prong of the test is a demonstration that the additional requirements outlined in the *ESP III* decision are fulfilled through the PPA Proposal:

- 1) Rigorous Commission oversight of the Rider, including a process for substantive review and audit: As part of both its up front prudence review for entering into the PPA and its ongoing oversight and review of PPA costs through AEP Ohio's proposed PPA Rider audit process, the Commission can conduct both accounting review of previously approved PPA costs and managerial review of AEP Ohio's decisions regarding new PPA costs.
- 2) A commitment to full information sharing with the Commission and its Staff: AEP Ohio's PPA Proposal fully complies with this requirement by committing to provide the Commission and Staff numerous types of information related to the PPA Units to enable the Commission and Staff to conduct the ongoing review process; the terms of the Stipulation and the Amended Application embody a commitment by AEP Ohio to provide full Commission visibility into any PPA costs being passed through the PPA Rider.
- 3) An alternative plan to allocate the Rider's financial risk between both the Company and its ratepayers: The Stipulation makes clear that "AEP Ohio, not its customers, would be responsible for the adjustments made to the PPA Rider based on actions deemed unreasonable by the Commission, including any costs (after proper consideration of such costs and netting of any bonus payments) associated with performance requirements in PJM's markets." The customer credit commitment and a substantially lower ROE agreement also place risk on AEP Ohio.
- 4) A severability provision to continue the ESP in the event the rider is invalidated: Section IV.D of the Stipulation ensures that ESP III will continue in an orderly fashion in the unlikely event that a court invalidates the PPA Rider.

Also under the second prong of the test, AEP Ohio examines each of the major provisions of the Stipulation to illustrate how the Stipulation as a package promotes ratepayer and public interests. First, while an effective hedge does not have to ensure a quantitative financial benefit in order to convey value (just like an insurance policy), the expected financial cost or benefit is certainly relevant and important. Of course, even if there is an expected net cost, there would be other offsetting benefits related to other factors that can render the overall impact a net benefit –

such as transmission upgrade cost avoidance and retained economic development benefits for Ohio's economy. Based on the evidence of record, however, customers are reasonably expected to receive a net financial benefit overall for the period covered by the financial projections.

Second, AEP Ohio shows that adopting the PPA Proposal has the unique potential to supplement the benefits derived from the staggering and laddering of SSO auctions and to protect customers from price volatility expected in the wholesale market; without the PPA Proposal, retail customers face significant volatility.

Third, AEP Ohio demonstrates that the package of substantive provisions in Section III of the Stipulation convey significant customer and public interest benefits. Under Section III.A, benefits include: (i) the voluntary amendments to the proposed PPA are beneficial to customers; (ii) the inclusion of both OVEC and the Affiliate PPA in the PPA Rider combine to provide a meaningful and significant financial hedge for all customers; (iii) the additional PPA Rider credits provide a substantial benefit to customers, even if the PPA Rider ends up being a net charge for one of the four years covered; (iv) the initial \$4 million annual credit and the wellconsidered rate design are improvements conveyed under the Stipulation; and (v) the regulatory approvals and reporting commitments in this section provide additional protections for customers. Under Section III.C, AEP Ohio has committed to file a separate application with the Commission requesting to extend its current ESP for another six years – through May 31, 2024, the term of the Revised Affiliate PPA – and the provision identifies several provisions that AEP Ohio will include in the extended ESP application. AEP Ohio's commitment to make and advance such proposals in its ESP extension filing adds value; but parties interested in those proposals will have an opportunity in the expanded ESP proceeding to present their positions on

them and the Commission need not decide anything about those provisions in adopting the Stipulation.

The other provisions outlined in the Stipulation provide further benefits. In Sections III.E-H and III.D.13, numerous provisions are included in the Stipulation regarding grid modernization, carbon reduction and fuel diversification, and battery technology and Volt/VAR optimization that provide important environmental, energy efficiency, demand reduction, and customer choice benefits that will help transform AEP Ohio into a "utility of the future." Further, Sections III.D.1, III.D.9-12 and III.I incorporate obligations undertaken by AEP Ohio that uniquely address environmental and renewable energy and significantly move forward advanced energy development in Ohio: (i) a higher education contribution for clean energy research, (ii) co-firing commitment for certain generation PPA Units and exploration of other potential retirement, repowering or refueling options for all of the PPA Units, and (iii) development of proposals for at least 900 MW of renewable energy over five years. Compliance with the Clean Power Plan will be a challenge for any state, but the Stipulation in this case provides additional flexibility for the Commission and State of Ohio to consider as it develops its compliance plan. In addition, Sections III.C.12 and III.D.7-8 provide benefits by pursuing procompetitive pilot programs for a Competition Incentive Rider, a supplier consolidated billing program and a "warm transfer" program. Moreover, Sections III.D.2-5 and III.D.14-15 provide benefits relating to energy efficiency/peak demand response ("EE/PDR") such as increased investment in infrastructure serving hospitals, partnering with Ohio Partners for Affordable Energy ("OPAE") to administer programs that benefit low-income residential customers, facilitating economic development by transferring part of EE/PDR rider costs to the EDR and making commitments to propose specific levels of EE and PDR in AEP Ohio's 2017-19 portfolio plan. Section III.B of the Stipulation also fosters a public debate about long-term capacity resource issues, including specific advocacy commitments by AEP Ohio, and Section III.D.6 commits to maintaining a nexus of operations (including employees) in Ohio to support the PPA Units.

Finally regarding the second prong of ratepayer and public interest benefit, AEP Ohio demonstrates that the MRO test results from the *ESP III* decision are still applicable and are only enhanced through adoption of the Stipulation.

#### Third Prong of the Test (does not violate any important regulatory practice or principle)

Several Intervenors have claimed that the Stipulation and the PPA Proposal it embodies violate regulatory principles, but all such arguments are meritless. The Market Monitor and other Intervenors claim that the cost-based compensation reflected by the PPA Proposal is an impermissibly "subsidy" that is inconsistent with competition in the wholesale markets. As an initial matter, the Commission should focus on the PPA Proposal's stabilizing effect on *retail* rates.

In any event, the PPA Proposal is fully consistent with existing wholesale market structures. As numerous Intervenor witnesses admitted in cross-examination, cost-based compensation for generation is commonplace in PJM. It exists in the retail regimes of numerous states, and for many years, tens of thousands of megawatts of generation in PJM have fully participated in PJM's energy and capacity markets while also receiving cost-based compensation through retail rates. None of these other examples of cost-based compensation in PJM constitute impermissible "subsidies" that have undermined the PJM markets. To the contrary, the Market Monitor expressly acknowledged that all previous PJM capacity auctions have been "competitive" notwithstanding the proliferation of numerous other forms of cost-based

compensation for generation in PJM. The PPA Proposal is no different – its cost-based rates are not an impermissible "subsidy" but are just like many other forms of cost-based compensation for generation in PJM. Intervenor arguments to the contrary are without merit.

Likewise, the Stipulation and PPA Proposal fully accord with principles of State utility policy. Intervenors claim that the PPA Proposal is in conflict with State policies that encourage competition, but the opposite is true. By limiting customers' exposure to the volatility of fully competitive retail generation rates, the PPA Proposal will ease the transition to competition in this State and encourage shopping by providing the kind of hedge against market fluctuations that the competitive retail electric service ("CRES") market has failed to develop on its own. Moreover, Intervenors' critiques are based on an extreme devotion to competition no matter the cost, and that is not Ohio utility policy. In the ESP provisions of Senate Bill 221, the General Assembly authorized the Commission to adopt a hybrid approach to utility regulation that relies on both competitive and cost-based principles, and the Commission has already determined that Senate Bill 221 authorizes AEP Ohio's PPA Rider as a means of stabilizing retail rates and mitigating the volatile effect on retail rates of total reliance on competition. It also bears recognizing that the Stipulation contains additional competitive elements and two prominent CRES providers as Signatory Parties.

Intervenors also claim that several of AEP Ohio's commitments for its future ESP III extension filing violate regulatory principles, but these claims are incorrect, and more importantly at this time, the arguments are premature. In the Stipulation, AEP Ohio only committed to *propose* various terms in its ESP III extension. Intervenors will have a full opportunity to present their objections to these terms in the proceeding in which the Commission addresses AEP Ohio's ESP III extension filing.

Finally, Intervenors claim that the Affiliate PPA violates FERC's restrictions on affiliate transactions. Intervenors made that claim in this proceeding and have now filed a complaint at FERC. Intervenors' FERC complaint will, of course, be adjudicated by FERC and not in this forum. Here, however, it is important for the Commission to confirm that the PPA Proposal gives the Commission numerous opportunities to review PPA Rider costs being passed through to ratepayers and ensure that there is no "affiliate abuse." FERC has held that its affiliate restrictions do not apply to transactions between an Ohio retail utility and its wholesale generation affiliate because the Ohio Commission exercises detailed regulatory oversight that already protects customers. Here, the Commission will carefully consider the PPA Proposal, finding that the proposed transaction is prudent and subsequently reviewing the prudence of costs incurred by AEP Ohio as a condition of those costs being passed through to retail ratepayers.

The Commission should exercise its ability to protect Ohio electric customers by approving the Stipulation using the established three-part test for adopting contested settlements. The record supports the expected benefits and steadying effect of the hedge. In addition, the benefits added in the Stipulation layer in a number of other benefits including an opportunity or path for transition to an alternative or diverse fuel source for generation here in the State of Ohio.

#### II. BACKGROUND

A. General background of the *ESP III* decision and overview of the Stipulation provisions relating to the PPA Rider.

The standard service offer (SSO) statute, R.C. 4928.141, plainly imposes a duty on electric distribution utilities such as AEP Ohio to provide retail electric service to non-shopping customers – as the Supreme Court of Ohio has explicitly acknowledged. *See Consumers'*Counsel v. Pub. Util. Comm., 128 Ohio St. 3d 512, 513 (2011). AEP Ohio has a duty to provide

a SSO throughout its service territory that includes generation supply and, specifically in the context of an ESP filing, to make a proposal that is more favorable in the aggregate than a market rate offer. In simple terms, the General Assembly provided that an ESP is supposed to be better than an MRO for customers. Further, as repeatedly held by the Commission, the ESP statute includes authority to approve a non-bypassable stability charge relating to generation service where the criteria of R.C. 4928.143(B)(2)(d) are met. Thus, AEP Ohio's PPA Proposal is being advanced to try and help address the retail rate volatility problem faced by AEP Ohio's customers.

The Commission's consistent track record shows that it is also vitally concerned with rate stability. In AEP Ohio's first ESP case, the Commission said rate stability was "essential." Again in AEP Ohio's second ESP, the Commission cited rate stability as a key factor in approving the rate plan. In the *ESP III* decision, in discussing the PPA Rider proposal (at 25), the Commission once again recited its belief that "rate stability is an essential component of the ESP." AEP Ohio believes that both the Commission and AEP Ohio are properly focused on rate stability. AEP Ohio asks the Commission to get past the rhetorical opposition of the small

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<sup>&</sup>lt;sup>1</sup> In re Application of Columbus Southern Power Company and Ohio Power Company for Authority to Establish a Standard Service Offer, Case Nos. 11-346-EL-SSO et al. ("ESP II"), Opinion and Order at 31-38 (Aug. 8, 2012); In re Application of Ohio Power Company for Authority to Establish a Standard Service Offer, Case Nos. 13-2385-EL-SSO et al. ("ESP III"), Opinion and Order at 19-27 (Feb. 25, 2015) ("ESP III decision").

<sup>&</sup>lt;sup>2</sup> In re Application of Columbus Southern Power Company for Approval of an Electric Security Plan, Case Nos. 08-917-EL-SSO et al. ("ESP I"), Opinion and Order at 72 (Mar. 18, 2009).

<sup>&</sup>lt;sup>3</sup> ESP II, Opinion and Order at 77.

<sup>&</sup>lt;sup>4</sup> Surprisingly, intervenors do not all agree with the goal of rate stability in an ESP. Dr. Hill, the witness representing the Ohio Manufacturers' Association Energy Group, affirmatively and unequivocally disagreed (when cross examined about the Company's Amended Application) with the *ESP III* decision's statement (at 25) that rate stability is essential to an ESP. (Tr. XIII at 3297.) OMAEG witness Dr. Hill later reversed his views about rate stability being an essential component of an ESP (when asked the same question in connection with his Stipulation testimony). (Tr. XX at 5073 (now agreeing that rate stability is important but claiming that the PPA Rider does not provide it).) In any event, OMAEG's opposition to the PPA Rider and the Stipulation is inexplicable given the resulting customer benefits.

but vocal group of opponents under the framework of the Stipulation and objectively consider the beneficial features of the jointly-recommended PPA Proposal.

AEP Ohio's PPA Proposal was borne of concerns about the impact of market price volatility for electricity on its retail customers – especially given that market price volatility may jeopardize economic development of existing or future industrial and commercial customers in Ohio. AEP Ohio is concerned about the prospect of Ohio losing control over future retail electricity prices. AEP Ohio is also concerned about the prospect of closing generation plants in Ohio – and eliminating the massive economic benefits those plants provide to Ohio's economy – merely because the long-term value of those plants is not currently recognized in short-term prices that are based on ineffective markets. AEP Ohio wants to ensure that the best interests of the State of Ohio are advanced even in the context of federal regulatory solutions that may not otherwise incorporate such interests. AEP Ohio is concerned about the prospect of short-term decisions that ignore the benefits and advantages of fuel diversity and place too much reliance on a limited number of fuel sources.

Based on its ongoing concerns and in light of the *ESP III* decision to adopt the PPA Rider construct pending further review of the AEP Ohio's developing PPA Proposal, AEP Ohio filed its Application and later Amended Application in this proceeding. After a robust discovery process, written testimony was filed and an extensive evidentiary hearing was conducted (17 hearing days in September and October of 2015). As the case entered the post-hearing briefing stage, the parties once again took up serious efforts to resolve the case through settlement. After a series of all-party settlement meetings, the majority of parties were able to reach a comprehensive settlement. On December 14, 2015, the Joint Stipulation and Recommendation ("Stipulation") was filed in the docket. (*See Jt. Ex. 1.*) The Stipulation fully resolves the issues

raised in the Amended Application, addresses the related ESP matters and makes other commitments and agreements. As supported in AEP Ohio's Stipulation testimony and as will be further explained through AEP Ohio's briefs, the PPA Proposal (as modified in the Stipulation) is a lawful and reasonable way to address all of these concerns and promote rate stability while fully preserving competition and retail choice.

# B. The *ESP III* decision already approved the PPA Rider construct and made key findings under Ohio law and energy policies.

The Commission approved the PPA Rider in its *ESP III* decision and it should not allow parties to re-litigate issues in this docket. In particular, the *ESP III* decision already found that the PPA Rider is authorized under R.C. 4928.143(B)(2)(d) and promotes Ohio energy policy under R.C. 4928.02. *ESP III*, Opinion and Order at 20-22. Further, the Commission found (at 25) that a reasonable PPA rider proposal could provide for a significant financial hedge that truly stabilizes rates, particularly during period of extreme weather. Moreover, the Commission also found (at 25) that the PPA Rider has the potential to supplement the benefits derived from staggering and laddering of the SSO auctions and to protect customers from price volatility in the wholesale market. AEP Ohio's PPA Proposal is intended to build upon the foundation laid in the *ESP III* decision and fulfill the benefits envisioned in the *ESP III* decision through a particular set of terms and conditions reflected in the new proposed affiliate PPA with AEPGR, as well as the benefits of the pre-existing OVEC PPA.

As part of its *ESP III* decision, the Commission determined that AEP Ohio would be required, in a future filing, to justify the inclusion of the cost impacts of any PPAs in the rider. *ESP III*, Opinion and Order at 25. The Commission also directed AEP Ohio to address in any PPA Rider filing, the following factors of consideration, which the Commission stated it would balance, but not be bound by, in deciding whether to approve AEP Ohio's request:

- 1. The financial need of the generating plant that is the subject of the PPA;
- 2. The necessity of the generation facility subject to the PPA, in light of future reliability concerns, including supply diversity;
- 3. A description of how the generating plant is compliant with all environmental regulations; and
- 4. The impact that a closure of the generating plant would have on electric prices and the resulting effect on economic development within Ohio.

*ESP III*, Opinion and Order at 25. In addition, the Commission also indicated that any PPA Rider proposal by AEP Ohio should incorporate four substantive requirements:

- a. Provide for rigorous Commission oversight of the PPA Rider, including a process for periodic substantive review and audit;
- b. Commit to full information sharing with the Commission and its Staff;
- c. Verification that the PPA Rider's financial risk is allocated between both the Company and its ratepayers; and
- d. Include a severability provision that recognizes that all other provisions of the Company's ESP III will continue, in the event that the PPA Rider is invalidated, in whole or in part at any point, by a court of competent jurisdiction.

ESP III, Opinion and Order at 25-26. Beyond the specific Factors and Requirements addressed by the Commission in the ESP III decision, AEP Ohio submits that the purpose of the PPA Proposal is to stabilize rates for both shopping customers and SSO customers alike – by passing through to customers the differential between PJM market prices and a cost-based contractual price, in this case the cost-based prices of the Affiliated and OVEC PPAs. Consistent with the ESP III decision, the PPA Rider would flow through to customers, on a nonbypassable basis, the net benefit of all revenues accruing to AEP Ohio resulting from the liquidation of its entitlements under each PPA into the PJM market (including energy, capacity, ancillaries, etc.) less all costs associated with each PPA. While the PPA Rider could be either a credit or a charge during a given time period, inclusion of the Affiliate PPA and the OVEC PPA in the PPA Rider would

always provide a measure of rate stability in parallel to, and as a true hedge against, more volatile market prices. Notwithstanding the invitation by opposing intervenors, the Commission should not entertain re-litigation of all the significant legal and policy determinations already made in its *ESP III* decision when evaluating the PPA Proposal as modified and adopted in the Stipulation.

C. The open disagreement by Intervenors with the principles adopted in the *ESP III* decision demonstrates that their perspective conflicts with the Commission's directives and confirms their contrary positions should be rejected.

The ESP III Opinion and Order already concluded (at pages 20-22) that the PPA Rider is permissible under the ESP statute and (at page 26) that the PPA Rider supports Ohio energy policy as reflected in R.C. 4928.02, thus approving the PPA construct and the placeholder rider. During the initial phase of the hearing, intervenors – all of which continue to oppose the PPA Rider as part of the Stipulation – lined up to explain how much they disagree with the Commission's decision. OCC witness Dr. Rose generally disagrees with the Commission's ESP III decision and the factors of consideration set forth in that order. (Tr. X at 2483.) OCC witness Dr. Sioshansi not only disagrees with the Commission's ESP III factors but asserts that they are biased. (Tr. XIII, at 3457.) Exelon witness Campbell disagrees with the Commission's authorization of the nonbypassable PPA rider as part of an ESP. (Tr. XV at 3684.) EDF witness Finnigan also registered his general disagreement with the Commission's ESP III decision and stated that order did not reflect sound policy. (Tr. XII at 3140, 3154.) Dynegy witness Ellis even disagrees with the PPA Rider mechanism approved in the ESP III case and with the four factors for considering a PPA for inclusion in the PPA Rider. (Tr. X at 2575-77.) The Independent Market Monitor, Dr. Bowring, would oppose the PPA even if it were a certainty that it would be a credit to customers. (Tr. XII at 3036.)

Opposing intervenors also openly challenged some of the Commission's other specific and material findings in the *ESP III* decision. For example, in the *ESP III* decision, the Commission also determined (at 21) that "there is no question" that the PPA Rider would offset rate volatility for both SSO customers and shopping customers. Exelon witness Campbell disagreed with that finding and actually contends that the PPA rider would have a destabilizing effect on retail electric rates. (Tr. XV at 3684-85.) Similarly, EDF witness Finnigan asserted without basis that the *ESP III* decision was not appropriate in concluding that "both shopping and SSO customers may benefit from the PPA rider because it would have a stabilizing effect on the price of retail electric service, irrespective of whether customer is served by a CRES provider or the SSO." (Tr. XII at 3140.) OMAEG witness Dr. Hill also disagreed with the *ESP III* decision's statement (at 22) that both shopping and SSO customers may benefit from the PPA Rider because it would have a stabilizing effect on the price of retail electric service, irrespective of whether the customer is served by a CRES provider or the SSO. (Tr. XIII at 3290.)

In addition, Intervenors also have an ongoing disagreement about the Commission finding in the *ESP III* decision (at 25) that a PPA rider proposal, if properly conceived, has the potential to supplement the benefits derived from the staggering and laddering of the SSO auctions, and to protect customers from price volatility in the wholesale market. (*See, e.g.*, Tr. XIII at 3290.) Similarly, the *ESP III* decision (at 25) appropriately found that "there may be value for consumers in a reasonable PPA rider proposal that provides for a significant financial hedge that truly stabilizes rates, particularly during periods of extreme weather." OMAEG witness Hill also disagrees with this finding in the *ESP III* decision, as does EDF witness Finnigan. (Tr. XIII at 3296; Tr. XII at 3141.)

In sum, the opposing intervenors have not attempted to apply the *ESP III* decision fairly or productively in this case. While these positions were staked out in the initial phase of the hearing and generally not revisited in the Stipulation phase of the hearing, it is telling that these same intervenors remain steadfastly opposed to the modified PPA Proposal reflected in the Stipulation. Thus, the input and positions of the opposing intervenors are premised upon a basic disagreement with the Commission on legal and policy matters and are counter-productive; as such, they should not be substantively relied upon or incorporated into the Commission's decision in this case.

D. Populating the PPA Rider as recommended in the Stipulation is a unique and impactful regulatory opportunity for the Commission to simultaneously promote rate stability, help preserve generation resource diversity, protect Ohio's economy and facilitate competition.

Despite the opposing intervenors' reluctance to carry forward the Commission's *ESP III* decision and apply it in a productive fashion that benefits customers and the State of Ohio, the Commission's decision to approve the legal and policy basis for the PPA Rider was a good first step toward activating the rider by populating it with PPAs. Further utilization of the authority for a non-bypassable stability charge under the ESP statute – by adopting the PPA Proposal in this case – presents a unique opportunity for the Commission to leverage important goals of rate stability and economic development in tandem with continuing to facilitate the development of competition in Ohio. But if the Commission declines to adopt the Stipulation and leaves the PPA Rider as an empty placeholder mechanism, it will let that unique opportunity slip away as well and it may not present itself again. Passing up this unique opportunity is akin to sole reliance on the MRO option: it leads down a narrow and inflexible one-way street whose end point subjects Ohio customers to the full volatility and pricing effects of the capacity and energy markets.

When AEP Ohio and other utilities sold or transferred their generators and transitioned to competitive generation rates, the Commission lost much of its ability to regulate generation. The ESP, which the Commission has repeatedly approved for all electric utilities, is a distinct alternative to the MRO. The ESP is only effective if the Commission exercises the regulatory flexibility the ESP statute permits. The PPA Proposal would ensure that reliable coal-based generation remains in Ohio, which can be matched in a portfolio with other generation types such as natural gas or renewables. Although the ESP statute contains other provisions for building new generators – namely, Subsections (B)(2)(b)-(c) – these provisions are problematic and inferior to the PPA option for two main reasons. First, utilities are unlikely to propose projects under Subsections (B)(2)(b)-(c) because those provisions contain so many vague, untested concepts that would cause litigation and delay (e.g., definition of "need" for the facility, scope of competitive sourcing requirement, etc.) Second, generators built under Subsections (B)(2)(b)-(c) must be used to serve load, and unlike the PPA approach, such generation would affect competitive supply. Thus, adoption of the PPA Proposal under the ESP statute authority is superior to other known options. And the PPA Proposal fulfills the essence of an ESP by enabling the Commission to exercise some regulatory control over generation supply and generation rates in Ohio – by enabling a portfolio approach to generation supply while maintaining competition.

Based on the evidence of record (that will be further discussed in detail below), a significant quantitative benefit is expected for customers during the abbreviated PPA term. An equally important benefit of the PPA Rider is that including the net impacts of the Affiliate PPA in the rider will protect Ohio's economy and reduce the likelihood of premature retirements of the relevant AEPGR generating plants due to short-term economic signals. Large base load

generating plants are vital to Ohio's economy, as they employ hundreds of Ohioans and produce millions of dollars of annual economic benefit to the state and local economies; conversely, premature closure of the generating plants would be devastating to the local economies in which they currently operate. While the proposed Affiliate PPA will not avoid closure of units already retired in 2015, it would incorporate a long-term solution for other Ohio coal plants that are on the economic bubble going forward. As a related matter, that proposed Affiliate PPA would help begin to address the current prospects faced by Ohio of being a taker of volatile market prices in the future. It is AEP Ohio's position that the proposed Affiliate PPA will help address those interests in a way that promotes the best interests of the State of Ohio.

Including the Affiliated and OVEC PPAs in the PPA Rider will also promote Ohio competitive markets while maintaining a robust and fully auction-based SSO. First, by providing a "safety net" against more volatile market prices, the PPA Rider helps encourage customers to shop by reducing the volatility pricing disincentive and providing a financial stability benefit. Second, the SSO supply will continue being supplied through the competitive bidding process and the capacity, energy and ancillary services associated with the PPA Units will be liquidated in the PJM market. Thus, the PPA Rider promotes Ohio's energy policy by fostering competitive markets for both shopping and SSO customers. The weather events experienced during recent winters – including most dramatically during the Polar Vortex events in the First Quarter of 2014 – have provided an early warning about serious issues with electric supply, especially as it relates to generation resources in Ohio as compared to electric load in Ohio.

Rejecting the PPA Proposal would leave the dynamic and useful ESP statute as a dead letter (in favor of the MRO option, which has been consistently and deliberately avoided by the

Commission to date) – that would be a mistake that could be costly in the long run to utility customers and the Ohio economy.

#### III. SUMMARY OF THE STIPULATION

The Stipulation fully resolves the issues raised in the Amended Application, addresses related ESP matters, and makes other commitments and agreements. Although the language in the Stipulation governs its content and meaning, the key terms of Stipulation are summarized here for convenience:

In Section III.A of the Stipulation, the Signatory Parties agree that it is prudent for AEP Ohio to sign a Revised Affiliate PPA with a reduced term of approximately eight and a half years (through May 31, 2024) with a reduced 10.38% return on equity ("ROE") that is fixed for the term of the PPA. (Jt. Ex. 1 at 4.) In Subsections III.A.1-2, the Signatory Parties further agree that the net credits or costs of the Revised Affiliate PPA and AEP Ohio's OVEC entitlement should be included in the PPA Rider. (Jt. Ex. 1 at 4-5.) Thus, the term of the PPA and level of recovery under the PPA were significantly reduced through changes voluntarily agreed to by AEP Ohio and AEPGR.

In Section III.A.4, the Stipulation provides that the initial PPA Rider rate will be based upon a \$4 million credit for 2016 (annualized). (*Id.* at 6). Further, as a commitment to exercise its contractual rights in a manner that ensures the PPA Units are managed efficiently, cost effectively, and with maximum market profitability, AEP Ohio agrees in Section III.A.3 to provide customer credits that could total \$100 million during the last four years of the PPA Proposal. (*Id.* at 5-6).

Section III.B of the Stipulation outlines advocacy commitments by AEP Ohio.

Specifically, in Subsections III.B.1-2, AEP Ohio commits to work to improve the PJM markets and advance initiatives that will benefit retail customers in Ohio. These commitments include

advocating for market enhancements, including a longer-term capacity product, and providing the Commission an annual update on the state of the wholesale markets from AEP Ohio's perspective. (*Id.* at 9.)

In Section III.C of the Stipulation, AEP Ohio commits to file, by April 30, 2016, a separate application with the Commission requesting that its current ESP be extended by an additional six years through May 31, 2024 – the term of the Revised Affiliate PPA. (*Id.* at 10.) Section III.C also specifies several provisions of the extended ESP that AEP Ohio agrees to include in its extension application:

- a) A proposal for an extension of riders and tariffs relating to the expanded ESP term, including but not limited to the terms and conditions of the Distribution Investment Rider (DIR). (*Id.* at 10 (Subsection III.C.1).)
- b) Additional funding commitments relating to the expanded ESP term. (*Id.* at 10 (Subsection III.C.2).)
- c) A proposal to extend the competitive bidding process for SSO procurement. (*Id.* at 10 (Subsection III.C.3).)
- d) An analysis and proposal relating to the significantly excessive earning test ("SEET") for the extended ESP term. (*Id.* at 10 (Subsection III.C.4).)
- e) An analysis for the statutory market rate offer comparison test. (*Id.* at 10 (Subsection III.C.5).)
- f) An extension of the IRP tariff and credit for the full expanded ESP as well as an increase in the IRP credit from \$8.21/kW-month to \$9/kW-month starting in June 2018 and extending through the remainder of the ESP term. (*Id.* at 10-11 (Subsection III.C.7).)
- g) An automaker credit to support increased utilization or expansion of automaker facilities in AEP Ohio's service territory. (*Id.* at 11 (Subsection III.C.8).)
- h) A pilot mechanism allowing GS-3 and GS-4 customers with interval metering capability to opt in to a transmission tariff rate based upon each eligible customer's single annual transmission coincident peak demand. (*Id.* at 11 (Subsection III.C.9.)
- i) A pilot program that establishes a bypassable Competition Incentive Rider (CIR) as an addition to the SSO shopping rate above the auction price with the purpose of incenting shopping and recognizing that there may be costs associated with providing retail electric

service that are not reflected in SSO bypassable rates. (*Id.* at 12-13 (Subsection III.C.12).)

The Signatory Parties agree to advocate for approval of items (f) through (i) above. Moreover, in addition to proposing the nine items above, AEP Ohio agrees not to propose any changes relating to the current ESP term (through May 2018) for the riders and tariffs approved in the *ESP III* decision. (*Id.* at 13 (Subsection III.C.13.) And for both the current and extended ESP term, AEP Ohio agrees not to renew proposals for riders or tariffs that were rejected in the *ESP III* decision. (*Id.*)

Section III.D of the Stipulation details commitments that AEP Ohio is making as part of the overall Stipulation package. These commitments are contingent on approval of the Stipulation and cost recovery, as appropriate:

- a) AEP Ohio will make a shareholder-funded donation of \$500,000 to a research and development program for clean energy technology at an Ohio public higher educational institution. (*Id.* at 13 (Subsection III.D.1).)
- b) AEP Ohio will work with its partner the Ohio Hospital Association ("OHA") on an annual energy efficiency program targeted at hospital facilities in AEP Ohio's territory. This work will be conducted in a manner that is consistent with AEP Ohio's existing EE/PDR plan. AEP Ohio also commits to update alternate feed service rates for OHA members to a uniform \$2.50/kW-month. (*Id.* at 13-15 (Subsection III.D.2).)
- c) In 2016, OPAE will receive \$200,000 to provide direct assistance with the approved Community Assistance Program ("CAP") within the Company's EE/PDR Plan. (*Id.* at 15-16 (Subsection III.D.3).)
- d) For 2017, OPAE will manage and administer the CAP within AEP Ohio's EE/PDR Plan. (*Id.* at 16, Subsection III.D.3.).)
- e) Fifty percent of EE/PDR Rider costs for transmission and sub-transmission voltage customers will be transferred to the EDR Rider through May 31, 2024. (*Id.* at 16, Subsection III.D.4).)
- f) Fifty percent of IRP credits from the EE/PDR Rider will be transferred to the EDR Rider through May 31, 2024. (*Id.* at 16 (Subsection III.D.5).)

- g) AEP will maintain a nexus of operations (including employees) in Ohio related to operation and support for the PPA Units and intends to maintain its corporate headquarters in Ohio for the duration of the PPA Rider. (*Id.* at 16 (Subsection III.D.6).)
- h) AEP Ohio commits to work with Staff and Signatory Parties on a two-year Pilot Supplier Consolidated Billing Program for any CRES provider that is a Signatory Party. (*Id.* at 16-19 (Subsection III.D.7).)
- i) AEP Ohio will file a proposal in the Commission's market development investigatory docket (Case No. 12-3151-EL-COI) proposing a pilot program to establish an EDU vendor call transfer and enrollment process. (*Id.* at 19 (Subsection III.D.8).)
- j) AEP Ohio will convert Conesville Units 5 and 6 to natural gas co-firing by December 31, 2017, subject to cost recovery and regulatory approvals. (*Id.* at 19-20 (Subsection III.D.9).)
- k) Conesville Units 5 and 6 will retire, refuel, or repower to 100% natural gas by December 31, 2029, subject to potential extension under a reliability must run arrangement. (*Id.* at 20 (Subsection III.D.9).)
- l) Cardinal Unit 1 will retire, refuel, or repower to 100% natural gas by December 31, 2030, subject to potential extension under a reliability must run arrangement. (*Id.* at 10 (Subsection III.D.10).)
- m) AEP Ohio and its affiliates will provide information in a Commission docket with the purpose of identifying and timely removing barriers to retiring, refueling, or repowering Conesville Units 5 and 6 by December 31, 2029 and Cardinal Unit 1 by December 31, 2030. (*Id.*at 21-23 (Subsection III.D.11).)
- n) AEP Ohio and its affiliates will provide information in a Commission docket with the purpose of identifying and timely removing barriers to retiring, refueling, or repowering the co-owned Units (Conesville Unit 4, Zimmer Unit 1, Stuart Units 1-4, and the OVEC Units). (*Id.* at 23-26 (Subsection III.D.12).)
- o) In Case No. 13-1939-EL-RDR, AEP Ohio will propose through settlement efforts to deploy 160 circuits of Volt/VAR Optimization and to include a future proposal to deploy all cost effective Volt/VAR technology. (*Id.*at 26-27 (Subsection III.D.13).)
- p) AEP Ohio will form a working group to discuss a pilot program to include EE projects in future SSO auctions. (*Id.* at 27-28 (Subsection III.D.14).)
- q) AEP Ohio will develop and submit for Commission approval a 2017-2019 EE/PDR plan to achieve an energy savings goal of 1.33% annually and a demand reduction goal of 0.75% annually. (*Id.* at 28 (Subsection III.D.15).)

Furthermore, in Section III.E of the Stipulation, AEP Ohio commits to file a carbon reduction plan by December 31, 2016. (*Id.* at 28-29.) This plan will indicate how AEP Ohio and

its affiliates intend to promote fuel diversification and carbon emission reductions. (*Id.*)

Likewise, in Section III.F of the Stipulation, AEP Ohio commits to implement programs to promote fuel diversity and carbon emission reductions to address potential future environmental regulations. (*Id.* at 29.) This includes a commitment to conduct an analysis of the economic impact of any proposals for the Commission's consideration. (*Id.*)

In Section III.G of the Stipulation, AEP Ohio commits to explore avenues to empower customers through grid modernization initiatives that promote customer choice in Ohio. (*Id.* at 29-30.) To that end, AEP Ohio will file a grid modernization business plan by June 1, 2016 that highlights future grid modernization initiatives, including but not limited to (i) installing advanced metering infrastructure, (ii) investing in distribution automation circuit reconfiguration, (iii) pursuing Volt/VAR optimization, (iv) removing obstacles to distributed generation, and (v) net metering tariffs. (*Id.*) In Section III.H of the Stipulation, AEP Ohio commits to include battery resources in future filings as an element of the provision of distribution service. (*Id.* at 30.)

In Section III.I of the Stipulation, AEP Ohio commits to develop 500 MW of wind energy projects and 400 MW of solar energy projects in Ohio, subject to Commission approval and full cost recovery. (*Id.* at 30-32.) The projects will be proposed over the next five years with the goal of completing the projects by 2021. (*Id.*) The rate design for recovery of any net costs or credits associated with the projects will be a uniform per kWh charge for all monthly consumption up to 833,000 kWh per customer account over the life of the projects. (*Id.* at 32 (Subsection III.I.3).)

Finally, Section III.J of the Stipulation sets forth the Signatory Parties' agreement on the conditions under which the ESP may be transitioned or terminated. (*Id.* at 32-33.) Specifically,

Section III.J provides that termination of the ESP will not affect continued cost recovery under the PPA Rider or the Distribution Investment Rider. Consistent with R.C. 4928.143, this provision will ensure an orderly transition should the long-term SEET test trigger termination of the ESP.

#### IV. STANDARD OF REVIEW

A. The Commission should apply its well-established three-part test for contested stipulations.

Rule 4901-1-30, O.A.C., authorizes parties to Commission proceedings to enter into stipulations. Although stipulations are not binding on the Commission, their terms are accorded substantial weight. *See Office of Consumers' Counsel v. Pub. Utils. Comm'n of Ohio*, 64 Ohio St. 3d 123, 125 (1992) ("Consumers' Counsel") (citing City of Akron v. Pub. Utils. Comm'n of Ohio, 55 Ohio St. 2d 155, 157 (1978)). That is especially true where, as here, the stipulation is supported or unopposed by the majority of parties in a proceeding. *See In re Application of Columbus S. Power Co.*, Case No. 09-1089-EL-POR, Opinion and Order at 20 (May 13, 2010). While the Commission may place substantial weight on the terms of a stipulation, it must determine from the evidence what is just and reasonable. *In re Application of Columbus S. Power Co.*, 129 Ohio St. 3d 46, 2011-Ohio-2383, ¶ 19.

In evaluating a contested settlement, the Commission applies a well-established threepart test:

- (a) Is the settlement a product of serious bargaining among capable, knowledgeable parties?
- (b) Does the settlement, as a package, benefit ratepayers and the public interest?
- (c) Does the settlement package violate any important regulatory principle or practice?

In re Columbus S. Power Co., Case No. 09-1089-EL-POR, Opinion and Order at 21 (May 13, 2010) ("In re Columbus S. Power Co.") (citing numerous cases in support of this standard). The Ohio Supreme Court has repeatedly approved this three-part test. See, e.g., Indus. Energy Consumers of Ohio Power Co. v. Pub. Utils. Comm'n of Ohio, 68 Ohio St. 3d 559, 561 (1994) (citing Consumers' Counsel, 64 Ohio St. 3d at 126).

Two additional legal standards are also pertinent here. First, as referenced above, the Commission's *ESP III* decision adopted specific factors for evaluating AEP Ohio's PPA Proposal. AEP Ohio discusses these factors below as part of the second prong of the three-part. *See infra* Part VI.A. Second, because the Stipulation implicates the PPA Rider adopted in the *ESP III* decision, the Commission should determinate that the Stipulation accords with the MRO test, which requires that an ESP be more favorable in the aggregate as compared to the expected results under a market rate offer. *See* R.C. 4928.143(C)(1). AEP Ohio also addresses the MRO test as part of the second prong of the three-part test. *See infra* Part VI.C.

# B. Intervenors' attempts to add their own elements to the three-part test should be rejected.

Some Intervenor witnesses have attempted to add their own elements to the Commission's three-part test, but these efforts should be rejected. For example, OCC witness Haugh argues that the first prong of the test requires a "diversity of interests" – including a representative of residential customers – "among the signatory parties." (OCC Ex. 33 at 3, 7; Tr. XXI at 5418.) But that is not – and never has been – the first prong of the test. The first prong focuses on the *negotiating* parties, not the ultimate *signatory* parties. As the Commission has explained, the first prong "evaluates the *level of negotiations* that appear to have occurred, and takes notice of the experience and sophistication of the *negotiating parties*." *In re Complaint of Dominion Retail v. Dayton Power & Light Co.*, Case Nos. 03-2405-EL-CSS et al., Opinion and

Order at 18 (Feb. 2, 2005) ("*Dominion Order*") (emphasis added).<sup>5</sup> So long as there were serious negotiations among capable parties, the first prong of the test is satisfied, no matter the make-up of those who actually sign.

Indeed, the Commission has repeatedly rejected OCC's attempts to obtain veto power over settlements. The Commission has made clear: "The Commission will not require OCC's approval of stipulations." *Dominion Order* at 18; *see also In re Vectren Energy Delivery of Ohio, Inc.*, Case No. 13-1571-GA-ALT, Opinion and Order at 10 (Feb. 19, 2014); *In re FirstEnergy*, Case No. 12-1230-EL-SSO, Opinion and Order at 26 (July 18, 2012); *In re FirstEnergy*, Case No. 12-1230-EL-SSO, Entry on Rehearing at 7-8 (Mar. 23, 2005). In fact, the first case that adopted the three-part test approved a stipulation that OCC opposed, and this was upheld by the Supreme Court. *See Consumers' Counsel*, 64 Ohio St. 3d at 126.

OCC witness Haugh also attempts to modify the second prong of the three-part test by arguing that the Stipulation should not be considered as a package because some Signatory Parties, in footnotes, declined to support targeted Stipulation sentences. But OCC's argument is the apex of hypocrisy because Mr. Haugh admitted on cross-examination that OCC has entered into settlements that have included such footnotes. (Tr. XXI at 5435.) In any event, Mr. Haugh openly admitted that his true position is that the three-part test "isn't the proper way to fully evaluate this stipulation." (Tr. XXI at 5434.) Volumes of case law from this Commission and the Supreme Court disagree. This Commission should apply the same test in this case that it has applied countless times before. <sup>6</sup>

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<sup>&</sup>lt;sup>5</sup> Available at 2005 WL 389146 at \*13.

<sup>&</sup>lt;sup>6</sup> OCC's other witness proffered to address the three-part test, Dr. Dormady, testified that he does not know the components of the three-part test adopted by the Commission; has no background or history on the test; and is unsure whether the "diversity of interests" language is part of the test. (Tr. XXII at 5626, 5632.)

In addition, OCC witness Haugh, OMAEG witness Hill, and ELPC witness Robago implicitly request that the Commission adopt a fourth prong to the three-part test that would require Stipulations to be narrow and focused on a single topic only. Dr. Hill, for example, criticizes the Stipulation as a "redistributive coalition" in which terms unrelated to the PPA Proposal were improperly included to garner a "facade of broad-based support." (OMAEG Ex. 29 at 25.) Likewise, ELPC witness Rabago criticizes the Stipulation's resolution of "non-core commitments" that should, in his view, have been taken up in separate dockets. (ELPC Ex. 19 at 3-6.) And OCC witness Haugh finds it "concerning" that AEP Ohio made commitments to Signatory Parties and not to other parties that did not join the settlement. (OCC Ex. 33 at 5.) But these arguments do not relate to any prong of the three-part test. Instead, they implicitly request that the Commission adopt a fourth prong that would prohibit "non-core commitments" (to use Mr. Robago's term).

This attempt to alter the three-part test to prohibit broad, multi-topic settlements would be highly disruptive and damaging to current Commission practice and is diametrically opposed to the elements of the existing test that *encourage* broad-based settlements. The first prong of the test expressly requires that the parties engage in "serious bargaining," and "bargaining" necessarily involves parties pursuing their own interests to obtain commitments that they support. This is not problematic, but rather what the Commission "*expects*," as it has made clear:

[T]he Commission notes that many signatory parties receive benefits under the Stipulation, but the Commission will not conclude that these benefits are the sole motivation of any party in supporting the Stipulation . . . . The Commission expects that parties to a stipulation will bargain in support of their own interests in deciding whether to support that stipulation."

In re Application of Ohio Edison Co., Case No. 12-1230-EL-SSO, Opinion and Order at 27 (July 18, 2012) ("FirstEnergy ESP III"). Moreover, the second prong of the three-part test encourages

Stipulations that benefit rate payers and the public interest "as a package." In so doing, the Commission's test recognizes that settlements that resolve a variety of pending disputes "as a package" often provide more benefits to ratepayers than a multitude of individual settlements in multiple proceedings. Indeed, if the Commission were to adopt the misguided proposals of witnesses Haugh, Hill, and Robago, parties that appear before the Commission – as well as the Commission's Staff – would be inhibited in their ability to settle pending disputes. That would deny parties an indispensable tool for resolving Commission matters expeditiously, and increase the time and resources that the Commission and its Staff expend in deciding numerous, disputed matters in separate dockets.

The Commission has never before discouraged broad settlements involving multiple matters, and it should not do so here. Insofar as the Commission believes that any particular element of a stipulation is objectionable, the existing three-part test already gives the Commission the tools to evaluate whether a stipulation element benefits ratepayers or violates any regulatory principle. The three-part test has served the Commission well for decades; it should not be altered in this proceeding.

### V. THE STIPULATION IS THE PRODUCT OF SERIOUS BARGAINING AMONG CAPABLE, KNOWLEDGEABLE PARTIES

#### A. The Stipulation satisfies the first prong of the three-part test.

The first prong of the three-part tests asks whether a settlement is "a product of serious bargaining among capable, knowledgeable parties." *In re Columbus S. Power Co.*, Opinion and Order at 21. The Stipulation here easily satisfies that standard.

The Stipulation is the result of a lengthy negotiation involving experienced representatives of many stakeholder groups. The negotiating parties included a variety of diverse interests, including industrial, commercial and residential customers; generation suppliers; CRES

providers; environmental groups; and Staff. (AEP Ohio Ex. 52 at 2, 11; Joint Ex. 1 at 1, 38-39.) All negotiating parties were capable and knowledgeable and were represented by experienced counsel; nearly all parties were frequent participants in Commission proceedings. (AEP Ohio Ex. 52 at 11; Joint Ex. 1 at 1.)

The negotiation process was long and involved numerous meetings and discussions with all negotiating parties. The Parties began negotiations prior to the evidentiary hearing and then continued the process after hearing. The final version of the Stipulation is the product of an intense three-week negotiation period that culminated in the filing of the Stipulation on December 14, 2015. (AEP Ohio Ex. 52 at 11.) Throughout that process, all parties were represented and their views were seriously considered.

The seriousness of the bargaining process was confirmed even by those parties who eventually did not sign. For example, OCC witness Haugh admitted during cross-examination that there were numerous meetings among the parties to discuss settlement. (Tr. XXII at 5419.) He acknowledged that he was personally involved in the settlement discussions (*id.*), and that there were numerous settlement drafts circulated, including a redline version provided by OCC for AEP Ohio to review (*id.* at 5423).

Moreover, all parties to the case, including the signatory parties, were well versed on the issues at stake. All signatory and non-signatory parties participated in the initial phase of the proceeding, which involved voluminous discovery (AEP Ohio responded to over 1,100 data requests with over 70 supplements) and a multi-week hearing that included the testimony of eleven AEP Ohio witnesses, twenty-five Intervenor witnesses, and a Staff witness. (AEP Ohio Ex. 52 at 11.)

Under the first prong of the test, therefore, the Stipulation is the product of serious bargaining among capable, knowledgeable parties.

## B. The Stipulation would satisfy the first prong of the three-part test even under OCC's erroneous "diversity of interests" standard.

As discussed above, OCC claims that the first prong of the three-part test requires a "diversity of interests among signatory parties." (*See* OCC Ex. 33 at 3.) But that is not now – nor has it ever been – an element of the first prong of the three-part test. *See supra* Part IV.B. Nonetheless, even if a "diversity of interest" were required (it is not), the Stipulation here would easily fulfill that criterion.

Among the parties that have signed (or agreed not to oppose) the Stipulation, there are representatives from every customer group and interest, including a representative from every group that participated in the negotiations. This includes representatives from industrial customers (OEG, IEU), commercial customers (OHA), and residential customers (OPAE, as well as Staff, as discussed below). It includes generators (Buckeye Power, MAEREC) and major CRES providers (IGS, Direct Energy). It also includes one of the most vocal and well-funded environmental advocates in both Ohio and across the nation (Sierra Club). And, most importantly, the Stipulation is fully supported by Staff. (*See* Jt. Ex. 1 at 38-39; AEP Ohio Ex. 52 at 2.) This is unquestionably a "diversity of interests."

OCC claims that the Stipulation lacks representation from advocates for residential customers. But that is simply false. As an initial matter, OPAE is a vociferous advocate for residential customers – and a frequent participant in Commission rate proceedings – as the Commission has recognized. *See FirstEnergy ESP III*, Opinion and Order at 26 (July 18, 2012) ("OPAE advocates on behalf of low and moderate-income customers."). OCC may wish that it had a monopoly on residential advocacy, but it does not. Thus, OPAE's support of the

Stipulation as a Signatory Party represents residential interests. Importantly, moreover, the Commission's Staff carefully considers impacts of rate proposals on residential customers, and Staff has expressed complete support for the Stipulation. This was admitted by OCC witness Haugh, who testified that "staff does consider the residential class" in performing its role. (Tr. XXI at 5430.)

In sum, the Stipulation includes multiple parties that advocate for residential customers – as well as a broad coalition of other customer groups and interests – and even if the "diversity of interests" were the standard (it is not), that standard would be satisfied here.

## VI. THE STIPULATION, AS A PACKAGE, BENEFITS RATEPAYERS AND THE PUBLIC INTEREST

The second prong of the three-part test asks whether the "settlement, as a package, benefit[s] ratepayers and the public interest." *In re Columbus S. Power Co.*, Opinion and Order at 21. As discussed below, the Stipulation easily fulfills that standard. As an initial matter, AEP Ohio's PPA Proposal, as modified by the Stipulation, satisfies each of the factors and requirements articulated in the *ESP III* decision. And the remaining aspects of the Stipulation, "as a package" with the PPA Proposal, provide numerous benefits to ratepayers and the public interest.

### A. The four *ESP III* factors support AEP Ohio's PPA Proposal.

As noted above, the *ESP III* decision established four factors for the Commission to consider when evaluating a proposal to include a PPA in AEP Ohio's PPA Rider:

- 1. The financial need of the generating plant that is the subject of the PPA;
- 2. The necessity of the generation facility subject to the PPA, in light of future reliability concerns, including supply diversity;
- 3. A description of how the generating plant is compliant with all environmental regulations; and

4. The impact that a closure of the generating plant would have on electric prices and the resulting effect on economic development within Ohio.

*ESP III*, Opinion and Order at 25. All four of those factors support AEP Ohio's PPA Proposal as modified by the Stipulation.

#### 1. Factor One: Financial need of the generating plant.

On the first *ESP III* factor – "financial need of the generating plant," – AEP Ohio's forecasts show that the PPA Units, including both the Affiliate PPA and OVEC Units, have a financial need, at least in the near term. AEP Ohio witness Pearce explained in Table III of his Direct Testimony that near-term PJM capacity market revenues are far below the fixed costs of the plants. (AEP Ohio Ex. 3 at 31.) Although the AEP Ohio's forecasts indicate that this hurdle can be overcome, particularly over the longer term if sufficient capacity revenues can be obtained for these generating units from the PJM Capacity Performance auctions, this large gap between fixed capacity costs and PJM capacity revenues provides a clear indication of the uncertainty that drives the financial need of the PPA Units in the near term. (AEP Ohio Ex. 3 at 31, tbl. III.)

AEP Ohio witness Allen's Direct Testimony in support of the Stipulation incorporates the results of PJM's recent Capacity Performance auctions (for the 2016/17, 2017/18, and 2018/19 delivery years) into the forecasted PPA Rider impacts. (*See* AEP Ohio Ex. 52, Ex. WAA-2<sup>7</sup>; Tr. XVIII at 4569.) However, while the results of these auctions do provide some capacity revenue uplift for the PPA Rider units, they do not alter the central point of AEP Ohio witness Dr. Pearce's Table III: near-term PJM capacity market revenues remain far below the fixed costs of the Affiliated PPA and OVEC generating units. <sup>8</sup> The bottom line is that, even with Capacity

<sup>&</sup>lt;sup>7</sup> Attachment WAA-2 is a modified version of AEP Ohio Exhibit 3, Attachment KDP-2.

<sup>&</sup>lt;sup>8</sup> Compare, for example, the Fixed Capacity Costs for 2016 and 2017 (approximately \$500/MW-day), *see* AEP Ohio Ex. 3 at 31, tbl. III, ln. 1; with the Capacity Performance revenues provided for qualifying

Performance revenue uplift, those generating units continue to have a significant financial need, at least in the near term.

AEP Ohio witness Vegas also pointed out that the possibility that demand response resources will continue to qualify for participation in PJM's capacity auctions – a possibility that was confirmed by the U.S. Supreme Court's recent ruling. *See FERC v. Elec. Power Supply Ass'n*, No. 14-840 (Slip. Op. Jan. 25, 2016). This could create additional uncertainty regarding the capacity pricing outcomes of PJM's future annual capacity auctions, which underscores the financial need of the PPA Rider generating units for the predictable revenue provided by the PPAs. (AEP Ohio Ex. 1 at 17.)

AEP Ohio witness Vegas reinforced that the PPA units are now on the economic "bubble," where low short-term capacity and energy market prices have increased the risk of premature retirement. Mr. Vegas explained that clearing prices in the PJM capacity market are expected to increase significantly in the future as a result of the upcoming retirement of several thousand megawatts of coal-fired units in 2015, the Mercury and Air Toxics Standards regulations, and PJM's introduction of the Capacity Performance Resource. However, although AEP Ohio is confident that the coal-fired PPA units will qualify for PJM's Capacity Performance category, this improvement to PJM's capacity market provides no guarantee that the result will be sufficient to make the PPA units economically viable without the PPAs and approval of the PPA Rider. (*Id.* at 17.)

Mr. Vegas testified that the predictable revenues that the Affiliate PPA and the OVEC PPA would provide will help address these uncertainties going forward, increasing the probability that these generating units will remain operating through their useful lives while at

generating units for the 2015/16, 2016/17 and 20117/18 Delivery Years (an approximate range of \$50 to \$150/MW-day), see OCC Ex. 19.

the same time providing more stable rates for consumers. Mr. Vegas also pointed out that any additional revenues above the costs to operate the PPA Units that result from changes in PJM's capacity market would flow to customers through the PPA Rider. *Id*.

AEP Ohio witness Thomas specifically addressed the financial need of the Affiliate PPA Units owned by AEPGR. Mr. Thomas explained that if the PPA Units are not able to justify a level of capital investment and operation and maintenance ("O&M") expenditure that is commensurate with what AEP Ohio witness Pearce included in his analysis, it is more likely that they will be retired. Mr. Thomas emphasized that, while there is no bright line of costs above which the plants will continue to operate and below which they will retire, without the long-term stability provided by the Affiliate PPA, the ability to make long-term investment decisions will be hindered. (AEP Ohio Ex. 9 at 13.) Mr. Thomas stated that the Affiliate PPA costs that Dr. Pearce included in his analysis (and which are also included in Mr. Allen's updated analysis supporting the Revised Affiliate PPA and the Stipulation) represent prudent and reasonable investments and expenses that are required to continue operating the Affiliate PPA Units in a safe and reliable fashion over the years covered by that analysis. In the absence of an Affiliate PPA, Mr. Thomas testified, it is possible that lower market revenues would require AEPGR to re-prioritize work, which would lead to decreased levels of investment in those generating units. (Id. at 14.) Simply put, he said, "current market conditions do not warrant the level of investment in these generating units needed to keep the units running reliably and safely until their planned retirement dates." (*Id.*)

Thus, the PPA Units' financial need for the revenue support that the PPA Proposal would provide, particularly in the critically important near term, is clear. The level of revenue support necessary to maintain the financial viability of those generation units during both the short term

and the long term also is clear. As Mr. Thomas confirmed, specifically in regard to the Affiliate PPA Units, but equally applicable to the OVEC PPA Units, the forecasted fixed costs and O&M expenses included in Dr. Pearce's analysis (and included in Mr. Allen's analysis) provide a reasonable estimate of the amount of revenues necessary to maintain the financial viability of the PPA Units over the short and long term. (*Id.* at 14-15.)

For the most part, there was little to no criticism of AEP Ohio's forecast of capital investment and O&M costs for the PPA Units. The one exception has been the contention that the proposed return on equity ("ROE") component of the Affiliate PPA is excessive. In AEP Ohio's Amended Application, AEP Ohio and AEPGR originally proposed using a 50% debt and 50% equity capital structure and a formula ROE, initially set at 11.24%, to recover the capital costs of the Affiliate PPA units. Under this original proposal, the formula ROE would be updated annually, using the average of daily Moody's Ba Corporate Bond Index ("Moody's Index") prices for the month of December of the preceding year plus 650 basis points, subject to a floor of 8.9% and a ceiling of 15.90%. AEP Ohio witness Hawkins thoroughly explained and supported the appropriateness of all aspects of that original cost-of-capital proposal. (AEP Ohio Ex. 8.)

In Section III.A.1 of the Stipulation, however, the Signatory Parties agreed that it would be prudent for AEP Ohio to sign a Revised Affiliate PPA with a reduced term of approximately eight and a half years (through May 31, 2024) and with a reduced ROE of 10.38% that is fixed for the term of the PPA Rider. (Jt. Ex. 1 at 4; Jt. Ex. 1, Att. A, Items 1 & 2; AEP Ohio Ex. 52 at 3.) AEP Ohio witness Allen estimated that the reduced ROE will produce savings for customers of \$86 million (AEP Ohio Ex. 52 at 14), compared to the original proposal. Ms. Hawkins' testimony demonstrated that the original cost-of-capital proposal, including the 11.24% ROE,

was reasonable. (AEP Ohio Ex. 8.) The reduced ROE level that the Stipulation provides, which will include a lower ROE value in the Revised Affiliate PPA, is even more reasonable from customers' perspective

As noted above, certain Intervenors who opposed the Amended Application and who now also oppose the Stipulation criticized the original 11.24% ROE proposal as excessive and, presumably, will continue to assert that the Stipulation ROE of 10.38% is also excessive. Thus, OCC witness Duann has recommended that no ROE should be included in the formula rate provisions of the Affiliate PPA, or, if the Commission approves the PPA Rider, that the ROE for the Affiliate PPA should be no higher than AEPGR's average cost of debt (including both long-term and short-term debt) during the three-month period preceding the filing of the PPA Rider. (OCC Ex. 8 at 6-7.) Wal-Mart witness Chriss contends that the ROE for the Affiliate PPA should be set at a level similar to ROEs established for vertically integrated utilities. (Wal-Mart Ex. 1 at 4.)

These criticisms are without merit. Dr. Duann's recommendations that there should be no ROE included in the Affiliate PPA – or, if an ROE is included, it should be no higher than AEPGR's average cost of long- and short-term debt – are simply not credible. First, equity capital has a non-zero cost, so treating it as if it is cost-free is nonsensical. Second, treating a firm's equity capital as if it has a cost no greater than the firm's average cost of short and long-term debt, while marginally less extreme than treating it as if it has no cost, is still irrational. Equity capital, which receives compensation only after all other claims against the firm, including those of debt holders, are paid, faces substantially greater risk than debt and, therefore, has a substantially higher cost. Finally, Mr. Chriss's recommendation that the ROE for the Affiliate PPA be set at a level similar to that of vertically integrated utilities also is flawed.

AEPGR is not a vertically integrated utility. It is a generation-only IPP. Consequently, Mr. Chriss's approach is one that relies upon a peer group whose risks are fundamentally different than AEPGR's risks.

The financial need of the PPA units for the revenue support that the PPA Rider would provide, particularly in the critically important near term, is clear. Based on the modest rate reflected in the Stipulation version of the PPA, the revenue stability that the Revised Affiliate PPA and the PPA Rider are designed to provide is sufficient to meet, but not exceed, that financial need.

# 2. Factor Two: Necessity of the generating facility, in light of future reliability concerns, including supply diversity.

The second *ESP III* factor focuses on the "necessity of the generation facility, in light of future reliability concerns, including supply diversity." *ESP III*, Opinion and Order at 25. Here, AEP Ohio has demonstrated that the PPA Units will play a vital ongoing role in promoting reliability and fuel diversity in this State.

AEP Ohio's testifying witnesses are uniform in their conclusions regarding energy market volatility and the potential resulting over-reliance on natural gas facility generation that will undoubtedly be associated with the potential closure of the Affiliate PPA coal-fired generation facilities. As Mr. Vegas testified, beyond stabilizing retail rates for AEP Ohio customers and promoting economic development in Ohio, the PPA Proposal is intended to ensure diversified electricity supply in the region. (AEP Ohio Ex. 1 at 13.) Retiring coal-fired units will only increase market volatility, as these units are either being replaced by gas-fired units or are potentially not being replaced at all. This increase on the market's overall reliance of natural gas, thereby reducing the region's energy reserve margin, is potentially detrimental to AEP Ohio's customers. (*Id.* at 8.)

Fuel source diversification is a critical component of ensuring reliable generation supply and delivery. Over-reliance on one source of fuel, such as natural gas, as opposed to a diversified fuel source portfolio presents risks that can, and should, be avoided. As AEP Ohio witness Robert Bradish (Vice President – Grid Development for American Electric Power Service Corporation or "AEPSC") testified, the coal-fired PPA Units store a substantial amount of fuel on-site, as opposed to gas-fired units, which cannot store fuel on-site. (AEP Ex. 7 at 3.) On-site storage assists in maintaining reliability during adverse weather conditions. *Id.* One need only to look to the recent Polar Vortex of January 2014 and the similar frigid temperatures of early 2015 to understand the very real threat of extreme adverse weather conditions.

As AEP Ohio witness Karl Bletzacher (Director Fundamental Analysis for AEPSC) testified, the colder the weather is, the greater the natural gas consumption will be. (AEP Ex. 6 at 6.) And, a more prolonged the cold weather snap will necessarily lower the natural gas storage inventory levels. (*Id.* at 7.) Gas costs became particularly volatile during the Polar Vortex when gas-fired electric generators did not secure firm transportation rights and underutilized pipeline space was not available for use during winter peak. Because coal and natural gas prices are not positively correlated, and natural gas prices are more volatile than coal, any coal-to-gas generation switching would certainly result in more volatile energy prices. (*Id.*)

Coal is, and should remain, a critical component of fuel diversification efforts. The Commission itself has supported and advocated for greater fuel source diversity. Specifically, on May 15, 2014, the Commission filed comments with FERC concerning that year's technical conference on winter operations. The Commission stated, in part:

[W]ith upcoming requirements that will take effect next spring, fuel diversity is of great importance to the Ohio Commission and should remain the top operative for FERC as it considers the events from this past winter [Polar Vortex].

(Federal Energy Regulatory Commission, Docket No. AD14-8-000, Comments Submitted on Behalf of the Public Utilities Commission of Ohio (May 15, 2014) at 2.) Significantly, the Commission's same set of comments also recognized that "[b]ased on performance during winter events, no one fuel resource can sufficiently meet demand on its own during extreme weather events." (*Id.* at 7.)

Moreover, AEP Ohio witness Steven Fetter, former Chairman of the Michigan Public Service Commission, testified that it is far better to have a portfolio of different supply choices, using various types of fuels, spanning from long-term in-ground cost-based generation commitments to market-based alternatives. (AEP Ohio Ex. 3 at 6-7.) Further, as AEP Ohio witness Allen testified, AEP Ohio has committed in the Stipulation to converting two of its coal-fired units, Conesville Units 5 and 6, to coal and gas co-fired facilities by December 31, 2017, subject to cost recovery approval. (Jt. Ex. 1 at 19 (Stipulation Subsection III.D.9.a); AEP Ohio Ex. 52 at 7.)<sup>9</sup> The import of these commitments is that AEP Ohio recognizes the current need to fuel diversity in today's energy climate. These coal and gas co-fired plants give the relevant PPA Units the ability to utilize coal or gas as the primary fuel source, thereby allowing the Unit operator to evaluate and maximize the most economic and efficient option available at any given time for its ratepayers. Further, should natural gas availability be compromised for some reason, these Units can still be powered by the on-site coal reserves.

This can be likened to options provided to someone who purchases a dual fuel source electric automobile, such as the Chevrolet Volt automobile. The Volt's engine can run on both battery-stored electricity and reserves from its gas tank powering its combustion engine. Battery

<sup>&</sup>lt;sup>9</sup> AEP has also committed to retiring, refueling, or repowering some of its wholly owned coal-fired units to natural gas by December 31, 2030, and has committed to working with the co-owners of its jointly owned coal-fired plants to retire, refuel, or repower those jointly owned units to natural gas in reasonable period of time. (Jt. Ex. 1 at 19-26 (Sections III.D.9-12).)

charging stations, away from one's residence, can sometimes be difficult to locate. In the event there are no charging stations available, the Volt can easily switch to its gasoline reserves to power the car until a charging location is reached. There is always a dependable and economic source of power available and the owner has the assurance that the Volt will operate safely and reliably. At their essence, that is how the versatility of these co-fired units can and should be viewed.

Transmission system upgrade costs are another critical factor which must be evaluated. As AEP witness Bradish testified, to mitigate the impacts of the facility retirements, AEP would need to modify and upgrade its transmission system in Ohio and surrounding states. (AEP Ex. 7 at 8.) AEP Ohio evaluated and modeled several upgrades that would mitigate reliability issues, including, among other things, a new 765 kV line and several 765 kV and 345 kV substations, resulting in a total estimated cost on \$1.6 billion for these minimum upgrades. (*Id.* at 8-9.) This cost estimate does not even include any upgrades to neighboring utilities' transmission systems. Because \$850 million of the targeted upgrades are at voltages of 345 kV and below, those costs would be borne directly by customers in the AEP zone. (*Id.* at 9.) And while fifty percent of the remaining \$750 million in targeted upgrades related to voltages of 765 kV may be shared with PJM members, this still represents a huge direct cost to AEP Ohio ratepayers. Keeping the Affiliate PPA Units in service alleviates the need for these immediate and expensive upgrades.

Finally, beyond fuel diversification and costly transmission system upgrade considerations, construction of new (predominantly gas-fired) generation facilities presents its own unique set of problems, uncertainties and challenges. As Mr. Vegas testified, since 2012, electric generators have announced the retirement of over 5,900 MW of generation by mid-2015. (AEP Ohio Ex. 1 at 19.) While that loss of generated energy is a certainty, there is much less

certainty related to the construction and operation of new generation units in Ohio. As AEP Ohio witness Eric Wittine (Manager–Regulatory Research and Issues Analysis for AEPSC) testified, building a new power plant is a long and complicated process, rife with potential delays and complications. (AEP Ex. 11 at 4.) For example, PJM recently produced an analysis showing historical progress of power projects between 2010 and 2014. This analysis shows that of 261,428 MW of capacity applied for, only 19,039 MW were ultimately placed in-service – a total of 7%. (*Id.* at 5.) Even for capacity projects that reached the stage of entering into Interconnection Agreements, only about half of those projects were ultimately placed in-service.

Mr. Wittine testified that, based on Ohio Power Siting Board filings, there are currently six dispatchable generation plants (five gas-fired and one coal-fired) in various stages of development in Ohio. Out of these six projects, four have been delayed, and the remaining two projects have not yet reached their proposed construction start dates. (*Id.* at 8; *see also* Exhibit EJW (photos of these six proposed generation sites from May 2015)). All of these projects are potentially years away from being placed in-service, and based upon PJM's own historical data, many of them may never reach that point. (*Id.*)

One of the strongest opponents of the proposed PPAs, the OCC offered the testimony of James Wilson, which only reinforces the uncertainty illustrated by AEP Ohio witness Wittine. Mr. Wilson clearly states that of the five gas-fired plants under construction in Ohio, only three have Interconnection Agreements. (Tr. XV at 3790.) Mr. Wilson also testified that only three of the five gas-fired plants have secured financing necessary to complete construction and ultimately allow them to be placed in-service. (Tr. XV at 3792.) Finally, Mr. Wilson also explained that each of these five gas-fired plants will need various and numerous regulatory approvals and permits to complete construction. He is unaware of whether they have received

such approvals and permits, and it is certainly possible that these projects can be delayed because of difficulties in securing these approvals and permits. (Tr. XV at 3792-93.) Simply stated, future gas-fired generation capacity in Ohio is far from a certainty.

3. Factor Three: Description of how the generating plant is compliant with all pertinent environmental regulations and its plan for compliance with pending environmental regulations.

On the third *ESP III* factor – a "description of how the generating plant is compliant with all environmental regulations," *ESP III*, Opinion and Order at 25 – AEP Ohio has demonstrated that the PPA Units are compliant with – or preparing to be compliant with – all existing and pending environmental regulations.

a. The PPA Units are compliant with – or preparing to comply with – six major existing and pending environmental regulations.

AEP Ohio provided detail regarding the PPA Units' compliance with environmental regulations through the testimony of AEPSC Vice President–Environmental Services, John M. McManus (AEP Ohio Ex. 4), and AEPGR Vice President-Competitive Generation, Toby L. Thomas (AEP Ohio Ex. 5). Together those two witnesses have over fifty years of experience in the industry. AEPGR also uses the expertise of the Environmental Services organization within AEPSC, including Mr. McManus, to interpret and provide guidance on environmental regulations and rulemakings to allow Mr. Thomas to manage the generating fleet. (AEP Ohio Ex. 5 at 6.)

AEP Ohio's witnesses described both how the PPA Units are complying with current regulations and how they intend to comply with pending regulations. Mr. McManus identified six major environmental regulations that fit the Commission's criteria of "pertinent regulations": the Mercury and Air Toxics Standards ("MATS") Rule, the Cross-State Air Pollution Rule ("CSAPR"), the Coal Combustion Residuals Rule ("CCR"), the Clean Water Act Section 316(b)

Rule ("316(b)"), the Effluent Limitation Guidelines ("ELG"), and the Clean Power Plan ("CPP"). (AEP Ohio Ex. 4 at 4-5.) Mr. Thomas then explained that the PPA Units are either already equipped with the environmental controls necessary to comply with the rules identified by Mr. McManus or that there are budgetary estimates for future compliance in the financial analysis provided as part of the PPA cost estimates. (AEP Ohio Ex. 5 at 7.) This testimony shows that the PPA Units are compliant with all pertinent environmental regulations and have reasonable plans for any pending regulations.

#### i. Mercury and Air Toxics Standards ("MATS").

The PPA Units are compliant with the MATS rule. Mr. McManus identified the PPA
Units with selective catalytic reduction ("SCR") and flue-gas desulfurization ("FGD") systems
and described the status of compliance of the other PPA Units. (AEP Ohio Ex. 4 at 5-6.) The
PPA Units that are already configured with technology to comply with the MATS Rule include
Clifty Creek Units 1-5, Kyger Creek Units 1-5, Cardinal Unit 1, Conesville Unit 4, Stuart Units
1-4, and Zimmer Unit 1. (*Id.* at 5.) As Mr. McManus discussed, the SCR and FGD systems
convert mercury to a soluble state as it passes through the SCR and then the mercury is removed
via the FGD system. (*Id.* at 6.) In addition, the FGD system will also remove acid gases, and the
existing electrostatic precipitator ("ESP") system will remove non-mercury trace metals. (*Id.*)
Although SCR technology is not installed on Clifty Creek Unit 6, Mr. McManus does not
anticipate additional controls will be needed on that Unit to comply with MATS. (*Id.*) As he
explained, the facility uses a ninety-day rolling site average, and with the level of emission
reductions gained through the controls on Units 1-5, additional controls will not be required on
Unit 6. (*Id.*)

AEP Ohio witness Thomas described the MATS compliance plan for the remaining two units, Conesville Units 5 and 6. Those two units received administrative extensions from the

Ohio EPA, which extends their compliance dates for another year. (AEP Ohio Ex. 4 at 6.) Mr. Thomas testified that, at the time of filing his direct testimony in May 2015, Conesville Unit 6 was in the process of installing a new technology designed to filter mercury from the flue gas exiting the existing FGD system on the Unit. (AEP Ohio Ex. 5 at 7.) He further testified that Unit 5 was scheduled to implement this technology in the next year, within the extension granted by the Ohio EPA. (*Id.*) Mr. Thomas anticipated that the addition of this technology on these two Units will allow each to comply with the MATS rule. (*Id.*) This was confirmed at hearing when Mr. Thomas testified that the Unit 6 project is now in service and Unit 5 will be in service by spring 2016. (Tr. IV at 1200.) He added that he expects compliance with MATS by April 2016, prior to the extension granted by the Ohio EPA. (*Id.*)

### ii. Cross-State Air Pollution Rule ("CSAPR").

The PPA Units are compliant with the CSAPR rule. All of the PPA Units are equipped with FGD systems that reduce SO2 emissions. (AEP Ohio Ex. 4 at 7.) Each Unit is also equipped with low-NOx burners ("LNBs") to reduce NOx emissions. (AEP Ohio Ex. 5 at 8.) And as discussed above, all but three units also have SCR systems to reduce NOx emissions. (AEP Ohio Ex. 4 at 7.) (Clifty Creek Unit 6 and Conesville Units 5 and 6 are the units without SCR systems.) AEP Ohio witnesses McManus and Thomas testified that the existing controls, in combination with the availability of emission allowances in the market, position the PPA Units for compliance with CSAPR. (*Id.*; AEP Ohio Ex. 5 at 8.)

### iii. Coal Combustion Residuals Rule ("CCR").

As Mr. McManus explained, the CCR establishes design and monitoring standards for new and existing landfills and surface impoundments to ensure the structural integrity of surface impoundments and ponds. (AEP Ohio Ex. 4 at 8.) CCR could lead to the conversion of "wet" ash disposal systems to "dry" ash handling and disposal and closing of ash ponds. (*Id.*)

The PPA Units are either in compliance with or have a plan to comply with the CCR rule. Conesville Units 4-6 and Zimmer Unit 1 are equipped with dry fly ash handling systems and landfills for CCR disposal that are anticipated to meet the CCR rule. (AEP Ohio Ex. 5 at 7.) Only Kyger Creek, Stuart, and Cardinal have wet fly ash handling systems. (AEP Ohio Ex. 4 at 8.) Mr. McManus explained that he and the Environmental Services organization within AEPSC are analyzing the CCR rule requirements, and conversion to dry ash handling and closure of existing ponds may be required. (*Id.*) To that end, Mr. Thomas testified that budget estimates provided for Stuart Units 1-4 and Cardinal Unit 1 in this proceeding already include funds to address conversion to dry ash handling. (AEP Ohio Ex. 5 at 8.)

#### iv. Clean Water Act 316(b) Rule ("316(b)").

The 316(b) rule requires existing power plants to comply with a standard for the impingement of aquatic organisms on cooling water intake screens. (AEP Ohio Ex. 4 at 8.) Mr. McManus testified that the rule is applied based on site-specific studies that must be performed to determine compliance measures. (*Id.*)

The PPA Units are either easily adaptable to the rule change or under study to determine potential modification for compliance. AEP Ohio witnesses McManus and Thomas testified the Conesville Units 4-6, Stuart Unit 4, and Zimmer Unit 1 are equipped with natural or mechanical draft cooling towers. (*Id.* at 9; AEP Ohio Ex. 5 at 8.) Mr. Thomas testified that the 316b rule may require AEPGR to modify intake screens at these Units, but he will not know until Mr. McManus completes the studies required by the rule. (AEP Ohio Ex. 4 at 8.)

In addition, Mr. McManus testified that the Clifty Creek and Kyger Creek Units, Cardinal Unit 1, and Stuart Units 1-3 all have once-through cooling water systems without cooling towers.

(*Id.*) He explained that engineering studies are underway to evaluate potential modifications required by the rule. (AEP Ohio Ex. 5 at 9.) Mr. Thomas added that additional investment may

be needed at Stuart Units 1-3, which are not equipped with cooling towers, although early indications are that the units will likely not need to install cooling towers to comply with the rule. (AEP Ohio Ex. 5 at 8.) Mr. McManus testified that the compliance timeline is not later than 2022, and although the Units may require additional capital investment to comply with the rule, he does not anticipate that the rule will require the installation of cooling towers. (AEP Ohio Ex. 4 at 9.)

#### v. Effluent Limitation Guidelines ("ELG").

The EPA proposed to update the ELG rule for the steam electric power generating category to require more stringent controls on certain discharges. (AEP Ohio Ex. 4 at 9.) The rule had only been proposed at the time Company witness McManus filed his direct testimony. The rule was issued as final just the day prior to Mr. McManus taking the stand and he had not yet had time to develop the expected compliance. (Tr. IV at 988-89.) However, Mr. McManus testified that based on the preferred approaches outlined in the proposed version of the rule, he anticipated that the planned projects will comply with the CCR rule and will position the generating units well with any potential future projects that will be required by the final ELG rule. (AEP Ohio Ex. 4 at 9-10.) AEP Ohio witness Thomas also testified that AEPGR's financial planning already included budget estimates for projects intended to comply with the expected ELG Rule. (AEP Ohio Ex. 5 at 8.)

### vi. Clean Power Plan ("CPP").

As the Commission is well aware, the CPP is focused on reducing Green House Gas ("GHG") emissions. In his testimony, AEP Ohio witness McManus described the rule as it was pending when AEP Ohio filed its Amended Application in May 2015. (*See* AEP Ohio Ex. 4 at 10-21.) Now the rule has been finalized, but compliance requirements will not be known until the individual states determine their implementation plans. As Mr. McManus pointed out, there

is a history of long delay when state plans are required to implement an EPA rule. For example, when EPA first issued guidelines for municipal solid waste landfills in 1991 (an effort that was less complex and applied to fewer facilities than the CPP), EPA did not complete the rulemaking until March 1996. (AEP Ohio Ex. 4 at 17.) At that point, state plans were due in 9 months, but some states submitted their plans as late as 10 years after the initial proposal. (*Id.*)

In light of the uncertainty surrounding CPP compliance, AEP Ohio provided an appropriate proxy to account for the impact of the CPP. Specifically, in its projections for this matter, AEP Ohio included an expected cost of \$15 per ton of CO2 emissions starting in 2022 for PPA Units. (*Id.* at 20.) Mr. McManus testified that this proxy reasonably accounts for the impact of the CPP because it affects the cost to dispatch the PPA Units, which lowers the capacity factor for those Units in the modeling years where that assumption is included. (*Id.*) Mr. McManus further explained that it was reasonable for AEP Ohio to assume that the carbon cost will begin in 2022 (rather than 2020) because there is a strong possibility that the compliance date will be changed. (*Id.* at 21.) And in fact Mr. McManus was ultimately proven correct – the date was moved to 2022 when updated by the EPA.

The record further supports AEP Ohio's assumption of a \$15/ton CO2 emission cost for planning purposes with supporting testimony from both AEP Ohio and Intervenor witnesses.

Both IGS witness Haugen and OCC witness Jackson agreed that AEP Ohio's \$15/ton CO2 emission proxy is a reasonable estimate. In her direct testimony, OCC witness Jackson stated that "the utility's proxy cost for CO2 of \$15 per ton starting in 2022 and escalating at a rate of inflation appears reasonable." (OCC Ex. 13 at 33.) Likewise, during cross examination, IGS witness Haugen testified that AEP Ohio's \$15 per metric ton of CO2 seemed reasonable. (Tr. X at 2519.)

In sum, the Commission instructed AEP Ohio to provide a plan for how it intends to comply with any proposed environmental regulations. The Parties agree that the implementation plans for the CPP are still pending, but AEP Ohio's assumption of \$15/ton CO2 emission is a reasonable approach. And the Company's cost projections reasonably captured all known and projected environmental compliance costs.

# b. Intervenors' criticisms of the PPA Units' compliance with environmental regulations are without merit.

Intervenors fail to adequately challenge the record established by AEP Ohio in demonstrating that the PPA Units are complying with environmental regulations.

For instance, OCC witness Jackson criticized environmental compliance cost projections for the PPA Units, but she admitted that her analysis was intended to provide an estimate of the high end of risk. (Tr. XIV at 3559.) Ms. Jackson claimed that the compliance costs for the six environmental regulations identified by AEP Ohio witness McManus could be greater than AEP Ohio estimates, but Ms. Jackson does not have the experience with the PPA Units needed to support her testimony. Ms. Jackson admitted that she is not an engineer (Tr. XIV at 3558), she has never worked at a generation plant, she has no first-hand work experience with maintaining a generation plant, she has never visited any of the PPA Units she criticizes in her testimony, and she has not reviewed any of the maintenance records of the PPA Units (Tr. XIV at 3560). She also testified that she is not familiar with the ongoing maintenance schedules of the PPA units. (Tr. XIV at 3568.)

Ms. Jackson's lack of specific knowledge of the PPA Units is also evident in the individual recommendations made in her testimony. When asked about her concern that the PPA Units could need cooling towers under 316(b), she admitted that her view is essentially an academic position based on public data and not Unit-specific knowledge. (Tr. XIV at 3561.)

Even with this academic approach to assessing the potential need for environmental action, moreover, she is unaware of basic facts, such as the length of time and tests for determining if a cooling tower is needed. (Tr. XIV at 3562.) Another example of Ms. Jackson's limited academic review of the environmental issues facing the PPA Units is her discussion of the changes needed at Zimmer to reduce SO2. On cross examination, she was asked if other changes could be made at the plant to reduce SO2 and was forced to admit that she did not know how the FGD currently there was operated and that she was unaware if there were additives available to lower SO2. (Tr. XIV at 3565.) Moreover, she agreed that Zimmer could change its fuel, but did not know what type of coal it is currently using. (Tr. XIV at 3565.) Ultimately, she admitted that she has no idea how Zimmer is operated or if a change in operations could lower SO2 emissions. (Tr. XIV at 3566-3577.)

OCC witness Jackson's reliance on a general public document to support her argument on the Clifty Creek environmental compliance status overstates the words she cites and fails to recognize the true underlying facts related to the Unit. She testified in her direct that it seems "very likely" that additional NOx controls will be required at Clifty Creek. But when faced on cross-examination with the OVEC report she relied upon, the actual language says it "may be necessary." (Tr. XIV at 3568-3569.) She later admitted that annual reports often include potential risks and that there is a difference in *potential* risks and something that is "very likely." (Tr. XIV at 3570.) Her testimony that such action is "very likely" is merely her speculation. The record does contain first-hand factual evidence related to this question. AEP Ohio witness McManus, who has specific plant knowledge, was questioned about this same statement from the OVEC annual report. Mr. McManus explained that the statement did not mean that Clifty Creek has compliance issues, and he stated that Clifty Creek will be in compliance. (Tr. IV at 1033.)

Mr. McManus testified that the statement in the OVEC annual report was a forward looking disclosure statement that OVEC may need to do something additional at some point in the future. (Tr. IV at 1034.) He testified that OVEC believes they will be able to comply with the controls they have in place, the allowances they have allocated, and the ability to go to an allowance market. (*Id.*)

Another argument raised by OCC witness Jackson and discussed with AEP Ohio witness McManus during cross-examination by counsel for Sierra Club is a concern that the counties around PPA Units will be declared non-attainment areas. OCC witness Jackson raised a number of concerns related to the fact that certain counties could be declared in nonattainment. But Ms. Jackson relied on outdated EPA data as the basis for this concern. (Tr. XIV at 3584.) As AEP Ohio witness McManus testified during cross-examination, any review of air quality must be based on current data to recognize that there has been a reduction in emissions that contribute to ozone and that air quality was expected to continue to improve. (Tr. IV at 1055, 1111.) Mr. McManus was once again proven correct by the EPA. As shown on cross examination, the EPA released a memorandum (AEP Ohio Ex. 40) indicating that the data relied upon by OCC witness Jackson in her direct testimony and the data used by Sierra Club (Sierra Club Ex. 13) in its cross examination of Mr. McManus is not the data that will be used by the EPA in determining nonattainment. OCC witness Jackson agreed, as outlined in the EPA memo (AEP Ohio Ex. 40), that the EPA intends to use ozone data from 2014 to 2016, and that the current air quality data may not be reliable. (Tr. XIV at 3580-3582.) As a result, the conclusions reached by OCC witness Jackson were based on data that she and the EPA admitted may not be reliable. (Tr. XIV at 3581-3582.)

AEP Ohio also properly addressed Intervenors' argument that AEP Ohio has not adequately considered the costs of environmental compliance. As explained by AEP Ohio witnesses McManus and Thomas, AEPGR and AEPSC develop compliance projects and cost estimates through a collaborative process that involves multiple collaborative steps: the environmental group interprets rules, the engineering department identifies technology, and the projects department takes that information and develops a potential schedule and cost estimate for implementation. (Tr. IV at 966, 1171-1172, 1192-1193.) The environmental cost compliance data provided by AEP Ohio witness Pearce are based on budgets for expected capital additions to the PPA Units. In fact, Sierra Club Confidential Exhibit 7, provided in discovery and introduced into the record, details the major expected environmental capital expenditure that AEP Ohio witness Thomas provided to AEP Ohio witness Pearce for use in his economic analysis in this case. (Tr. IV at 1189-1191.) This exhibit identifies specific capital investments that AEP anticipates are needed to comply with major environmental regulations. (Id.) AEP Ohio witness Thomas explained that Sierra Club Confidential Exhibit 7 was based on a more detailed collection of costs that was disclosed in discovery as SC-INT 2-089. As discussed in the supplemental response on Sierra Club Confidential Exhibit 7, that more detailed collection of costs reflected the complete set of capital budgets, including "plant buckets." which is a catchall for small projects. (Tr. IV at 1191.) Mr. Thomas testified that each plant does not know exactly what projects are going to be accomplished every year, so plants are provided a budgetary blanket to help cover those smaller projects. (Id.) Nonetheless, the detail found on the confidential attachments on Sierra Club Confidential Exhibit 7 includes expected PPA Unit costs for compliance with MATS, CCR, ELG, 316(b), NOx, Particulate Emission Limits, and other rules.

The budget estimates used to forecast environmental compliance costs for the PPA Units are reliable estimates based on the extensive experience of AEPGR and AEPSC. Mr. Thomas testified that the forecasted environmental major project budgets, provided in discovery and discussed at hearing, was pulled together through the collective forecast of the AEP generation business units and is a reasonable forecast based on a reasonable premise of how AEP runs its entire business. (Tr. IV at 1193.) He testified that the cost estimates are created through a normal AEP process and are based on industry standards. Mr. Thomas attested to the use of the process for an extended period of time and the rigor involved. (Tr. IV at 1195.)

AEP Ohio witnesses' experience and direct knowledge of the PPA Units and their compliance with environmental requirements are unrebutted in the record. The years of experience of the AEP Ohio witnesses and the explanation of the layers of corporate support that leads to the decisions and planning done by AEPGR and AEPSC both confirm that the PPA Units are positioned to comply with all applicable environmental regulations going forward. AEPGR, AEPSC, and their affiliates operate numerous facilities and have the know-how and personnel to do it well. That expertise is shown in the record, and no opposing testimony rises to any credible level to rebut the specific testimony related to these PPA Units. Accordingly, AEP Ohio has fulfilled the third ESP III factor by providing a detailed "description of how the [PPA Units are] compliant with all environmental regulations," ESP III, Opinion and Order at 25.

4. Factor Four: The impact that a closure of the generating plants would have on electric prices and the resulting effect on economic development within the state.

The fourth *ESP III* factor asks AEP Ohio to address the "the impact that a closure of the generating plant would have on electric prices and the resulting effect on economic development within the state." *ESP III*, Opinion and Order at 25. AEP Ohio responded to this factor through the testimony of AEP Ohio President Pablo Vegas (AEP Ohio Ex. 1), and AEP Ohio witnesses

Fetter (AEP Ohio Ex. 3), Pearce (AEP Ohio Ex. 2), Wittine (AEP Ohio Ex. 11), and Allen (AEP Ohio Ex. 10.)

AEP Ohio President Vegas stated from the outset that approval of the PPA Proposal will provide substantial economic benefits. As he explained, the PPA Proposal will support economic development in Ohio and protect against the adverse impact of early plant closures on the Ohio economy and the impacts to the local communities the plants support. (AEP Ohio Ex. 1 at 13.) He also testified that "[t]he stable price structure of the PPA is also expected to provide economic development opportunities in AEP Ohio's service territory, along with continued operation of the PPA Rider Units to keep thousands of Ohioans employed and support both the state and local economies as detailed by Mr. Allen." (AEP Ohio Ex. 1 at 10.) Mr. Vegas went on to point out that based on the joint ownership structure of certain proposed PPA Units owned jointly by AEP Ohio and others, adopting the PPA Proposal would allow AEP Ohio to exercise veto privileges over any attempts to retire those units. (*Id.* at 11.) That would allow AEP Ohio to influence the maintenance of 6.800 MW of generation in the State of Ohio. (*Id.*)

### a. The PPA Units provide economic benefits to Ohio currently.

The PPA Units are located in Ohio and provide significant benefits to their respective regions and Ohio as a whole. Mr. Vegas testified that the PPA Units employ over 1,600 workers and provide \$121 million of direct annual payroll income to Ohio. (AEP Ohio Ex. 1 at 25.) The PPA Units indirectly contribute to more than 4,000 additional jobs in Ohio and nearly \$244 million of additional income to the State. (*Id.*) The PPA Units also promote the coal industry in Ohio and the employment of 900 miners at \$63 million annually as a result of contracts with the Units. Mr. Vegas testified that the jobs provided by the PPA Units are particularly important to the local economies in which they operate because they are high-paying jobs in regions that are economically lagging and have high-unemployment rates. (*Id.* at 25-26.) He added that the

Units have added to the local tax base, including nearly \$11.5 million in Ohio property taxes annually. (*Id.* at 26.)

AEP Ohio witness Allen also discussed the economic impact of the PPA Units on both local areas and greater Ohio. Mr. Allen explained that the ongoing operation of the PPA Units provides over \$650 million of economic benefit. His testimony included an AEP Ohio economic analysis, including two economic reports studying the impact of the plants. (AEP Ohio Ex. 10, Ex. WAA-3, WAA-4). The analysis showed that the OVEC units provide over \$40 million of economic benefit in its six county region and over \$100 million of economic benefit in Ohio annually. (AEP Ohio Ex. 10.) It further showed that the Affiliate PPA Units provide an annual economic benefit in excess of \$550 million from electricity production. (*Id.*) That benefit is based on the plants directly employing over 1,100 individuals with associated mining employment of over 6000 individuals. (*Id.*) He testified that the total impact to the State, including the direct and related workers, exceeds 4,600 jobs. (*Id.*) Mr. Allen provided the following table in his testimony to summarize the economic benefits of the PPA Proposal:

				Total Impact to State-		Total Impact to State-		Annual Property
Plant Direct		Mining Direct		Employment		Income		Taxes
Workers	1,614	Miners	894	Plant	4,320	Plant	\$244M	
Income	\$121M	Income	\$63M	Mining	2,395	Mining	\$127M	\$11.5M

(*Id.* at 12.)

No intervening witness provided an alternative economic analysis to weigh against the analysis provided by AEP Ohio. OCC witness Dormady admitted on cross examination that he has not studied what the impact to the economy would be if the PPA Units closed, and he was unable to provide any independent measurement of the economic benefits from those Units. (Tr. IX at 2329-2330.) He testified that his testimony was limited to being critical of the AEP Ohio's method. (Tr. IX at 2330.) However, he did admit that the closure of the plants would have some

economic impact. (Tr. IX at 2329.) In fact, in relation to the Muskingum River Plant closure, OCC witness Dormady agreed on cross-examination that, absent a new business taking its place, the closed plant would result in job losses in the county. He does not know how long those job losses will continue, but they could go on forever. (Tr. IX at 2335-2337.) AEP Ohio provided the only economic impact of the PPA Units on Ohio.

b. Closure of the PPA Units would substantially impact Ohio's economy because Ohio is not replacing equivalent generation facilities in the State.

The record is clear that while there is some construction of generation units in Ohio, that the number is low and is not equivalent to the 3,100 MW included in the PPA Proposal. AEP Ohio witness Vegas explained that since 2012, utilities have announced the retirement of 5,900 MW of generation in Ohio by mid-2015. (AEP Ohio Ex. 1 at 20.) He also testified that current economic conditions may lead to additional plants forced to shutter. (*Id.*)

More concerning is the lack of future generation built here in Ohio. AEP Ohio witness Vegas recognized that Ohio should be a prime location for the addition of new gas-fired generation investment. (*Id.* at 24.) However, he points out that the movement to SSO procurement through short-term auctions means investors can only rely on *projected* market revenues to support long-term investment decisions. (*Id.*) This drives investment in new generation to the eastern part of PJM, where the capacity market has traditionally supported greater capacity clearing prices. (*Id.*) He also points out that Ohio's neighboring states – Indiana, Michigan, Virginia, West Virginia, and Kentucky – are all regulated states with regulated recovery of generation costs giving investors clarity in a long-term return. (*Id.*)

MAREC witness Burcat explained this short-term view and the impact on generation construction in his testimony. Mr. Burcat testified to the importance of large-scale investment

and long-term guarantees to support the entire electric system. (MAREC Ex. 1 at 5.) Specifically, Mr. Burcat testified:

Energy markets require large-scale capital investments. Large-scale capital investments require large-scale financing. Large-scale financing requires some meaningful degree of certainty that adequate returns can be achieved. In fact, virtually the entire electricity system has been build based on government approved, long-term, guaranteed rates of return for just such reasons.

(*Id.*) He then pointed out that the restructuring of the market eliminated long-term guaranteed rates of return for some generation, and now there is a lack of incentives for new generation. (*Id.*) He identified the concern with revenue adequacy as the "Missing Money" problem; this arises because prices in energy markets reflect short-term variable costs, but power generators must recover not only short-term costs but also long- term capital costs to achieve revenue adequacy. (Id.)

The corporate position of Dynegy, an owner of unregulated generation in Ohio, is that the addition of new generation in this region are greatly exaggerated. Specifically, Mr. Ellis admitted to the language in a Dynegy corporate presentation that "[o]ur takeaway in the bottom slide is that new build hype is overblown." (Tr. X at 2593.) Mr. Ellis describes the Dynegy investor presentation comments describing the hurdles for new built generation including: a statement that the economics don't work, the requirement to complete facility studies prior to participating in CP auctions adding 6 to 8 months, increasing credit requirements, increased challenges with financing and PJM's estimate that 75% of projects in the queue will not be built. (Id. at 2593; AEP Ohio Ex. 17 at 12.) This supports the testimony of AEP Ohio witness Wittine that "history indicates that most new generation winds up being withdrawn rather than placed in service." (AEP Ohio Ex. 11 at 2.)

<sup>&</sup>lt;sup>10</sup> Transcript mistakenly reads "overgrown" but the source document, AEP Ohio Ex. 17 at 12, states: New build hype "overblown."

The economic benefits of the PPA Proposal are real, and there are not adequate replacements realistically anticipated to fill that void. The actual corporate position of the unregulated generator supports AEP Ohio's testimony concerning the lack of adequate new generation. The record also shows the real impact on jobs, taxes and communities in the absence of the PPA Units. The economic analysis provided by AEP Ohio is the only analysis in the record that details the impacts requested by the Commission under the fourth *ESP III* factor. And that analysis clearly demonstrates that premature closure of the PPA Units would have a profoundly negative impact on economic development within Ohio.

# 5. Additional Requirements: The PPA Proposal satisfies the ESP III decision's four additional requirements.

In addition to the four factors discussed above, the *ESP III* decision also provided for four requirements for including a PPA within the PPA Rider. *See ESP III*, Opinion and Order at 25-26. Here, the PPA Proposal as modified by the Stipulation meets all four requirements.

## a. First Requirement: Rigorous Commission oversight of the Rider, including a process for substantive review and audit.

The *ESP III* decision required that AEP Ohio "provide for rigorous Commission oversight of the rider, including a proposed process for a periodic substantive review and audit." *ESP III*, Opinion and Order at 25. AEP Ohio's PPA Proposal fully satisfies that requirement by providing the Commission many opportunities for rigorous oversight and substantive review of PPA Unit costs and revenues: First, in this proceeding, the Commission will determine whether the proposed Affiliate PPA is beneficial for ratepayers and, therefore, whether it is prudent for AEP Ohio to sign the PPA and pass on any net PPA costs or credits to customers in the PPA Rider. Second, after the Commission approves the prudence of the Affiliate PPA and the contract is signed, the Commission's oversight will not end; rather, the Commission will continue to exercise rigorous *ongoing* oversight and review of PPA costs through AEP Ohio's

proposed PPA Rider audit process. As described in greater detail below, this audit will involve both *accounting* review of previously approved PPA costs and *managerial* review of AEP Ohio's decisions regarding new PPA costs. (*See generally* AEP Ohio Ex. 10 at 10.)

## i. The Commission's authority to review the prudence of the Affiliate PPA and PPA costs.

Before describing the substantial Commission oversight provided by AEP Ohio's PPA Proposal, it is important to specify the Commission's legal authority to exercise oversight over PPA costs that will be incurred by AEP Ohio. Numerous intervenors have claimed that this proceeding involves an incursion by the Commission into the field of wholesale sales, which the Federal Power Act reserves exclusively to FERC. But those claims are false. The Affiliate PPA is a wholesale contract subject to FERC's exclusive jurisdiction, and AEP Ohio is not requesting that the Commission approve the Affiliate PPA *itself* or make any finding that the Affiliate PPA's rates and terms are just and reasonable – those are issues under FERC's jurisdiction. Instead, in this proceeding, AEP Ohio is requesting that the Commission approve the *retail rate treatment* of the Affiliate PPA on the same basis as the Commission has reviewed other AEP Ohio purchases, whether from affiliates or non-affiliates.

Under the Federal Power Act, the Commission possesses well-established authority to determine the retail rate treatment of the costs incurred under a utility's wholesale purchases — that is, to determine whether (or to what extent) a utility may pass on the net costs or credits of a wholesale purchase to retail ratepayers. As part of that retail ratemaking power, moreover, the Commission possesses broad authority to judge the prudence of a utility's wholesale purchases — that is, to "determine whether [the utility] has prudently chosen from among available supply options." *Central Vermont Pub. Serv. Corp.*, 84 FERC ¶ 61,194 (1998).

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<sup>&</sup>lt;sup>11</sup> Of course, the Commission can (and regularly does) intervene or otherwise participate in FERC proceedings that relate to or affect broader Ohio issues.

A state commission's authority to judge the prudence of wholesale purchases for the purposes of retail ratemaking is often called the "Pike County doctrine" after the case that first formally recognized this longstanding principle. See Pike Cty. Light & Power Co. v. Penn. Pub. Serv. Comm'n, 77 Pa. Commw. 268, 237-74 (1983) (distinguishing FERC's jurisdiction "to determine whether it is just and reasonable for [a power supplier] to charge a particular rate" from a state commission's jurisdiction to determine "whether it is just and reasonable for [a utility] to incur such a rate as an expense" (emphasis added)). Under the Pike County doctrine, state utility commissions have a long history of reviewing the prudence of a utility's wholesale purchases for the limited purpose of deciding whether to permit retail rate recovery. And numerous state and federal courts, as well as FERC itself, have confirmed that *Pike County* prudence review is grounded on a State's retail ratemaking authority under the Federal Power Act. See, e.g., Cent. Vt. Pub. Serv. Corp., 84 FERC ¶ 61,194, ¶ 61,975 (1998) (endorsing the Pike County doctrine); Pub. Serv. Co. of N.H. v. Patch, 167 F.3d 29, 35 (1st Cir. 1998); Ky.-W. Va. Gas Co. v. Pa. Pub. Util. Comm'n, 837 F.2d 600, 609 (3d Cir. 1988); cf. Nantahala Power, 476 U.S. at 972 (assuming that States may consider whether a wholesale purchase is prudent for purposes of retail ratemaking).

Thus, the review and oversight of costs that would be passed on to retail ratepayers that is provided to the Commission by the PPA Proposal falls well within the Commission's *Pike County* authority over *retail* rates. First, in this proceeding, the Commission will exercise its well-established *Pike County* authority to determine whether it would be prudent for AEP Ohio to enter into the proposed Affiliate PPA, to incur the legacy costs specified in that contract, and to pass on those legacy costs (net of revenues) to retail customers through the PPA Rider. Second, through periodic PPA Rider audits, the Commission will continue to exercise its *Pike* 

County authority to ensure that new, non-legacy PPA costs are properly accounted for in the PPA Rider and that AEP Ohio has prudently exercised its contractual rights under the proposed Affiliate PPA to review and approve new PPA Unit costs.

In conducting this prudence review, the Commission will not determine whether the rates and terms of the Affiliate PPA are just and reasonable or otherwise encroach on FERC's exclusive jurisdiction over wholesale power rates or the PPA *itself*. Instead, the Commission will exercise its well-established *Pike County* authority to determine if AEP Ohio has acted prudently with respect to costs and revenues AEP Ohio seeks to include in retail rates through the PPA Rider. In so doing, the Commission will remain firmly on the "retail side" of the line dividing state and federal authority in the Federal Power Act.

## ii. The Commission's rigorous review of PPA costs and revenues.

As noted above, in this proceeding, the Commission's adoption of the Stipulation will confirm that it is prudent for AEP Ohio to sign the Affiliate PPA. The Commission's adoption of the Stipulation will also confirm that it is prudent for AEP Ohio to incur the "legacy costs" that flow automatically once the PPA is signed. (*See* AEP Ohio Ex. 10, at 10.) Legacy costs include two primary categories of costs: First, by signing the PPA, AEP Ohio agrees to pay AEPGR certain charges – in particular, a Depreciation Payment and a Capacity Payment – that are based on AEPGR's net book value of the PPA Units. (*See* P3/EPSA Ex. 10 at 14-15.)

Second, legacy costs also include legacy contracts (such as fuel contracts) that will be in place at the time the PPA is signed. All legacy contracts and existing costs were provided for Intervenors' review in discovery. (Tr. XIX at 4738-39.)

This proceeding, however, is by no means the end of the Commission's oversight.

Rather, as required by the *ESP III* order, AEP Ohio's PPA Proposal will allow the Commission

to continue to exercise substantial oversight over AEP Ohio's incurrence of PPA costs and revenues through the proposed PPA Rider audit process. (AEP Ohio Ex. 10 at 10.) The proposed PPA Rider audits will function much like the existing Fuel Adjustment Clause ("FAC") audits with which the Commission is extremely familiar (*see id.*), and like the FAC audits, will involve two components: a *financial* audit and a *managerial* audit.

The financial audit will ensure that PPA costs and revenues are properly accounted for in the PPA Rider. (AEP Ohio Ex. 10 at 10.) The financial audit will not revisit prudence determinations that the Commission has already made. For example, if the Commission approves the prudence of signing the proposed Affiliate PPA in this proceeding, the reasonableness of recovering legacy costs will not be reconsidered in future financial audits. But those legacy costs – and any other costs the Commission has already deemed prudent – will be subject to a financial audit that ensures the accuracy of the accounting of previously approved PPA costs in the PPA Rider.

The managerial audit, by contrast, will focus on *new* PPA costs for which the Commission has yet to make a prudence determination. Specifically, the managerial audit will review any decisions that AEP Ohio, as buyer, made in exercising its contractual rights under the Affiliate PPA to review and approve new PPA Unit costs. (AEP Ohio Ex. 10 at 10.) If the Commission determines that AEP Ohio prudently exercised its contractual review and approval authority regarding particular PPA costs, the Commission will permit the pass-through of those costs through the PPA Rider. If the Commission determines that AEP Ohio did *not* prudently exercise its contractual review and approval authority, the Commission may disallow the pass-through of related costs through the PPA Rider. In this way, the Commission will continue to

examine and evaluate new PPA Unit costs as it reviews the prudence of AEP Ohio's contractual actions related to those costs.

The proposed Affiliate PPA contains numerous "buyer's prudence" provisions under which AEP Ohio, as purchaser of the PPA Units' output, may influence and control PPA Unit costs. These provisions are critical to the Commission's ability, under the PPA Proposal, to continue to review the prudence of PPA costs before permitting recovery of those costs in retail rates. Each of the provisions conveys a contractual right or obligation on the buyer, AEP Ohio, such that the Company's actions and decisions will trigger a prudence review for retail cost recovery by the Commission. Wherever AEP Ohio is given authority to review and exercise oversight over PPA Unit costs, the Commission will be able to review the prudence of AEP Ohio's use of that oversight authority. If the Commission believes that AEP Ohio has acted imprudently in exercising its contractual oversight rights, it may disallow retail recovery of the associated costs in the PPA Rider.

As an initial matter, the Affiliate PPA establishes a PPA Unit "Operating Committee" under which AEP Ohio may review and approve a wide range of PPA Unit costs. (P3/EPSA Ex. 10 at 21); AEP Ohio Ex. 1 at 27).) The Operating Committee consists of one representative each from AEP Ohio, AEPGR, and AEPSC; each company has one vote, except that AEPSC may vote only if there is a tie between the other parties. (P3/EPSA Ex. 10 at 21.) As AEP Ohio witness Vegas explained, the Operating Committee "will provide oversight over all major decisions and operation of the PPA Units." (AEP Ohio Ex. 1 at 27.) Specifically, the Affiliate PPA gives the Operating Committee broad authority to "review and approve decisions regarding" numerous PPA Unit matters, including (1) "the retirement dates of the Facilities," (2) "annual budgets," (3) "capital expenditures," (4) "procedures and systems for dispatch and

notification of dispatch," (5) "procedures for communication and coordination with respect to Facility capacity availability," (6) "scheduling of outages for maintenance, as well as the return to availability following an unplanned outage," (7) "approval of material contracts for Fuel," (8) "establishment of specifications for Fuels," and (9) "other duties as assigned by agreement of the Representatives." (P3/EPSA Ex. 10 at 21.) Thus, through its role on the Operating Committee, AEP Ohio will have broad visibility – as well as substantial control and influence – over PPA Unit costs and operations. And through the Commission's ongoing managerial prudence review of AEP Ohio's actions and decisions under its contractual oversight authority, the Operating Committee provisions of the Affiliate PPA also give *the Commission* substantial oversight over AEP Ohio's exercise of its control and influence over PPA Units costs and operations.

Moreover, in addition to AEP Ohio's role on the Operating Committee, the Affiliate PPA provides AEP Ohio specific controls over certain categories of PPA Unit costs. Most importantly, the Affiliate PPA includes contract provisions that grant AEP Ohio, as buyer, essentially "veto authority" over any major capital investment at wholly owned PPA Units. Specifically, the Affiliate PPA provides: "For major or material projects at a wholly owned [AEPGR] Facility, [AEP Ohio's] prior written approval and agreement must first be obtained before proceeding with such Capital Improvements." (P3/EPSA Ex. 10 at 13 (emphasis added).) In this way, any significant capital expenditure at a PPA Unit must be approved by AEP Ohio, and any such approval decision made by AEP Ohio will be subject to the Commission's ongoing managerial audits of AEP Ohio. In this way, the Commission will be provided "substantive review," ESP III, Opinion and Order at 25, of AEP Ohio's exercise of its rights in connection with all significant capital expenditures at the PPA Units.

As for the timing of the Commission's financial and managerial audits, AEP Ohio's PPA Proposal contemplates that the Commission will conduct annual financial and managerial reviews. For managerial reviews in particular, AEP Ohio proposes that the Commission follow its typical process of reviewing the prudence of costs in the year they are incurred, as the Commission has done for Fuel Adjustment Clause audits. (Tr. XX at 4984-85.) That is, when the Commission reviews the prudence of AEP Ohio's use of its contractual oversight rights with respect to a particular new PPA cost, the Commission will do so in the managerial audit that immediately follows the first inclusion of that cost in the PPA Rider. For example, if, in 2019, AEP Ohio exercises a vote on the PPA Operating Committee to approve a new fuel contract that is effective January 1, 2020, the fuel costs will be included in the PPA Rider in 2020, and the Commission will review the prudence of AEP Ohio's vote to approve the fuel contract in the managerial audit conducted for the 2020 audit year. As provided in the Stipulation, moreover, when the Commission assesses the reasonableness of AEP Ohio's vote to approve the fuel contract, that assessment will "be made in light of the facts and circumstances known" in 2019, which was "the time such costs were committed." (Jt. Ex. 1 at 7.)

Critically, moreover, AEP Ohio has committed that it will obtain prudence "preapproval" from the Commission for substantial capital expenditures at a PPA Unit or other major
PPA Unit decisions that would affect the level of costs that AEP Ohio will incur under the PPA.
For example, if AEP Ohio is asked to exercise its contractual authority to approve (or veto) a
significant environmental-compliance capital investment at a PPA Unit, AEP Ohio will not give
its approval (or veto) until it first requests a finding from the Commission that AEP Ohio's
approval of the project, and recovery from the retail ratepayers of the costs of that project, would
be prudent. In addition, AEP Ohio has committed to seeking a Commission prudence

determination before exercising any contractual rights with respect to the retirement of a PPA Unit. (Tr. XX at 4997-98.) Thus, although the prudence of the exercise of AEP Ohio's approval rights over many PPA Unit costs will be reviewed (and allowed or disallowed) by the Commission after they are incurred and reflected in the PPA Rider, the costs of any significant PPA Unit capital expenditures or other major decision such as a Unit closure will not be included in the PPA Rider until the Commission first "pre-approves" the prudence of the cost in question.

Lastly with respect to the Commission's oversight of the PPA Rider, the Commission's ongoing review will not be limited to a review of PPA Rider costs; the Commission will also have an opportunity to review PPA Rider *revenues*. As provided in the Stipulation, "AEP Ohio agrees to participate in annual compliance reviews before the Commission to ensure that actions taken by AEP Ohio when selling the output from generation units included in the PPA Rider into the PJM market were not unreasonable." (Jt. Ex. 1 at 7.)

Thus, when the Commission conducts its annual managerial audit, the Commission will not just review the prudence of the *costs* incurred at the PPA Units; it will also review the prudence of AEP Ohio's actions in selling the output of the PPA Units. The Commission's after-the-fact review of AEP Ohio's PJM sales will include how AEP Ohio directed the dispatching of the PPA Units on the energy markets, as well as how the capacity of the Units was bid in the PJM capacity auctions (including any supplemental auctions or bilateral contracts). (Tr. XVIII at 4484, 4723.) Importantly, moreover, the Commission's review will include prudence oversight with respect to any PJM capacity performance bonuses or penalties that AEP Ohio incurred. (Jt. Ex. 1, at 7.) If the Commission concludes that AEP Ohio imprudently sold the output of the PPA Units (including with respect to capacity performance bonuses and penalties), the Commission

may adjust the PPA Rider to AEP Ohio's detriment and to the benefit of its retail customers. (*Id.*)

As with the timing of the Commission's managerial audit of PPA Rider costs, AEP Ohio proposes that the Commission review PPA Rider revenues in the audit for the year in which the revenues are included in the PPA Rider. For example, the Commission would review AEP Ohio's Unit dispatch decisions in 2020 in the managerial audit for 2020 costs and revenues, at least insofar as Unit dispatch decisions would be immediately reflected in 2020 energy revenues. For capacity revenues, this means that the prudence of AEP Ohio's PJM capacity auction bids would typically be reviewed three years after the bids are made, when capacity auction revenues are actually received by AEP Ohio and included in the PPA Rider. (Tr. XX at 4984-85.) For example, in 2016, AEP Ohio will bid into the 2019/2020 Base Residual Auction ("BRA"), and AEP Ohio proposes that the Commission review the prudence of this bid in the 2019 managerial audit, when the 2019/2020 BRA revenue is first received and included in the PPA Rider. (Id.) This would be consistent with the established Fuel Adjustment Clause audit process and would ensure that all revenues and costs for a particular audit year would be reviewed in the same audit proceeding. Notwithstanding the three-year delay between bidding and prudence review, however, the Commission's Staff may request information concerning capacity auction bids before the relevant auction year, if the Staff deems this information to be relevant to earlier auction-year managerial audits. (Tr. XX at 4985-86.) Moreover, although AEP Ohio proposes that the Commission review revenues in the year they are realized, the precise details of PPA Rider audit schedules are ultimately the Commission's prerogative and could be adjusted if the

Commission encounters difficulty in assessing the prudence of capacity auction bids three years after they are made. <sup>12</sup>

In sum, both the general nature of retail cost recovery by a utility and the specific "buyer's prudence" provisions of the Affiliate PPA provide for numerous forms of ongoing Commission review of the prudence of PPA Rider costs and revenues incurred by AEP Ohio – confirming that there will be "rigorous Commission oversight of the rider."

## b. Second Requirement: A commitment to full information sharing with the Commission and its Staff.

The *ESP III* decision also required AEP Ohio to "commit to full information sharing with the Commission and its Staff." *ESP III*, Opinion and Order at 25. AEP Ohio's PPA Proposal fully complies with this requirement by committing to provide the Commission and Staff numerous types of information related to the PPA Units to enable the Commission and Staff to conduct the ongoing prudence review process described above.

In particular, the terms of the Stipulation itself embody a commitment by AEP Ohio to provide full Commission visibility into any PPA costs that AEP Ohio seeks to pass through the PPA Rider. The Stipulation provides: "AEPGR fleet information on any cost component will be provided pursuant to a reasonable Staff request (as determined by the Commission) as it conducts a reasonableness review of a specific cost component for the generation units included in the Affiliate PPA." (Jt. Ex. 1 at 7.) That commitment ensures that if AEP Ohio possesses information that the Commission deems necessary to evaluate a PPA Rider cost, AEP Ohio will provide that information for Commission consideration. (*See, e.g.*, Tr. XX at 4983, where AEP

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<sup>&</sup>lt;sup>12</sup> No matter when the audit takes place, however, the prudence of AEP Ohio's PJM sales must be reviewed in light of the facts and circumstances known at the time AEP Ohio takes the action in question, as provided in the Stipulation. (Jt. Ex. 1 at 7.)

Ohio witness Allen confirmed that the Commission will be the ultimate arbiter of whether a Staff information request is reasonable.)

Furthermore, AEP Ohio's commitment to information sharing in the Stipulation amplifies the commitment to information sharing that AEP Ohio already presented in its Amended Application. (*See, e.g.*, AEP Ohio Ex. 10 at 10.) For example, even before the Stipulation, AEP Ohio witness Vegas committed to "provide, on a periodic basis as determined by the Commission, summaries and/or details of the [Operating] Committee's actions." (AEP Ohio Ex. 1, at 27.) Mr. Vegas also committed to providing the Commission detailed information into the PPA Units through AEP Ohio's Books, Records, and Audit Rights under the proposed Affiliate PPA. (*Id.*; P3/EPSA Ex. 10 at 17.) And in order to "provide for clear auditing of revenues and costs as credited and billed directly from PJM," Mr. Vegas committed to providing the Commission full information regarding the PJM subaccount in which the PPA Units will be located. (AEP Ohio Ex. 1 at 27.) In summary, Mr. Vegas assured the Commission: "Cost data for operating the Affiliate PPA Units will be comparable to data that the Commission has historically been provided related to these units." (*Id.*)

Accordingly, the commitment to information sharing provided in the Stipulation, combined with the commitments AEP Ohio had previously made to share PPA Unit cost and revenue data with the Commission, fulfill the requirement that AEP Ohio provide "full information sharing with the Commission and its Staff." *ESP III*, Opinion and Order at 25.

c. Third Requirement: An alternative plan to allocate the Rider's financial risk between both the Company and its ratepayers.

The third *ESP III* requirement requires AEP Ohio to verify that the PPA Rider's financial risk is allocated between AEP Ohio and its ratepayers. *ESP III*, Opinion and Order at 25. As AEP Ohio witness Vegas testified, AEP Ohio is at risk of having recovery of the PPA Rider

balance being disallowed in a future proceeding. (AEP Ohio Ex. 1 at 29.) While this observation was made in connection with the Amended Application, it is equally true under the Stipulation. Specifically, under Section III.A.4.a of the Stipulation, the Commission will have the ability to audit the accuracy of the costs and revenues included in the PPA Rider through a rigorous review process and as well as a prudence review of actions and decisions undertaken by AEP Ohio or its agents. (Jt. Ex. 1 at 7.) As that provision makes clear, "AEP Ohio, not its customers, would be responsible for the adjustments made to the PPA Rider based on actions deemed unreasonable by the Commission, including any costs (after proper consideration of such costs and netting of any bonus payments) associated with performance requirements in PJM's markets."

Thus, while the costs are expected to be equaled or exceeded by market revenues over the PPA term, there are significant costs flowing through the PPA Rider – thus significant financial risk on AEP Ohio for retail cost recovery. Although there is no direct or specific financial upside to AEP Ohio related to the PPA transaction, the Company supports the approach in order to facilitate economic growth and assist customers in its service territory. As President Pablo Vegas testified, "fundamentally what drives AEP Ohio's long-term success is a successful energy economy in Ohio so that its customers can grow, invest, we can attract businesses, things of that nature. So AEP Ohio experiences a benefit through that outcome of this proposal, but not directly financial to the terms of the contract as you described it." (Tr. I at 211-12.) In any case, the rigorous review of costs being passed through the PPA Rider exposes AEP Ohio, not its customers, to the risk of disallowance. Under the Stipulation, there are additional risk allocations that are pertinent to this discussion.

For example, another benefit in this regard on the customer side is the long-term viability of the PPA units. As AEP Ohio President Vegas explained with respect to the generation units that his organization operated until 2014:

[T]hat segment of the business is performing profitably and performing very well, and in the last couple of years if you look at the performance of that unregulated generation segment, it's created a lot of profit and a lot of earnings, of which under a PPA would have been returned to customers.

So it's not an issue about these units and these plants not having the potential to perform profitably and so we are trying to off-load that risk to customers. It's that the ownership of those plants and the uncertainty and the inability to make long-term investment decisions because of the fact that the market doesn't operate consistently, and we've seen that over the last many years, is that's why AEP is offering these units into a longer-term structure that essentially caps the profit of what AEP can earn on them, but it ensures that they'll be able to continue to operate predictably for a long time.

(Tr. I at 236.) This is another aspect of the PPA Proposal demonstrating that risk is properly balanced.

During his cross examination, AEP Ohio witness Vegas agreed that ROE is an area for potential risk allocation. (Tr. I at 254.) While AEP Ohio was not willing at that time to accept a reduced ROE in order to share risk, that position changed as a result of the settlement negotiations that led to the Stipulation. Consequently, another risk taken on by AEP Ohio and AEPGR is their voluntary agreement to a substantially lower ROE under the Stipulation version of the PPA – by reducing the maximum ROE by several hundred basis points to 10.38%. (Jt. Ex. 1 at Att. A.) Although it may turn out that AEPGR's required ROE exceeds 10.38% during the term of the PPA, that risk is borne by AEPGR and will not be passed through to AEP Ohio or its retail customers.

Last but by no means least, one of the most significant risks that is explicitly taken on by AEP Ohio could be the \$100 million credit obligation that AEP Ohio agreed to take on in Section III.A.3 of the Stipulation. As explained in more detail in Part VI.B.3.a.iv, *infra*, the

customer credit commitment conveys a significant benefit to customers. Accordingly, the PPA Rider proposal properly allocates financial risk between AEP Ohio and its customers, as contemplated in the *ESP III Order*.

### d. Fourth Requirement: A severability provision to continue the ESP in the event the rider is invalidated.

As the fourth requirement, the *ESP III* Opinion and Order indicated (at 25-26) that AEP Ohio should provide for severability in the event that the PPA Rider is invalidated by a court of competent jurisdiction. In the Stipulation, Signatory Parties included a severability provision that satisfies the Fourth Requirement. Section IV.D of the Stipulation provides in pertinent part:

If a court of competent jurisdiction invalidates the application of the PPA Rider proposal in whole or in part, the Company will permit any part of the Joint Stipulation that has not been invalidated to continue while a good faith effort is made by the Signatory Parties to restore the invalidated provision to its equivalent value. The Signatory Parties agree to work in good faith, on an expedited basis not to exceed 60 days, to cure any court-determined deficiency. The Company will then file (or jointly file with Signatory Parties) the modification to the PPA Rider, or its successor provision, for expedited approval by the Commission, which approval shall not be withheld if the modified PPA Rider, or its successor provision, provides a reasonable remedy to cure the deficiency.

(Jt. Ex. 1 at 35.) Regarding this provision, AEP Ohio witness Allen also explained his lay understanding that the Commission would need to review any Supreme Court ruling and decide how to apply the severability provision. (Tr. XIX at 4743.) Thus, consistent with both the *ESP III* decision and the ESP statute, the Stipulation's severability approach will ensure that *ESP III* will continue in an orderly fashion in the unlikely event that a court invalidates the PPA Rider. The Commission should adopt the Stipulation's severability provision.

- B. The provisions in the Stipulation, as a package, benefit ratepayers and the public interest.
  - 1. Based on the evidence of record, customers are expected to sufficiently benefit from the Rider's financial hedging mechanism.

In deciding without prejudice not to accept the OVEC-only PPA proposal, the ESP III decision (at 23) considered as a critical component whether, based on the record evidence, the Stipulation's PPA Rider proposal is reasonable and whether customers would, in fact, sufficiently benefit from the Rider's financial hedging mechanism. Of course, even if there is an expected net cost, there may be other offsetting benefits related to other factors that can render the overall impact a net benefit. Ultimately, the ESP III decision found (at 25) that it was "not persuaded, based on the evidence of record in these proceedings, that AEP Ohio's PPA Rider proposal would provide customers with sufficient benefit from the rider's financial hedging mechanism or any other benefit that is commensurate with the rider's potential cost." In any case, while an effective hedge does not have to ensure a quantitative financial benefit in order to convey value (just like an insurance policy), the expected financial cost or benefit is certainly relevant and important. Of course, even if there is an expected net cost, there would be other offsetting benefits related to other factors that can render the overall impact a net benefit – such as transmission upgrade cost avoidance and retained economic development benefits for Ohio's economy. OEG witness Baron testified to his experience with hedges in the gas industry and opined that there is value to a hedge even if it ends up as a net cost to customers. (Tr. XI at 2999-3000.) Based on the evidence of record, however, customers are reasonably expected to receive a net financial benefit overall for the period covered by the financial projections.

a. The record evidence demonstrates that there is a reasonable expectation of a long-term financial benefit from the proposed PPA Rider.

The record evidence demonstrates that there is a reasonable expectation of a long-term financial benefit to customers from the proposed PPA Rider. In that regard, AEP Ohio witness Pearce developed forecasts of revenues and costs under the version of the PPA Rider proposed in the Amended Application. (AEP Ohio Ex. 3 at 11-20.) In order to prepare those forecasts, Dr. Pearce relied upon various data, including the supporting information provided by AEP Ohio witnesses Bletzacker (a long-term forecast of PJM wholesale power prices) and Hawkins (the appropriate capital structure and return on equity for use in the Affiliate PPA, initially set at 11.24%). (Id. at 11; Tr. II at 543; AEP Ohio Ex. 53, Ex. WAA-2 (impact of lowering ROE from 11.24% to 10.38%).) The market revenues and variable costs of production for the generating units were based on a generation forecast for each Unit prepared utilizing the simulation model PLEXOS®. PLEXOS® is an hourly, chronological, production cost model that AEP uses to forecast the dispatch of units in the PJM power market. PLEXOS® utilizes assumptions for each Unit's cost of energy (e.g., fuel, fuel handling, variable operations & maintenance, consumable costs and emission allowance costs, if any), scheduled maintenance outages, and forced outages along with forecasted market prices of energy (provided by Mr. Bletzacker) to determine forecasted generation output, costs and energy revenues for each Unit. (*Id.* at 11-12.)

The results of Dr. Pearce's forecasts for the generating units whose costs and revenues are included in the PPA Rider are displayed in Exhibit KDP-2 to his Direct Testimony, AEP Ohio Exhibit 3. AEP Ohio witness Allen then provided a revised version of Dr. Pearce's analysis, modified primarily to incorporate the changes wrought by the Stipulation. Specifically, Mr. Allen's Settlement Exhibit WAA-2 modified Exhibit KDP-2 by shortening the period under analysis to January 1, 2016 through May 31, 2024 (to be consistent with the end of the term for

the PPA Rider under the Stipulation), reducing the return on equity used to determine PPA costs from a formula rate set initially at 11.24% to a fixed 10.38% for the term of the PPA Rider (also required by the Stipulation), and incorporating the results of PJM's recent Capacity Performance auctions for the 2016/17, 2017/18, and 2018/19 delivery years. (AEP Ohio Ex. 52, Att. A, Items 1 & 2; AEP Ohio Ex. 52, Ex. WAA-2; Tr. XVIII at 4568-69.)

While AEP Ohio's forecast analysis cannot be easily boiled down to a single set of numbers or portrayed as a guarantee of the financial result over an extended number of years, it is the most reliable and credible forecast available and can reasonably be relied upon by the Commission in making a finding of the expected financial impact of the PPA Rider. In a similar fashion to how Dr. Pearce summarized his original Ex. KDP-2 results in Table 1 of his testimony (AEP Ohio Ex. 2 at 5), the summary of Mr. Allen's updated analysis in Settlement Exhibit WAA-2 can be presented as follows:

### PPA Rider Forecast using average of high load and low load cases Total January 2016 - May 2024 (\$Millions)

PJM Revenues (incl. PJM Capacity Performance) \$10,819
PPA Rider Costs\* \$10,097
Net PPA Rider Credit \$721
\* PPA Rider Costs include \$620 million dollars of carbon tax expense

AEP Ohio's underlying financial projections were performed in detail to capture the range of impacts that load volatility can have on the resulting PPA Rider revenues and costs. Accordingly, AEP Ohio examined four different scenarios: (1) a case with a five percent increase in load, compared to the weather normalized case, (2) an average of five percent increase and five percent decrease in load for reach year, (3) a weather normalized load case, and (4) a case with a five percent decrease in load. Each case included scalars which are factors used to provide the hourly and daily weather volatility based on historic multiple year averages. (AEP

Ohio Ex. 3 at 12.) These loads and prices were then modeled to forecast unit dispatch under the various scenarios. (*Id.* at 11.)

AEP Ohio performed three cases (weather normalized load, 5% lower load and 5% higher load) to show what can happen when loads differ from normal, such as during severe winter or summer seasons or due to other factors such as changes to the economy. (AEP Ohio Ex. 2 at 13.) In that sense, each of the years shown can be considered as its own one-year forecast for a range of three results. The 5% higher load and lower load cases done to demonstrate the true hedge value of the PPA Rider – by showing that weather and other load variability factors can have an asymmetric impact on electric prices. During mild periods, energy has a "floor" cost for units to run and recoup their variable costs – even the most efficient, lowest heat rate units. On the other hand, times of high load, caused by abnormal weather or other factors, and potentially exacerbated by other issues such as fuel supply congestion, can result in extremely high prices above this floor. (AEP Ohio Ex. 2 at 13.)

More specifically, the nominal energy price cap in PJM is currently \$1,000 per Megawatt-hour (MWh). However, during shortage events, when real-time reserve margins are below the PJM target levels, energy prices can go as high as \$2,700/MWh beginning with the PJM 2015/16 delivery year that begins June 1. What is clear from these forecasts is that such volatility and variation from the norm drives an asymmetry in prices. In other words, compared to a given weather-normalized case, load shifts up tend to increase prices more so than the price decreases that may result when load shifts down. (AEP Ohio Ex. 2 at 13-14.) Indeed, the ESP III decision already recognized this principle in finding that "there may be value for consumers in a reasonable PPA rider proposal that provides for a significant financial hedge that truly

stabilizes rates, *particularly during period of extreme weather*." *ESP III*, Opinion and Order at 25 (emphasis added).

AEP Ohio witness William Allen, who addressed the retail impacts of the PPA Rider, further elaborated why the average of high and low load cases is appropriate as an overall view of the potential PPA Rider impact during the study period:

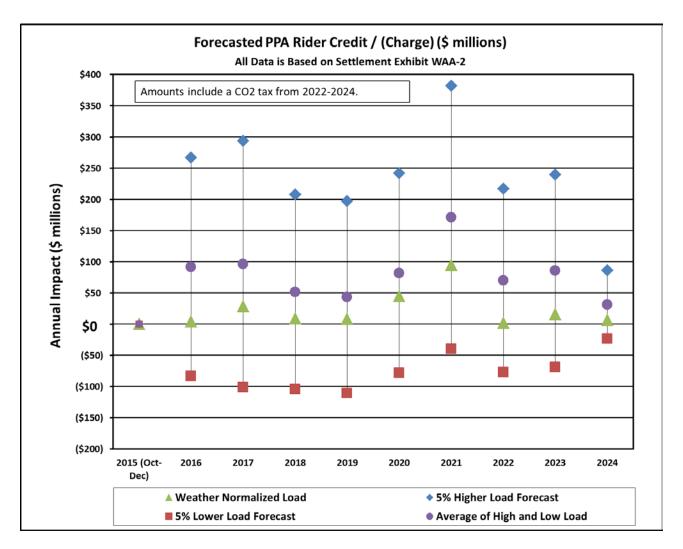
If the Commission is looking at the benefit of the PPA rider purely from a dollar and cents perspective over the forecast period, the number I would look at is the number between the 574 million and then the "Net with Maximum PJM Capacity Performance," so somewhere between 574 million and 1.5 billion as a benefit.

When you are looking at customer impacts, they should be looking at the weather normalized cases setting the base, and then the hedge benefits are what show up in the 5 percent higher load forecast and lower load forecast.

(Tr. XVII at 4388.) Mr. Allen went on to explain in more detail why the high and low load cases were important to review in considering the PPA Rider's true hedge value (as opposed to the overall net credit/charge question addressed by reviewing the average values over the study period):

We wouldn't charge customers a true-up or an annual rate based upon the average of the high and low load forecast cases. That case is there solely to provide the Commission an estimate of the net benefit over the entire period, not to identify what the hedge value is in any one period, the hedge value, and that's why we included the five higher and lower load forecast cases, to give an indication to the Commission of the value of the hedge that we are proposing here.

(Tr. XVII at 4405-06.) Thus, the 5% high and low load cases demonstrate the upward potential for customer benefit and the average net credit calculation is a reasonable value to rely upon over the study period as a likely overall result. In a similar fashion that Dr. Pearce graphically presented the four cases his testimony as Figure 1 (AEP Ohio Ex. 2 at 12), the summary of Mr. Allen's updated analysis in Settlement Exhibit WAA-2 can be graphically presented as follows:



AEP Ohio's analysis shows that the PPA Rider has more "upside" than "downside".

That analysis demonstrates that if loads increase due to weather volatility and/or a strengthening economy, AEP Ohio customers, both shopping and default service customers alike, will be exposed in an asymmetric manner to the resulting higher wholesale prices, which the PPA Rider will then partially offset. On cross-examination regarding his Stipulation testimony, Mr. Allen again summarized the asymmetric manner in which load increases lead to disproportionate increases in wholesale prices (and which Exhibit KDP-2 and Stipulation Exhibit WAA-2 confirm) as follows:

[Stipulation Exhibit WAA-2 is attempting to reflect] the range of outcomes that one would expect to occur over a number of years within PJM where, in some

years, the load is going to be higher than weather normal and some years it's going to be lower than weather normal, but trying to show the effect than an increase in load above normal has an asymmetric effect on market prices as compared to lower load in the market.

And so that's why we've shown the average of the high and low load forecast, even though they both reflect a 5-percent deviation from weather normal, the average, over that eight-year period, produces a little over \$500 million of additional revenue under that average of the high and low load forecast case [than the weather normal case], and that's what demonstrates the asymmetric pricing that exists within PJM as load changes.

#### (Tr. XVIII, at 4574.)

AEP Ohio customers were protected from the impacts of this asymmetry in the last decade when wholesale markets were very strong and very little shopping occurred because AEP Ohio had generation resources serving its customers at substantially lower cost than the prevailing wholesale market could offer. At present, though, AEP Ohio customers have no such cost-based hedge. (AEP Ohio Ex. 3, at 19.) Accordingly, they and other Ohio electric utilities' customers felt the effects of this asymmetry acutely during the Polar Vortex of the 2013-2014 winter, when colder-than normal weather served as confirmation of the risk that customers bear when they lack such a hedge. (AEP Ohio Ex. 6 at 5.)

Overall, the proposed PPA Rider captures the financial benefit of a diversified portfolio for AEP Ohio customers being a cost-based hedge, sourced from 20 generation units, against market prices. It provides a more balanced approach than relying solely on the market. (*Id.*) Moreover, it is likely to provide a financial benefit to AEP Ohio's customers over the long term.

## b. The Fundamentals Forecast of wholesale power prices sponsored by AEP Ohio witness Bletzacker is reasonable.

Dr. Pearce testified, as explained above, that AEP Ohio conducted a full dispatch modeling exercise to estimate the PPA Rider's financial impacts for the study period, which covered the period from the Fourth Quarter of 2015 through the end of 2024. AEP Ohio witness

Bletzacker, Director of Fundamentals Analysis for American Electric Power Service

Corporation, developed a Long Term North American Energy Market Forecast ("Fundamentals Forecast") that includes, among other things, monthly and annual locational power prices and capacity values. (AEP Ohio Ex. 6 at 3-4.) Mr. Bletzacker's Fundamentals Forecast covers the entire North American electricity market and, thus, the PJM power market. (*Id.*) As Dr. Pearce explained, the forecasted PJM market prices of energy that Mr. Bletzacker's Fundamentals Forecast produced is one of the assumptions utilized by the PLEXOS model to determine the forecasted energy revenues for each of the PPA units during the study period. The Fundamentals Forecast that AEP Ohio utilized for this proceeding was prepared and released by Mr. Bletzacker's Fundamentals Group for use by AEP's operating companies in the fourth quarter of 2013. (*Id.* at 4.) The 2013 Fundamentals Forecast's market energy and capacity values were used in Dr. Pearce's financial impact analysis for the PPA Rider that was included as part of AEP Ohio's Amended Application and testimony in this proceeding submitted on May 15, 2015.

Mr. Bletzacker confirmed that the 2013 Fundamentals Forecast released at the end of 2013 was the appropriate source of forecasted energy market and capacity prices to use in the financial impact analysis for the PPA Rider. He also addressed criticisms and suggestions that AEP Ohio should have used data from subsequent forecasts, such as the 2015 Fundamentals Forecast that was not completed and released until sometime after AEP Ohio's Amended Application and Testimony was filed May 15, 2015. First, as Mr. Bletzacker explained, the 2015 Fundamentals Forecast was not finalized and released, and thus was not available for use when AEP Ohio filed its Amended Application. (Tr. V at 1410.)

Second, both Mr. Bletzacker and Mr. Allen also addressed the criticism that AEP Ohio should have further delayed its Amended Application waiting until the 2015 Fundamentals

Forecast became available and then, once again, revised its Amended Application and Testimony. Mr. Bletzacker explained that the process of preparing Fundamentals Forecasts is an essentially continuous and iterative one. There is always another Fundamentals Forecast just over the horizon:

We can wait till the 2016 fundamentals come out or [the fundamentals for] the second half of 2015 and that will be another set of good numbers to take a look at. But within a band of credibility, the 2013 fundamentals look good.

(Tr. V at 1430-1431.) In other words, if AEP Ohio were to keep waiting for the next forecast to be completed and released, it would never be able to submit its Amended Application. As Mr. Bletzacker concluded: "So you have to stop the process somewhere and the 2013 Fundamentals is a fine place to stop." (*Id.*)

Mr. Allen reinforced this point as follows:

If we were to update the forecasted analysis each time a new forecast set of data was available, we would continue to update a forecast. We would have to go back through discovery for all parties to evaluate that new forecast. By the time all of that next review would be done there's new data that would change one of the forecast elements at a minimum which would require us to update it again. You would never get done so what you have to do in a regulatory proceeding you have to get a snapshot you have to stop at some point . . . .

### (Tr. XVIII, at 4667.)

It is appropriate to rely upon information that is available when an application is filed, and it is accepted practice in regulatory proceedings to do so. The use of a historical date certain for valuation of rate base and a test year synchronized to the date certain, both of which end up becoming historical as a result of the time taken to complete the regulatory process are but two examples of this practice in the ratemaking context. That practice recognizes that in regulatory proceedings there will always be a lag between the initiation of the proceeding and the time when the regulator makes its decision. Accordingly, AEP Ohio did in this proceeding the same thing it ordinarily does, which is to use the forecast available when it makes its filing and then

continue to rely upon that forecast through the course of the proceeding. (Tr. XVIII at 4667.)

As Mr. Bletzacker and Mr. Allen explained, it is appropriate to rely upon the information available when an application is filed. As they also explained, any other approach would result in regulatory paralysis.

A rule of reason must be the standard. In that regard, Mr. Bletzacker confirmed the reasonableness of AEP Ohio's use of the 2013 Fundamentals Forecast in this case. He specifically stated that, to the extent that Dr. Pearce (and, thus, Mr. Allen) relied upon the 2013 Fundamentals Forecast information to generate projections regarding the rider revenues and costs, those projections were "based on a forecast that's within what I would call a band of credibility." (Tr. V at 1432.)

c. OCC witness Wilson's financial projections of the net PPA Rider impact are flawed and should not be relied upon by the Commission.

OCC witness Wilson contends that AEP Ohio's estimates of the PPA Rider's net impacts on customers through 2024, set forth in Exhibit KDP-2 to AEP Ohio Exhibit 3, will lead to cumulative net costs, and thus charges to customers, through 2024 of \$2.0 billion, or \$1.6 billion on a net present value basis. (OCC Ex. 16 at 13, tbl. 2 (as revised by OCC Ex. 17).) In arriving at his alternative estimate regarding the net impacts of the rider, Mr. Wilson did not make any changes to the costs of the PPA units upon which Dr. Pearce's analysis relied. Instead, for his alternative estimate, Mr. Wilson changed AEP Ohio's hourly energy prices, and thus revenues, that the PPA units would realize from the sale of their output into the PJM energy market. Mr. Wilson believes that the hourly energy prices that Dr. Pearce used in the preparation of his Exhibit KDP-2 to his testimony (and which Mr. Allen used in his Exhibit WAA-2 to his testimony in support of the Stipulation), which are based on the 2013 Fundamentals Forecast that Mr. Bletzacker prepared, are speculative and should be replaced by prices based upon energy

forwards (or "futures") contracts. (OCC Ex. 16 at 51-52.) Thus, Mr. Wilson's criticism of Dr. Pearce's net impact analysis boils down to his belief that electric energy forwards contracts provide a more reasonable and reliable basis for accurately estimating future "spot" electric energy prices than AEP's 2013 Fundamentals Forecast does. As explained below, forwards prices do not provide a sound basis for forecasting future wholesale energy prices. Accordingly, Mr. Wilson's analysis should be rejected.

Mr. Wilson began his analysis of the PPA Rider's financial impacts with AEP Ohio's 5% Lower-Load Forecast scenario that Dr. Pearce sponsored. He then changed the hourly energy prices of that 5% Lower-Load scenario, replacing them with energy prices that he calculated based upon forward electric energy prices for the AEP-Dayton (AD) Hub. (OCC Ex. 16 at 51.) Specifically, Mr. Wilson accessed for PJM AD Hub Day-Ahead Calendar-Month 5 MW Peak and Off-Peak Futures (forwards) contract prices published by the CME Group on the website for its NYMEX trading platform as of September 5, 2015. (*Id.* at 51 n.19). He then scaled AEP Ohio's hourly energy prices to match, on average by month and peak/off-peak, the NYMEX AD Hub Day-Ahead forward prices that he accessed from CME Group's website. For months beyond October 2020, the period for which there are no Ad-Hub Day Ahead forward prices, he used the forward prices he found for November 2019 through October 2020. Next, he scaled AEP Ohio's hourly prices for each of the months of the post-October 2020 period to the forward price for the corresponding month of the November 2019 through October 220 period. <sup>13</sup> (*Id.* at 51-52; Tr. XV at 3817-3819.)

<sup>&</sup>lt;sup>13</sup> So, for example, the November 2019 forwards price was used as the forwards price for November 2020 and each subsequent November, the December 2019 price was used as the price for December 2020 and each subsequent December, and that process was used to manufacture forwards prices for use in the analysis for each of the last 50 months (November 2020 through December 2024) of the forecast period. (Tr. XV at 3817-3819.)

Mr. Wilson submitted Supplemental Direct Testimony for the Stipulation phase of the hearing in which he reiterated his original forwards-based analysis of the PPA Rider's financial impacts with only relatively minor changes to that original analysis. (OCC Ex. 35.)

Specifically, he updated the time period of his analysis to the January 1, 2016 through May 31, 2024 period (consistent with Mr. Allen's modified analysis in Exhibit WWA-2 to his testimony, AEP Ohio Ex. 52); updated the PPA's costs to reflect the revised ROE of 10.38%, consistent with the Stipulation; incorporated the recent RPM Capacity Performance auction results consistent with Mr. Allen's modified analysis in his Exhibit WAA-2; incorporated his view of the impact of the Stipulation's \$100 million PPA Rider Credit Commitment for the last four years of the rider; and, finally, updated the forward prices that he used in his analysis to the NYMEX AD Hub AD Hub forward prices reported by CME Group as of November 30, 2015. (OCC Ex. 35 at 9-10; Tr. XXII at 5488-89.)

Mr. Wilson's use of forwards prices to predict the net impact of the PPA Rider is fundamentally flawed in several ways, and the Commission should not rely upon them or Mr. Wilson's methodology. Both his original Direct Testimony (OCC Ex. 16) and his Supplemental Direct Testimony (OCC Ex. 35) suffer from the same basic flaws that result from their reliance on forwards prices as the basis for forecasting future long-term wholesale energy prices. First, forwards prices are not a forecast of future spot market prices. Rather, a forward price represents a price to which a buyer and seller agree based on their respective goals for that particular transaction, goals that have no connection to what future spot prices actually might be. Second, even if forwards prices were based on what transacting parties believe future spot prices will be, there are too few forwards transactions to provide a sound basis for relying upon them as estimates even of what forwards market participants believe about future prices except for short

periods in the very near term. Third, it is inappropriate to use forwards prices in the manner Mr. Wilson advocates because long-term futures contract prices are tied to volatility of *current* spot market prices, not factors relevant in the long term. Thus, forwards prices do not account for, among other things, the potentially very significant impact the Clean Power Plan Final Rule will have on energy prices in the future. Fourth, Mr. Wilson does not even rely upon forwards prices after October 2020 in his analysis because he does not believe that suitable forwards price information exists after that point. Instead, for the post-October 2020 period Mr. Wilson simply uses the monthly forwards prices he picked for the twelve-month period of November 2019 through October 2020 and then repeatedly recycles them as proxies for forward prices for the November 2020 through December 2024 portion of the period under analysis.

# i. Forwards prices are not a forecast of future spot market prices.

The basic premise of Mr. Wilson's adjustments to Mr. Bletzacker's wholesale energy prices and, thus, to Dr. Pearce's estimate of the PPA Rider's impacts is that forwards prices provide a reasonable and accurate forecast of long-term energy prices. That basic premise is not supportable, and it should be rejected.

Reliance upon futures contract pricing as a basis for long-term energy market forecasts is not appropriate. AEP Ohio witness Bletzacker explained that NYMEX and Intercontinental Exchange (ICE) energy futures contract pricing are not intended to be reliable forecasts of future, weather-normalized, long-term energy market fundamentals. Futures market participants are either speculating (placing bets) or escaping the volatility of energy prices through risk management activities (hedging). (AEP Ohio Ex. 50 at 2-3.) Mr. Bletzacker testified that NYMEX and ICE futures represent the price point(s) at which a buyer and seller can realize price certainty, but those commercial expectations do not represent economic principles of

demand, supply and the resulting price. He noted that energy consuming entities, which are on the buyer's side of the futures transaction, that have costs and revenues that move independently from one another may need to protect their businesses' margins through hedging activities, and the NYMEX and ICE futures markets can satisfy that need. On the other (seller's) side of the futures trade, for example in the case of a gas producer that is concerned about covering future exploration and production costs, a seller will also utilize futures market contracts to achieve its business objective. (*Id.* at 3.) Mr. Bletzacker explained that in a futures transaction while both sides of the transaction are satisfied with their hedged position, neither participant is then concerned with the actual future price of energy. (*Id.*) Consequently, by assuming that future pricing is connected to parties' expectations of what future spot market energy prices will be, Mr. Wilson makes a fundamental mistake that renders the remainder of his analysis unsuitable as a forecast of long-term energy prices and, thus, as a basis for estimating the financial impacts of the PPA Rider.

Another primary purpose of futures markets participants, unrelated to predicting future spot energy prices, is to capture price spreads between time periods and between different commodities. Mr. Bletzacker explained that hedging, or "locking in" price spreads between i) natural gas, propane and other natural gas liquids ("fractionation spread"); ii) natural gas and electricity ("spark spread"); and iii) coal and electricity ("dark spread") illustrate the widely accepted use of electric and gas energy futures contract prices to justify the capital and operating costs of certain physical assets, for example, gas and coal-fired electric generating units. (*Id.* at 3-4; Tr. V at 1470.) Once again, Mr. Bletzacker identified that the important business objectives that motivate energy futures markets participants are not connected, and do not reflect those participants' efforts to predict future spot prices of electric energy (or natural gas).

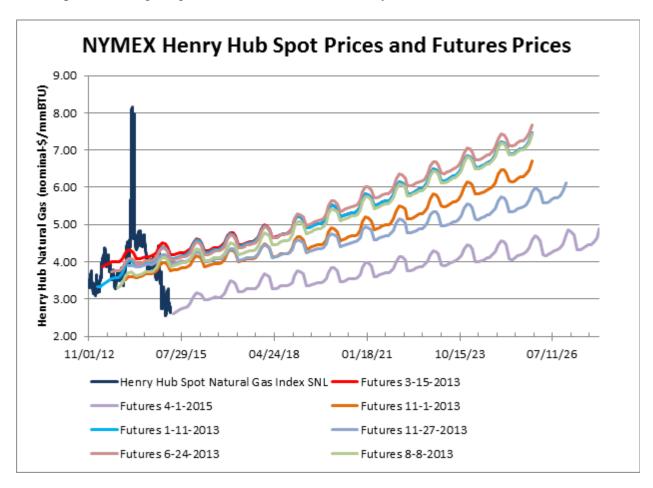
ii. The market for electric energy forwards is illiquid, except for the very nearby, short-term, period, and, therefore, cannot provide a sound basis for a long-term forecast in any event.

Open Interest (or the total number of open futures contracts of a given commodity) is extremely low, or zero, for NYMEX and ICE natural gas futures contracts beyond 2019 and PJM AEP Dayton Hub electric energy futures contracts beyond 2018. (AEP Ohio Ex. 50 at 4.) Notably, the Open Interest for NYMEX AD Hub Day-Ahead electric energy futures prices contracts, as reported by CME Group, declines to zero for the Off-Peak contract after May 2017 and declines to zero for the On-Peak contract after December 2017. (AEP Ohio Ex. 48 at 47.) Those are the futures contracts upon which Mr. Wilson states that his analysis is based. Mr. Bletzacker explained that the futures price propositions upon which Mr. Wilson relied upon for periods of little or no open interest do not reflect actual NYMEX or ICE transactions. (AEP Ohio Ex. 50 at 4.) Consequently, such price propositions are not the result of actual NYMEX or ICE futures contracts. Mr. Bletzacker also observed that should any attempt be made to purchase electric power or natural gas futures in such periods of little or no open interest, it would greatly increase demand for them and run up their prices. (*Id.*) Consequently, Mr. Bletzacker pointed out, the lack of futures market liquidity beyond the near term does not even provide clarity to the traditional energy futures market participants, let alone to outside observers such as Mr. Wilson attempting to forecast future energy market spot prices. (*Id.*)

iii. Energy futures market volatility is synchronized to volatility of current spot market prices rather than factors relevant to the long term.

Another reason why it is inappropriate to base forecasts of long-term energy market prices on energy futures contract prices is that the long-term futures prices are tethered to *current* 

spot market prices. Mr. Bletzacker illustrated this phenomenon, in the context of natural gas futures prices, through Figure 1 of his Rebuttal Testimony. (*Id.* at 5.)



As illustrated in Figure 1, long-term futures values follow the volatility of current (nearby) spot market prices. Mr. Bletzacker explained that because futures contract price propositions for periods of illiquidity in the futures contract price curve do not reflect actual transactions, there is considerable variation in futures market prices – even in a short timeframe. Mr. Bletzacker concluded that, unlike what Figure 1 shows happens in the case of energy futures prices, a judicious long-term energy market forecast should not be driven by nearby, short-term, events such as the 2014 Polar Vortex or the fact that futures markets are illiquid in the long term. (*Id.* at 4-5.) In short, futures prices cannot be reliably used as a basis for long-term market price projections.

Mr. Bletzacker also pointed out that the futures market prices that Mr. Wilson relies upon do not take into account the impact of the Clean Power Plan Final Rule or exhibit any salient inclusion of a CO<sub>2</sub> allowance price. Conversely, the 2013 Fundamentals Forecast that AEP Ohio relies upon in its analysis does include a \$15 per metric ton CO<sub>2</sub> allowance price on coal burned at Clean Power Plan Final Rule-affected coal-fired generating units. (*Id.* at 5-6.) Mr. Bletzacker explained that this allowance price in the forecast utilized by AEP Ohio results in a \$15 per MWh burden to dispatch costs which ultimately results in less total energy production.

Likewise, Mr. Bletzacker testified, a natural gas-fired combined cycle facility would realize an approximate \$7 per MWh burden in the forecast utilized by AEP Ohio. Mr. Bletzacker explained that this glaring exclusion of future CO<sub>2</sub> emission costs from futures contract prices, which affects Mr. Wilson's analysis, provides strong evidence that power and natural gas futures market participants, and the prices of the futures contracts that they enter into, have no ability to accurately forecast actual future spot market energy values. (*Id.*)

iv. Even Mr. Wilson's own analysis recognizes that suitable forwards prices are unavailable for nearly half of the period he analyzes.

As explained above, to the extent that Mr. Wilson's analysis of the PPA Rider's impacts is based upon actual NYMEX PJM AD Hub day-ahead futures contract prices reported by CME Group – which is what he said that he relied upon in his testimony (OCC Ex. 16 at 51 n.51) – there was no Open Interest for such contracts reported by CME Group after December 2017. This indicates a fundamental flaw in his approach, even if futures prices could be regarded as providing a suitable basis for forecasting future electric energy prices (and they do not provide a suitable basis for the many reasons provided above). Simply put, there is no CME Group data for actual NYMEX futures contract prices after 2017.

However, in addition, even Mr. Wilson concedes that there are no suitable electric energy futures prices available after October 2020. (Tr. V at 3819.) He confirmed that in the analysis he conducted for his Supplemental Direct Testimony, as was the case in his original Direct Testimony, he stopped using forward energy prices in that updated analysis after October 2020. (Tr. XXII at 5494.) This is a significant shortcoming even if one were to accept the premise of his approach that futures prices provide a suitable basis for a long-term energy market forecast. But Mr. Wilson never provides any explanation why, even under his assumption that futures prices do provide a reasonable basis for such a forecast, it is also reasonable to use futures prices from the twelve-month period November 2019 through October 2020 as the futures prices for the next 50 months. It is not reasonable to do so. Consequently, there is no basis at all, even under his approach, for the estimates he makes of the net impacts of the rider for the last 50 months of the analysis.

## v. Mr. Wilson did not test his results to confirm that they do not produce irrational results.

Finally, the adjusted wholesale power prices that Mr. Wilson's forwards-based analysis produced, which he used estimate the revenues that AEP Ohio would realize from the sale of the PPA Units' output into the PJM wholesale markets, led him to predict that the PPA Units would operate at extremely low capacity factors (*e.g.*, capacity factors of 22.5% for 2019 and 10.7% for 2022) and, thus, would provide very low wholesale revenues for AEP Ohio during the term of the PPA Rider. (OCC Ex. 35, tbl. 1; OCC Ex. 35, Ex. JFW-1; Tr. XXII at 5520.) But Mr. Wilson never tried to apply his method of forecasting wholesale prices to the operation of the entire PJM generation fleet to see what the results would be. (Tr. XXII at 5521.) Thus, he did not apply his forwards-based method of adjusting determining wholesale power prices to the entire PJM market to see how his adjusted prices would have affected the operation of the

generation fleet in that wider area. (Tr. XXII at 5522.) Without such a "sanity check", he has no idea whether his approach would produce the irrational result of the PJM generation fleet producing less power than the expected demand for the region. Mr. Bletzacker warned against the pitfalls of making adjustments to one aspect of a forecast without examining what the repercussions on other aspects, and the ultimate results, of the forecast would be, stating: "the relationships between all components [of the forecast] should be recognized and fitly jointed through iterative use of forecasting models to insure proper correlation." Clearly, Mr. Wilson did not heed this bedrock forecasting principle. Consequently, for this and all of the other reasons provided above, his methodology and recommendations should be rejected.

- 2. Including the proposed PPA in the PPA Rider has the unique potential to supplement the benefits derived from the staggering and laddering of the SSO auctions, and to protect customers from price volatility in the wholesale market.
  - a. The benefits of laddering and staggering are not enough to address market volatility.

AEP Ohio acknowledges that staggering and laddering provide some level of benefit for customers facing volatile prices in generation prices. However, more can be done beyond staggering and laddering to stabilize prices. The Commission agreed in the *ESP III* decision when it stated:

A PPA rider proposal, if properly conceived, has the potential to supplement the benefits derived from the staggering and laddering of the SSO auctions, and to protect customers from price volatility in the wholesale market;

There may be value for consumers in a reasonable PPA rider proposal that provides for a significant financial hedge that truly stabilizes rates, particularly during periods of extreme weather.

*ESP III*, Opinion and Order at 25. Company witness Allen testified that staggering and laddering may provide a benefit of smoothing out changes in the market prices in the short term, but that they are not capable of nor designed to address longer term changes in market prices in the same

way as the AEP Ohio PPA mechanism can. (AEP Ohio Ex. 10 at 7-8; AEP Ohio Ex. 51 at 2-3.) Mr. Allen provided an exhibit to his direct testimony showing the laddering and staggering of standard service offerings for the FirstEnergy Companies had limited the annual change in customer rates to less than \$6/MWh or less for the five years ending with the 2015/16 PJM planning year. (AEP Ohio Ex. 10 at 8; AEP Ohio Ex. 10, Ex. WAA-2.) Mr. Allen explained that the laddering and staggering may mask the impact on customers of rising market prices but it cannot offset those impacts like a PPA rider mechanism can. (*Id.* at 8.) Mr. Allen testified that auction prices for the 2015/16 planning year are approximately \$18/MWh or 34% higher than the same product for the 2014/15 planning year. (*Id.*)

The PPA mechanism provides a contrast to the masking of rate volatility provided by staggering and laddering. The PPA rider mechanism is intended to provide a hedge against changes in market prices over a longer period than a short ESP period to provide changes in market prices over that longer period and provide a true hedge for both SSO and shopping customers. (AEP Ohio Ex. 51 at 3.) The PPA rider construct also provides the offset to customer bills for both shopping and non-shopping customers, due to weather related increases in usage. (*Id.*) Mr. Allen explained his testimony with an example. He testified that in the first quarter of 2014 the average residential customer of AEP Ohio experienced an 18% increase in usage over the expected weather normal level of usage resulting in an increase in monthly bills of approximately \$15 (Columbus Southern Power Rate Zone) to \$22 (Ohio Power Rate Zone). (*Id.*) He went on to point out that conservatively assuming that the true-up value for the quarter was a \$54 million credit (AEP Ohio Ex. 2 at 18) and that each residential customer using 1,000 kWh per month would see a monthly credit of \$5.14 for three months (AEP Ohio Ex. 10). He pointed out that under this example, "residential customers would have seen a credit equal to

approximately a quarter to a third of the weather related increase that they experienced." (*Id.*) Mr. Allen testified that the PPA mechanism is likely to produce credits relating to time periods of extreme weather when mitigation is most beneficial because prices are most volatile. (*Id.*)

## b. The industry faces market volatility that can be minimized by the PPA Proposal.

The intervenor witnesses challenge the fact that the industry faces the risk of volatile prices. They provide testimony asserting that the risk of volatile prices is overblown or that certain competitive offerings will provide customers that protections needed to address any volatility that does exist. However, a review of the support provided for those claims show the intervenor testimony is without merit, and that the AEP Ohio PPA Proposal is needed to address market volatility.

Dynegy witness Dean Ellis provided extensive analysis in his pre-filed testimony that future prices would not be volatile. In fact, Mr. Ellis testified that the AEP claim concerning market volatility were repeatedly overstated and misleading. (Dynegy Ex. 1 at 17.) However, upon cross-examination it became clear that it was the testimony of Dynegy that was misleading the Commission. Mr. Ellis admitted on cross-examination that the data he provided in his testimony related to price volatility was a historical look and not based on the expectations of his company, Dynegy. (Tr. X at 2567.) That is a significant admission because the Dynegy expectations match and perhaps exceed those of AEP Ohio's position on market volatility.

On cross-examination Mr. Ellis was presented with an investor presentation comments by Dynegy executives including Dynegy CEO Robert Flexon, which exposed the Dynegy position expecting volatile markets and higher energy prices. Mr. Ellis admitted, as supported by the June 25, 2015 Investor Day Transcript (AEP Ohio Ex. 15), that Dynegy anticipated that the structural changes in the market from retirements would create a more volatile market and a less

stable power market as 2015 approached and therefore Dynegy deployed its balance sheet to expand into markets, like PJM, where the changes were occurring. (Tr. X at 2557; AEP Ohio Ex. 15 at 3.) The Dynegy corporate presentation went on to opine that "price scarcity premiums may be substantial and will become evident during high demand periods and system shortage events possibly as early as this summer, but certainly by the summer of 2016." (Tr. X at 2562; AEP Ohio Ex. 15 at 27.) In response to this expectation Dynegy declared that its position in 2017 is largely open and reflects their bias that the structural changes discussed would lead to higher energy prices and increased volatility that is yet to be recognized in forward markets. (Tr. X at 2563; AEP Ohio Ex. 15 at 27.) This conversation surrounded the actual investor presentation slide with a header that states "Volatile Power Prices" and a sub heading stating, "More volatile energy prices as reserve margins tighten." (Tr. X at 2563; AEP Ohio Ex. 16 at 63.) Dynegy CEO Robert Flexon summed up the company position in the investor call transcript when stating,"[s]o our fundamental thesis behind keeping the energy portion open is that supplyside is very different than what it has been and it is going to be stressed, it is going to cause volatility." (Tr. X at 2568; AEP Ohio Ex. 16 at 47.) Despite Mr. Ellis's testimony on behalf of Dynegy criticizing the AEP Ohio testimony as misleading and asserting a lack of volatility, he admits on cross-examination that he agrees with comments made by his CEO, Mr. Flexon, and those comments speak for the company. (Tr. X at 2568.) The Commission should treat Dynegy's true corporate position as Dynegy's actual position on price volatility. That position is clear that it expects price volatility and expects to profit off of that unstable market. This evidence explains Dynegy's vocal opposition to the rate stabilizing potential of the PPA Proposal and further justifies the rationale behind approving the Stipulation.

The arguments provided by P3 witness Cavicchi and Constellation witness Campbell asserting a lack of volatility are also without merit Mr. Campbell asserted at hearing that competition leads to price stability. (Tr. XV at 3689-3690.) A review of the offers available on the Apples to Apples website show's that Mr. Campbell's testimony is not consistent with historical data. (AEP Ohio Ex. 51 at 3-4.) AEP Ohio witness Allen provided an exhibit with his rebuttal testimony showing the average, minimum and medium offers for twelve month CRES offers. (Id. at 4, Ex. WAA-R1.) The analysis showed that the twelve month offers increased by 15.4% to 21.5% from January 2014 to April 25, 2014 (a period of only 109 days). (*Id.*) Mr. Allen also showed the same data for twenty-four month offers and found the offers increased by 12.4% to 15% over the same period. (*Id.*) He also reviewed the change in CRES offers over a period of twelve months. The CRES contracts offers changed in the average, minimum and median between January 6, 2014 and January 2, 2015 in a range from an increase of 21.4% to 27.6%. (Id.) Mr. Allen testified that these changes provide clear and fact based evidence that competition does not necessarily lead to the price stability Mr. Campbell claims. (Id.) Mr. Allen points out that CRES offers can take the form of price increases or decreases. (Id.)

Mr. Allen also addressed the argument that competition leads to price stability by reviewing standard service auctions. He pointed out that the FirstEnergy Ohio service territories saw auction prices change by over 9% for three of the eight products. (*Id.*) Mr. Allen pointed out that the 12- month auction product for delivery in 2014/2015 PJM planning year from the January 28, 2014 auction was \$4.92/MWh or 9.7% higher than a similar auction for the same produce that occurred on October 1, 2013. (*Id.*) The 24-month product saw an increase of \$8.32/MWh or 13.7%. (*Id.*) P3 witness Cavicchi agreed that reviewing the FirstEnergy territory experience was a proper comparable offering to determine volatility because of the auction

history in that territory compared to the short time in the AEP Ohio territory. (Tr. XIV at 3523.) Mr. Allen did review the recent AEP Ohio auction results and determined that volatility exists. (AEP Ohio Ex. 51 at 5.) He reflected how over just 10 business days, that the auction clearing prices for the one, two and three year products increased by 3%, 2.2% and 1.4% respectively. (*Id.*)

P3 witness Cavicchi's arguments seeking to minimize the market volatility are equally without merit. Mr. Cavicchi claims that price volatility may be high for daily energy supply but that it not the same for the long term supply. (P3/EPSA Ex. 1 at 11.) Mr. Cavicchi also argues that the volatility of one-year energy prices is only approximately 7% that of daily energy prices. (*Id.* at 12.) AEP Ohio witness Allen responded directly to these points in his rebuttal testimony. He agreed that hourly prices are more volatile but that should not diminish the importance of recognizing that long term energy prices are still quite volatile. (AEP Ohio Ex. 52 at 7.) Mr. Allen provides a chart and a supporting exhibit showing that the year-over-year change in the PJM real time load weighted LMP often ranges from 15% to 45%. (*Id.* at 8, WAA-R3.)

Constellation/Exelon witness Lael Campbell disagrees with the fact that there is a lack of options for customers to hedge against volatile market prices. He asserts that CRES providers can offer fixed contracts to remedy market volatility concerns. (Exelon Ex. 1 at 17-18; Tr. XV at 3696.) In particular, Mr. Campbell cites to his own company, Constellation as offering a solution. Specifically, he states that Constellation offers a three year fixed price and asserts that those customers know exactly what their cost for competitive power will be for the next three years, but that the PPA rider erases that certainty. (Exelon Ex. 1 at 18.) However, a closer look at the terms and conditions of the standard Constellation contract offer on the Apples to Apples website shows that the so-called "fixed price contracts" that he points to as providing certainty

do not fit his characterization. AEP Ohio presented Mr. Campbell with the contract on cross-examination, marked in the record at AEP Ohio Exhibit 41. This exhibit includes the following term:

Change in Pricing and Other Terms. In addition to Constellation's right to revise the price, terms and conditions of this Contract as provided in the "Renewal" section above, this Contract may be revised at any time by Constellation upon the occurrence of any event beyond its reasonable control that materially increases the obligations of Constellation or the cost of performing such obligations under this Contract. If we request such a change, Constellation will provide you notice of the changed prices and/or terms and conditions and you will have an opportunity to terminate this Contract without any further obligation by notifying us in writing within 30 days after the date of the notice of the new prices and/or terms and conditions, in which case your retail electric service will terminate effective as of the next meter read date after expiration of the required notice period. You will remain responsible for any unpaid balance as of the termination date but we will not assess a termination payment.

### (AEP Ohio Ex. 41 (emphasis added).)

The language of Constellation's own standard contract on the Apples to Apples link makes it clear that the CRES offers contemplated by Mr. Campbell do not provide the certainty he testified to in his direct testimony. When faced with the actual language of the Constellation contract, Mr. Campbell had to admit that the language allows Constellation to change the price if there is any event beyond the reasonable control of Constellation. (Tr. XV at 3708.) He also admitted that the language allows for a change if something materially increases the obligation of Constellation or the cost of performing the contract. (Tr. XV at 3709.) His argument that the "fixed price contracts" are the answer to market volatility is without merit. Mr. Campbell's testimony is even further undermined by the fact that he did not actually review the terms and conditions of any fixed contracts to make the statements in his testimony. (Tr. XV at 3706.) In fact, all Mr. Campbell did to provide the Commission his testimony that "fixed price contracts" can deliver the promises expressed in his testimony was to review the offers on the Apples to

Apples website. (*Id.*) A review of the terms in Mr. Campbell's own company's contracts show that his testimony is unreliable.

AEP Ohio witness Allen did look further into the CRES "fixed price contracts" and discovered that the fixed price promised by the CRES providers is not so fixed after all. Mr. Allen reviewed the standard contract terms available to the general public by linking to the offers provided on the Apples to Apples website in his rebuttal testimony. (AEP Ohio Ex. 51 at 5-7.) Mr. Allen reviewed, and provided as attachments to his rebuttal testimony, the standard available contracts for four CRES offers on the Apples to Apples website at the time of preparing his testimony filed on October 27, 2015. (Id. at 6.) Mr. Allen highlighted the "not-so fixed" provisions of the Constellation contract discussed above with Mr. Campbell, showing customers are at risk for volatile market pricing under that contract. (Id.) Overall, the CRES contracts he reviewed indicated that providers have the ability to modify the pricing due to changes in laws or regulations or other events outside of their reasonable control that materially increases their obligations or cost of performing. (Id. at 5.) Mr. Allen provided an example of the type of event that could change a customer's deal under the Constellation contract. He pointed out that under the Constellation provisions, the recently enacted PJM capacity performance product for planning years 2016/2017 and 2017/2018 would qualify as an event to trigger a change or cancelling of the contract. (Id. at 6.) Mr. Allen pointed out that this industry update is beyond the normal change of law provisions included in many contracts. (Id.) Conversely, Mr. Allen points out that under AEP Ohio's proposal, the same increase in PJM capacity costs would result in an increase in capacity revenues for the PPA units which would be credited to customers through the PPA rider, helping to offset the increase passed through by CRES providers. (*Id.*)

- 3. The Stipulation advances the public interest and conveys significant benefits to customers that advance Ohio energy policies.
  - a. The Stipulation's modifications to the PPA and PPA Rider components of the Amended Application, found in Section III.A, provide significant benefits.

Section III.A of the Stipulation conveys several significant benefits. Sections III.A.5.a and 5.b are addressed separately in Parts VI.A.5.a and 5.b, *supra*, as part of the *ESP III* decision factors of consideration), but this part of the brief will address the balance of Section III.A. As summarized below, the most significant benefits conveyed in Section III.A include: (i) the voluntary amendments to the proposed PPA are beneficial to customers; (ii) the inclusion of both OVEC and the Affiliate PPA in the PPA Rider combine to provide a meaningful and significant financial hedge for all customers; (iii) the additional PPA Rider credits provide a substantial benefit to customers, even if the PPA Rider ends up being a net charge for one of the first four years covered; (iv) the initial \$4 million annual credit and the well-considered rate design are improvements conveyed under the Stipulation; and (v) the regulatory approvals and reporting commitments in this section provide additional protections for customers. (Jt. Ex. 1 at 4-9.)

#### i. The voluntary amendments to the PPA are beneficial.

The voluntary changes to the PPA contract between AEPGR and AEP Ohio, as outlined in Attachment A to the Stipulation and reflected in full contractual detail in the redlined PPA contract, are significant improvements from a retail customer perspective that convey additional benefits. (Jt. Ex. 1, Att. A; P3/EPSA Ex. 10.) The revised Affiliate PPA used Sierra Club Exhibit 2 (the PPA contemplated in the Amended Application) as the starting point and included the following changes as reflected in P3/EPSA Ex. 10 (the updated PPA contemplated in the Stipulation):

- 1. The Delivery Period will begin when AEP Ohio voluntarily signs the Revised Affiliate PPA (anticipate immediately upon Stipulation approval) and extend through May 31, 2024.
- 2. The ROE ("Return on Equity" as referenced in the Affiliate PPA) will not be variable, but will be fixed for the Delivery Period at 10.38%, with Seller's Debt Percentage and Seller's Equity Percentage both to remain at 50%.
- 3. Article V will be updated to replace the exit fee based on net book value plus closing/retirement costs with a reduced liquidated damages provision for the early termination of the Agreement under Section 2.3, that being an annual payment equal to the most recent 12 months of actual fixed costs (*i.e.*, the payments made under Article V less Section 5.2 Fuel Payments) for the shorter of i) three years, or ii) the remainder of the Delivery Period, minus the amount of Seller's forecasted net revenues for Capacity (based on cleared BRA prices) during such shorter period. Section 2.3 will also be modified to clarify that upon discontinuation of retail cost recovery by the Commission, Buyer may exercise right to terminate PPA under Section 2.3. Finally in this regard, Section 2.4 will be removed from the Revised Affiliate PPA.
- 4. Provisions in PPA Article XIII will be updated consistent with the Stipulation.
- 5. The 2014 date references, Table of Contents, Schedule A will be updated and any other administrative changes needed to presently execute the contract will be made.

(Jt. Ex. 1 at Att. A.) If the Commission approves the Stipulation and the prudence of AEP Ohio entering into the Revised Affiliate PPA, AEP Ohio witness Allen expects P3/EPSA Exhibit 10 would be the form of the agreement that would be signed without the redlining. (Tr. XVIII at 4477.)

While each of the first four items on the above-quoted list is ultimately beneficial to retail customers, the most significant item on the list of changes is the ROE reduction. The Amended Application had originally included a term through the life of the Affiliate PPA units (extending to 2051) and a ROE with a starting point of 11.24% (but an upward range up to a 15.9% ROE), as well as including the OVEC entitlement in the PPA Rider through 2040. (AEP Ohio Ex. 2, Ex. KDP-1 at 7; Sierra Club Ex. 3 at 18.) So the much lower ROE of 10.38%, coupled with the more limited term, provides quantifiable value. Conservatively, just measuring the difference between the starting point ROE of 11.24% and the now-fixed 10.38% for the abbreviated term

yields an \$86 million savings. (AEP Ohio Ex. 52, Ex. WAA-2.) In short, the voluntary PPA contractual changes agreed to by AEPGR and AEP Ohio provide significant additional value to retail customers.

#### ii. The PPA Proposal is now a significant hedge.

Inclusion of both the OVEC contractual entitlement and the Affiliate PPA creates a significant hedge that adds value to the PPA Rider construct. The *ESP III* Opinion and Order (at 25) adopted the empty PPA Rider because it found that a subsequent PPA filing by AEP Ohio "has the potential to supplement the benefits derived from the staggering and laddering of the SSO auctions, and to protect customers from price volatility in the wholesale market." It recognized that "there may be value for consumers in a reasonable PPA rider proposal that provides for a significant financial hedge that truly stabilizes rates, particularly during periods of extreme weather." *Id.* The Commission thus determined that it was necessary and appropriate to establish the PPA Rider now and preserve the option to subsequently include PPAs based on future determinations to be made in separate proceedings – *i.e.*, in the case at bar. The evidence of record shows that the combined hedge provided by the OVEC and Affiliate PPA agreements being reflected in the PPA Rider is significant and effective.

AEP Ohio witness Allen testified that the approximately 3,100 MW of capacity under the PPA Proposal constitutes about 30% of AEP Ohio's connected load, thereby significantly displacing the volatility of market rates for the entire customer base. (Tr. XX at 4978.) As Mr. Allen's direct testimony also showed, the laddering and staggering of SSO auctions for the FirstEnergy Ohio companies has limited the annual change in customer rates to less than \$6/MWh or less for the five years ending with the 2015/16 PJM planning year. While this laddering and staggering approach may mask the impact on customers of rising market prices it cannot offset those impacts in the same way that the PPA Rider mechanism can. Auction prices

for the 2015/16 planning year are approximately \$18/MWh or 34% higher than the same product for the 2014/15 planning year. (AEP Ohio Ex. 10 at 8, WAA-2.)

Moreover, as demonstrated in Table II of AEP Ohio witness Dr. Pearce's direct testimony, the PPA Proposal with OVEC and the Affiliate PPA combined would significantly reduce the impact of volatile wholesale market rates (this table was based on the original PPA Proposal prior to the change made in the Stipulation but remains illustrative of the rate volatility mitigation effect of the PPA Proposal):

Item	<b>2015</b> (Oct-Dec)	2016	2017	2018	2019	2020	2021	2022	2023	2024	Avg.
Without PPA Rider											
1 +5% Load ATC Price	\$39.6	\$56.3	\$60.1	\$57.7	\$58.0	\$60.0	\$66.1	\$72.8	\$74.5	\$74.3	\$61.9
2 -5% Load ATC Price	\$33.9	\$40.1	\$40.5	\$42.3	\$42.7	\$44.3	\$45.7	\$59.1	\$59.5	\$61.0	\$46.9
3 Average	\$36.7	\$48.2	\$50.3	\$50.0	\$50.4	\$52.2	\$55.9	\$66.0	\$67.0	\$67.7	\$54.4
4 Spread	\$5.7	\$16.1	\$19.6	\$15.4	\$15.3	\$15.8	\$20.4	\$13.7	\$15.0	\$13.2	\$15.0
With PPA Rider											
5 +5% Load ATC Price	\$40.9	\$51.4	\$54.6	\$52.8	\$53.3	\$54.8	\$57.7	\$68.2	\$69.3	\$69.9	\$57.3
6 -5% Load ATC Price	\$36.3	\$43.3	\$44.1	\$44.5	\$45.1	\$46.3	\$46.8	\$61.1	\$61.2	\$62.5	\$49.1
7 Average	\$38.6	\$47.3	\$49.3	\$48.7	\$49.2	\$50.5	\$52.3	\$64.6	\$65.3	\$66.2	\$53.2
8 Spread	\$4.6	\$8.1	\$10.5	\$8.3	\$8.3	\$8.5	\$10.8	\$7.1	\$8.1	\$7.4	\$8.2
9 PPA Impact on Spread	(\$1.0)	(\$8.0)	(\$9.0)	(\$7.1)	(\$7.0)	(\$7.3)	(\$9.5)	(\$6.6)	(\$6.9)	(\$5.9)	(\$6.8)

(AEP Ohio Ex. 2 at 16.) The updated PPA Proposal fits the bill described by the Commission in its *ESP III* decision as providing value for consumers through a reasonable PPA rider proposal that provides for a significant financial hedge (30%) that truly stabilizes rates, particularly during periods of extreme weather.

#### iii. The PPA Rider credit commitment conveys a significant benefit.

As referenced above, Section III.A.3 of the Stipulation includes significant commitments by AEP Ohio to provide PPA Rider credits of up to \$100 million. (Jt. Ex. 1 at 5.) For the last four planning years of the PPA term, AEP Ohio will "back up" the normal operation of the rider in the manner spelled out in Section III.A.3. For example, if the unadjusted PPA Rider credit were \$5 million in Planning Year 2020/2021, then AEP Ohio would provide customers an

additional credit of \$5 million, resulting in a net credit of \$10 million. Alternatively, if, in that same planning year, the unadjusted PPA Rider charge were \$16 million, then AEP Ohio would provide an additional credit of \$10 million to customers, resulting in a net charge of \$6 million. To further illustrate, if in that same planning year, the unadjusted PPA Rider charge were \$5 million, then AEP Ohio would provide an additional credit of \$10 million, resulting in a net credit of \$5 million. (*Id.*) Thus, if the actual revenues experienced under the PPA Rider are at a level that would otherwise impose a charge (or a larger charge) without the credit commitment, customers will realize a tangible and quantifiable financial benefit. In effect, the credit commitment serves as an insurance policy on the hedge – making it even more valuable to customers.

As a related matter, these customer credit commitments are designed to "encourage AEP Ohio to exercise its contractual rights under the Affiliate PPA to ensure that the PPA Units are managed efficiently, cost-effectively, and with maximum market profitability." (*Id.* at 5.) As AEP Ohio witness Allen explained, these efficiency incentives (and the associated risks) tied to the final four years of the PPA term "primarily relate to the cost of coal to be consumed at the PPA units, other O&M-related costs at the PPA units, capital costs, the whole suite of costs that exist at these PPA units and the decision making AEP Ohio has under its contract with AEPGR. (Tr. XVIII at 4525.) Mr. Allen also pointed out that "[t]he traditional incentives for AEP Ohio to ensure that the units are managed efficiently, cost-effectively . . . [and] with maximum market profitability, exist in the first four years as well. And so those are the incentives. The normal incentives that the company has to act in a reasonable and prudent manner exist in the first four years just as they do in the last four years." (Tr. XVIII at 4653-4654.)

In short, this credit commitment could convey up to \$100 million of quantifiable benefits to customers through operation of the PPA Rider in addition to incentivizing AEP Ohio to ensure efficient operations and maximize revenues for the benefit of customers.

#### iv. The initial PPA Rider credit of \$4 million annually and the rate design are beneficial improvements.

Section III.A.4 of the Stipulation provides that the initial PPA Rider rate will be set at a \$4 million credit for 2016 (annualized) subject to reconciliation. (Jt. Ex. 1 at 6.) If the Stipulation is adopted, the rider would be implemented at the same time that delivery under the PPA begins – so if that happens before April 1, for example, the rider would begin on April 1 and it would be a credit of \$4 million on an annualized basis as described in Mr. Allen's testimony. (Tr. XVIII at 4480.) Under that example, the earliest the PPA Rider rate would be adjusted through reconciliation would be the Fourth Quarter of 2016. (Tr. XIX at 4725.) So, the Stipulation's annualized initial PPA Rider rate of \$4 million provides a benefit to customers.

The new and improved rate design is also fair to all customers and is, thus, beneficial and reasonable. Specifically, Section III.A.4 provides that the credits and charges will be allocated to the rate classes/voltage levels based upon their five monthly coincident peak demands for the prior year, and then billed through a kWh charge for each rate class/voltage level. (Jt. Ex. 1 at 6.) AEP Ohio witness Allen further explained the rate design based upon the PJM 5 CP represents the five peak hours on five separate days in the PJM region that set the days:

[F]or each one of those, the peak hours, we would look at the peak of each one of the rate classes/voltage levels that are listed in [Section III.A.4] and identify the peaks for each one of those groups on each one of those hours and average those peaks and then look at the percent that each one of those groups had as compared to the total for AEP Ohio. And that would identify the percentage allocation to each class of the PPA rider credits or costs. And that's also shown on a workpaper that was provided to all the parties in the case. Once the costs are allocated to each one of those rate classes/voltage levels, then a rate would be determined on a volumetric basis and applied uniformly to customers within that class.

(Tr. XVIII at 4527-28.) Thus, each customer class would be paying its fair share of the 5CP demand caused by the respective class and the fair share would be collected within the class through an energy charge. The prior method of collecting the whole rider charge/credit on an energy basis would have sub-optimally collected demand costs through an energy charge.

In sum, the Stipulation's changes to the initial rider rate and the rate design are beneficial improvements.

## v. The regulatory approvals and reporting commitments provide added benefits.

Additional improvements were made in Sections III.A.5.c and 5.d of the Stipulation as well as III.A.6. (Jt. Ex. 1 at 8-9.)

In Section III.A.5.c, the Commission can review a sale or transfer to a non-affiliate of any of the PPA Units, as detailed in that provision, to determine whether the Commission wants to continue or exclude that Unit from the PPA Rider based on the circumstances of such transfer or sale. That provision provides additional discretion and flexibility to the Commission and ensures that a qualifying future sale or transfer of a PPA Unit will be evaluated in order to determine whether it is in the public interest to continue including the Unit in the PPA Rider (footnote 9 on page 8 clarifies the scope of a qualifying transfer/sale). Also, in Section III.A.5.d, AEP Ohio is obligated to file an annual compliance report by the end of each year of the PPA confirming that the commitments in Section III of the Stipulation are being met.

In addition, Section III.A.6 clarifies that the Commission is not making any finding with respect to any future modification of the Affiliate PPA and reserves the right to review the prudence of AEP Ohio agreeing to any such modification as part of its ongoing oversight of retail rates. As a related matter, AEP Ohio voluntarily agrees to request an up-front prudence review of any such future PPA modification as well as any contemplated change in depreciation

rates under the Affiliate PPA. Finally in this regard, this provision clarifies that AEP Ohio, not its customers, would be responsible for any increased costs associated with changing depreciation rates if the Commission determines that it would not be prudent for AEP Ohio to incur such changed depreciation costs. (Jt. Ex. 1 at 9.)

Each of these provisions of the Stipulation conveys an additional benefit for customers.

#### b. The Stipulation commitments regarding the extended ESP filing, found in Section III.C, provide significant benefits.

As described in Part III, *supra*, AEP Ohio has committed to file a separate application with the Commission requesting to extend its current ESP for another six years – through May 31, 2024, the term of the Revised Affiliate PPA – by April 30, 2016. (Jt. Ex. 1 at 10-13.) Section III.C of the Stipulation identifies several provisions that AEP Ohio will include in the extended ESP application:

- 1. A proposal for extension of riders and tariffs relating to the expanded ESP term, including but not limited to the terms and conditions of the Distribution Investment Rider (DIR):
- 2. Additional funding commitments relating to the expanded ESP term;
- 3. A proposal to extend the competitive bidding process for SSO procurement;
- 4. An analysis and proposal relating to the significantly excessive earning test (SEET) for the extended ESP term;
- 5. An analysis for the statutory market rate offer comparison test;
- 6. Extension of the IRP tariff and credit for the full expanded ESP as well as an increase in the IRP credit from \$8.21/kW-month to \$9/kW-month starting in June 2018 extending through the remainder of the ESP term;
- 7. An automaker credit to support increased utilization or expansion of automaker facilities in the Company's service territory;
- 8. A pilot mechanism allowing GS-3 and GS-4 customers with interval metering capability to opt-in to a transmission tariff rate based upon each eligible customers single annual transmission coincident peak demand; and

- 9. A pilot program that establishes a bypassable Competition Incentive Rider (CIR) as an addition to the SSO shopping rate above the auction price with the purpose of incenting shopping and recognizing that there may be costs associated with providing retail electric service that are not reflected in SSO bypassable rates.
- (*Id.*) As AEP Ohio witness Allen testified, the above commitments, among others in the Stipulation, provide "significant benefits to customers and the public interest and could truly be viewed as transformative." (AEP Ohio Ex. 52 at 14.) Indeed, the Signatory Parties recognize and agree that the extended ESP term and the provisions AEP Ohio's expanded ESP application will include have "significant value to the Commission and to the State of Ohio." (Tr. XIX at 4681.)

For instance, the automaker credit described in Section III.C.7 of the Stipulation will provide economic development benefits to AEP Ohio's customers and the State in general. (Tr. XX at 4932.) Mr. Allen explained that the credit will do so by providing "an incentive for automakers to utilize their facilities in the State of Ohio" and "a benefit as compared to other states that would allow more production to move to the State of Ohio as compared to a condition where such a provision did not exist." (*Id.*) The proposed CIR pilot program described in paragraph III.C.9 of the Stipulation is a shopping incentive similar to many the Commission has approved for over fifteen years and will help "to grow the market for shopping customers and to allow more opportunity for CRES providers to enter the market and to provide more innovative offerings to customers as a market is developed." (Tr. XIX at 4927-28.) RESA witness Bennett agreed that the CIR is a "great" program in concept, opining only that additional details regarding the program remain to be developed in a separate proceeding. (Tr. XXII at 5582-83, 5593-94.)

As AEP Ohio witness Allen explained, through Section III.C of the Stipulation, AEP

Ohio is "committing [to] offer up specific provisions and provide supports for those provisions"

in its expanded ESP filing "because those elements couldn't exist without the [C]ompany's willingness to include [them] \* \* \* and ultimately \* \* \* accept [them] if the Commission approves them as the [C]ompany has proposed." (Tr. XIX at 4870.) Those provisions, which may not otherwise exist absent the Stipulation, will provide significant benefits to AEP Ohio's customers and the public interest for years into the future.

c. The provisions of the Stipulation that help transform AEP Ohio into a "utility of the future," found in Sections III.E-H and III.D.13, provide significant benefits.

The Stipulation also includes numerous provisions regarding grid modernization, carbon reduction and fuel diversification, and battery technology and Volt/VAR optimization that provide important environmental, energy efficiency, demand reduction, and customer choice benefits that will help transform AEP Ohio into a "utility of the future."

In terms of environmental benefits, AEP Ohio has committed to filing a carbon reduction plan by December 31, 2016 that will indicate how it and its affiliates intend to promote fuel diversification and carbon emission reductions (Jt. Ex. 1 at 28-29; AEP Ohio Ex. 52 at 8) and to implement programs to promote fuel diversity and carbon emission reductions to address potential future environmental regulations (Jt. Ex. 1 at 29; AEP Ohio Ex. 52 at 8). As for energy efficiency, demand reduction, and customer choice benefits, AEP Ohio has committed to explore avenues to empower customers through grid modernization initiatives that promote customer choice. Specifically, AEP Ohio will file a grid modernization business plan by June 1, 2016 that will include initiatives related to advanced metering infrastructure installation, investment in distribution automation circuit reconfigurations, Volt/VAR optimization, removing obstacles to distributed generation, and net metering tariffs. (Jt. Ex. 1 at 29-30; AEP Ohio Ex. 52 at 8-9.)

With regard to Volt/VAR optimization, the Signatory Parties have also agreed that AEP Ohio will propose in Case No. 13-1939-EL-RDR, through settlement efforts, to deploy 160

circuits of Volt/VAR Optimization and to include a future proposal to deploy all cost effective Volt/VAR technology. (Jt. Ex. 1 at 26-27; AEP Ohio Ex. 52 at 8.) The Company agreed not to count the savings associated with the Volt/Var optimization toward triggering the shared savings mechanism, but agreed that the energy savings would be applied toward the Company's overall EE/PDR achievement above and beyond the savings benchmarks agreed upon in Section III.D.16 of the Stipulation. (Jt. Ex. 1 at 26-27; Tr. XX at 4938-39.) Ohio also commits to include eligible grid scale battery resources in future filings as an element of distribution service. (Jt. Ex. 1 at 30; AEP Ohio Ex. 52 at 9; Tr. XIX at 4772.)

Through each of the above programs and proposals, AEP Ohio is committing to invest significant resources in Ohio's energy future and to empower customer choice. These commitments, too, provide significant benefits to AEP Ohio's customers and will further the state's environmental, energy efficiency, and other objectives set forth in R.C. 4928.02(B), (C), (D), (E), (J), (L), and (N). (AEP Ohio Ex. 52 at 12-13.)

d. The Stipulation commitments regarding environmental and renewable energy, found in Sections III.D.1, III.D.9-12 and III.I, provide significant benefits.

Within the Stipulation package AEP Ohio has undertaken certain obligations that uniquely address environmental and renewable energy and significantly move forward advanced energy development in Ohio. Through the deployment of a diverse package of new initiatives with a directed focus on alternatives and renewables, the Stipulation provides added benefits to AEP Ohio's customers, creatively advances energy policy within the State of Ohio and facilitates opportunities to positively impact the environment. As with other matters that will involve future filings, any party that opposes specific investments or cost recovery proposals that will be proposed for approval in a future Commission proceeding (as applicable) can air its grievances in the future case; those matters need not be resolved in order to adopt the Stipulation.

#### i. Higher education credit.

Among its commitments, as listed in Section III.D.1 of the Stipulation, AEP Ohio will make a contribution of \$500,000 to an Ohio public institution of higher education. (Jt. Ex. 1 at 13). That funding is being committed specifically to provide the higher education community in Ohio with additional opportunities to study cutting edge technologies in the research and development of clean energy. Today, with the ongoing reduction of the distribution of taxpayer funding to Ohio's public universities, and the requirement that institutions be as efficient as possible, doing more with less, it is important to ensure that private dollars are made available to create opportunities to advance clean energy research. In recognition of those facts, and with an understanding that it has an important role to play in energy advancement to ensure that Ohio's brightest minds have the opportunity to tackle the challenges of clean energy development, AEP Ohio has committed shareholder dollars to provide that funding. During his cross-examination, AEP witness Allen provided clarity in regards to the funding source from which the contribution that has been committed will be secured. Mr. Allen succinctly states that AEP Ohio will not seek recovery of the \$500,000.00 from ratepayers in the current or any future proceeding and, additionally, will not be recovering monies through the anticipated PPA rider. (Tr. XVIII at 4540-4541.) Therefore, while AEP Ohio's ratepayers will ultimately see the benefit of the investment that AEP Ohio is making in public higher education in Ohio for much needed additional research and development to advance clean energy, they will not be funding or subsidizing the grant provided. While the economic burden of the limited financial obligation being committed is being undertaken solely by AEP Ohio, the opportunities for Ohio's clean energy scholars and the resulting benefits to Ohio's citizens from such added research and testing are essentially limitless.

#### ii. Co-firing commitment and other potential retirement, repowering, or refueling options.

Sections III.D.9-12 of the Stipulation describe and outline AEP Ohio's commitment to deploy coordinated conversions of certain current coal burning operational units to natural gas or alternatively retire or repurpose coal units over a responsible and reasonable time frame. (Jt. Ex. 1 at 19-26.) AEP Ohio's commitment will advance carbon reduction and reduce other environmental impacts of coal use by transitioning current coal fired generating units in Ohio to natural gas. The Stipulation language describes how AEP Ohio will move forward with its commitments at certain generating units.

Section III.D.9 of the Stipulation indicates, as to Conesville 5 and 6, AEP Ohio will make a cost recovery filing supporting the conversion of Conesville 5 and 6 to natural gas co-firing on or before July 1, 2016. Subject to how certain Commission approval timing regarding cost recovery may impact the need for general construction lead time (or impacts created by other regulatory approvals), Conesville Units 5 and 6 will be converted to natural gas co-firing by December 31, 2017. From the period of completion of the co-firing at Conesville 5 and 6 through December 31, 2029, AEP Ohio and its affiliate owner agree to limit coal heat input to no more than 37.5% of the Unit's design (28,737,180 MMBTUs per year). Further, the units will maximize usage of natural gas when it is available and economic. Conesville 5 and 6 will retire, refuel, or repower to 100% natural gas by December 31, 2029, unless PJM pursues a Reliability Must Run ("RMR") arrangement or equivalent, necessitating the complete retirement, refueling, or repowering at the end of the RMR arrangement. Exclusive of potential depreciation rate change described in Stipulation Section III.A.6 or the Conesville co-firing costs per Stipulation Section III.D.10, the costs to retire, refuel, or repower Conesville 5 and 6 will not be recovered through the PPA Rider.

Section III.D.10 of the Stipulation states that at Cardinal 1, unless PJM pursues a Reliability Must Run ("RMR") arrangement or equivalent, necessitating the complete retirement, refueling, or repowering at the end of the RMR arrangement, Cardinal 1 will be retired, refueled or repowered to 100% natural gas by December 31, 2030. Exclusive of potential depreciation rate change described in Stipulation Section III.A.6., the costs to retire refuel, or repower Cardinal 1 will not be recovered through the PPA Rider.

Section III.D.11 of the Stipulation commits that on or before December 31, 2024, AEP Ohio will open up a docket, the "Retirement Readiness" docket, to be annually updated for the purpose of identifying and timely removing any barriers to retiring, refueling or repowering Conesville 5 and 6, and Cardinal 1 by the dates committed in the Stipulation. The Retirement Readiness docket reporting will include numerous types of analysis performed by AEP Ohio or an independent third party that will address, based upon then current or then planned market parameters, potential reliability concerns, complications and issues projected to result with the retirement, refueling or repowering of Conesville 5 and 6, and Cardinal 1. The analysis will take into account and review transmission upgrades or non-transmission alternatives to create a plan, with annual reporting updates to the Commission, to reasonably ensure the retirement, refueling or repowering of Conesville 5 and 6, and Cardinal in a timely and responsible manner. Finally, no transmission upgrade costs or non-transmission alternative costs associated with the commitments of Stipulation Section III.D.11 will be recovered through the PPA Rider.

Section III.D.12 of the Stipulation addresses how AEP Ohio intends to explore retiring, refueling or repowering to 100% natural gas the remaining AEP Ohio co-owned PPA units (Conesville Unit 4, Zimmer Unit 1, Stuart Units 1-4, and the OVEC Units). On or before March 30, 2017, AEP Ohio will open an annually updated docket at the Commission entitled

"Generation transition" whose purpose will be to identify and remove barriers to the retiring, refueling or repowering of the units as anticipated. That docket will among other things, detail and address: the efforts of AEP Ohio to consolidate ownership interest in the co-owned units; load flow analysis performed by AEP Ohio or a third party to identify any necessary transmission upgrades of non-transmission alternatives to allow certain of the co-owned units to retire before their planned retirement dates without negatively impacting reliability; how to minimize or replace any job losses; how to attract and encourage growth in the manufacturing and headquartering of renewable energy companies in Ohio; and how to replace possible lost local tax revenues. Exclusive of potential depreciation rate change described in Stipulation Section III.A.6, no transmission upgrade costs or non-transmission alternative costs associated with the commitments of Stipulation Section III.D.12 will be recovered through the PPA Rider.

AEP witness Allen illustrates during cross-examination how the terms of the Stipulation benefit the public interest by obtaining the commitment of AEP Ohio to make a filing with the Commission to facilitate the conversions to natural gas co-firing at Conesville 5 and 6. (Tr. XIX at 4711.) Essentially, the Stipulation creates an otherwise unavailable mechanism that has incentivized AEP Ohio to move forward with co-firing plans while providing the opportunity for the Commission to evaluate the reasonableness of the anticipated AEP Ohio co-firing request. As further evidence of AEP Ohio's commitment to transition to co-firing in a real and meaningful way, AEP Ohio witness Allen provided additional assurance that not only will Conesville be limited to an annual coal heat input of 28,737,180 MMBTUs per year (Section III.D. 9.b.), it is AEP Ohio's intent to burn an equal mix of 50% coal and 50% gas at Conesville 5 and 6. (Tr. XVIII at 4647.)

Dynegy witness Dean Ellis, in his pre-filed testimony, expressed some concerns about the challenges of such transitioning to and operating of a coal plant efficiently on gas. (Dynegy Ex. 2 at 11.) His understanding of how AEP Ohio has proposed to proceed with co-firing appears somewhat misinformed. On cross-examination he clarified that his concerns regarding the plant operations were only focused on situations where coal plants were co-fired and running solely on natural gas. (Tr. XXI at 5341.) Conversely, it is evident from the language in the Stipulation and AEP witness Allen's testimony, that in the immediate term, AEP Ohio intends to operate Conesville 5 and 6 in a manner that will rely upon both coal and gas.

Mr. Ellis further questioned the potential economic reasonableness of the cost of the coffiring conversions by indicating while under certain circumstances conversions could cost only several hundreds of thousands of dollars, a much greater and significant portion of the cost for such conversions could be attributable to the work necessary to bring gas to the site, with pipeline construction costs alone reaching into the tens of millions of dollars. (Dynegy Ex. 2 at 11-12.) Mr. Ellis later admitted during cross that he had become aware, in the case of Conesville 5 and 6, that there was already a gas pipeline on site. (Tr. XXI at 5365.) This revelation as described by Mr. Ellis, incorporated with Mr. Allen's explanation that the existing pipeline can support operations on the site at 50% gas (Tr. XIX at 4749) should alleviate any concerns regarding the economic reasonableness of co-firing operations at Conesville 5 and 6.

Through the encouragement of the terms of the Stipulation, AEP Ohio's commitment to evaluate, and where economic, implement plans to transition coal-fired generation units to natural gas has provided the opportunity to reduce coal burning generation in Ohio and decrease associated carbon emissions. Importantly, the acceptance of AEP of the terms of the Stipulation works as catalyst to encourage and incentivize natural gas conversions in Ohio. Because the

commitments come within the terms of the Stipulation and the requirement exists for the Commission to analyze and review the economics, the Commission will be able to ensure that AEP satisfies the offer to co-fire units with natural gas. Not all generation owners in Ohio seem willing to move towards co-firing at current coal burning units. For example, Dynegy witness Ellis testified that Dynegy, who he is clear is not regulated by the Commission on the generation side (Tr. XXI at 5350), has no plans to add natural gas co-firing at its coal fired Unit, Conesville Unit 4. (Dynegy Ex. 2 at 12.) He additionally reasserts his belief in Dynegy's complete lack of interest in co-firing on cross-examination by admitting "Dynegy has no plans for co-firing." (Tr. XXI at 5349.) Finally, when questioned as to whether Dynegy would ignore the Commission if it suggested Dynegy co-fire at Conesville 4 he states, "it would "depend upon the compliance mechanisms." (Tr. XXI at 5350.) It seems without being forced to co-fire, Ohio generation owners like Dynegy, have little interest in the concept. Without acceptance and deployment by generation owners like AEP Ohio, it seems likely that conversions to natural gas co-firing will not occur with any real significance in Ohio.

#### iii. Renewable energy projects.

Pursuant to Section III.I of the Stipulation, AEP Ohio and the signatory parties acknowledge the importance of the development and deployment of renewable energy projects in Ohio thereby working to further Ohio's interest in energy efficiency. As part of the Stipulation, at least 900 MWs of renewable energy is to be proposed by AEP Ohio within the five next years. In accordance with Section III.I, AEP Ohio and its affiliates will develop a total of at least 500 MWs of nameplate capacity of wind energy projects and 400s MW of nameplate capacity for solar energy projects. (Jt. Ex. 1 at 30-32.)

Throughout the course of the proceeding, intervening parties such as MAREC have suggested that the addition of renewable energy components would be beneficial and "improve"

AEP Ohio's PPA Proposal by arguing, for example, that the Commission should add a requirement which would mandate a competitive solicitation for approximately 1,000 MWs of fixed price long term renewable generation to the PPA Rider. (MAREC Ex. 1 at 10.) In addition, MAREC witness Burcat stated that MAREC is requesting the 1,000 MWs of additional renewable energy be added to AEP Ohio's standard service offer and distributed to AEP Ohio customers under normal service delivery conditions. (Tr. XIII at 3184; MAREC Ex. 1 at 4.)

MAREC has essentially advocated for an adder to be placed on top of what AEP Ohio is already requesting in the PPA Rider. Other environmental advocacy groups, like Sierra Club, that are Intervenors in this proceeding also support deployment of renewable energy resources. (See, e.g., AEP Ohio Ex. 21, 22.)

To address such interest in, and concern for, a PPA package that deals with renewable energy in a reasonable and responsible way, AEP Ohio, in Stipulation Section III.I (Jt. Ex. 1 at 30), creatively committed to develop solar (500 MW) and wind energy (400 MW) projects in Oho subject to Commission approval and full cost recovery. The projects will be developed under the PPA Rider with AEP Ohio filing EL-RDR applications with the Commission. The projects will be competitively bid with AEP Ohio affiliates having the right to own up to 50% of such projects on an aggregate net basis based on installed capacity. AEP Ohio will complete the wind energy projects, and use best efforts to complete the solar energy projects, by 2021.

Commission Staff will be consulted on project selection and AEP Ohio and its affiliates will use best efforts to seek Commission approval for the EL-RDR filings. The RFP process for development of these renewable projects will commence within 45 days of the Commission approving the Stipulation. Construction is intended to begin by the deadline for eligibility of benefits under the CPP, but the projects will not be contingent upon the CPP taking effect. AEP

Ohio will be the buyer of a long term PPA of ten years or greater for each project. Capacity, energy and ancillary services for the projects will be liquidated into the PJM markets with the revenues being credited to customers. Renewable energy credits not reserved for compliance will be liquidated with revenues being credited to customers. For the life of the projects, the rate design used for recovery of net costs or any net credits shall be a uniform per kWh charge for all monthly consumption up to 833,000 kWh per customer account. Finally, preference will be given to solar projects that are sited in Appalachian Ohio that create permanent manufacturing jobs in Appalachian Ohio and commit to hiring Ohio military veterans.

The renewable projects being proposed are designed to move renewable development in Ohio forward while creating value for the ratepayers through competitive development pricing. Ultimately, inclusion of each proposed project in the PPA Rider will be subject to review and approval of the Commission. As explained by AEP Ohio witness Allen, the projects will be competitively bid, irrespective of the percentage that AEP Ohio would own (Tr. XIX at 4804-05), and the Commission, through the EL-RDR process, will review the prudency of AEP Ohio entering into the wind and solar PPAs and approve the cost recovery of the net of those PPAs (Tr. XIX at 4777-78). The proposed wind and solar projects provide Ohio and the Commission with additional tools to address the need for, and interest in, renewable development in Ohio.

The renewable projects proposed by the Stipulation are facilitated by AEP Ohio, within the PPA Rider concept being proposed, entering into long term PPAs for the purchase of the output of those renewable projects. Those methods seem acceptable to parties advocating for the addition of renewables to the AEP Ohio PPA package. In his testimony, MAREC witness Burcat, asserted that long term power purchase agreements serve an important function in energy markets by enabling project finance for new projects, assist in ensuring revenue adequacy for

existing large generators, and providing a hedge against volatile energy prices. (MAREC Ex. 1 at 5-7.) Further, in Stipulation Section III.I.4. (Jt. Ex. 1 at 32) MAREC and its members have specifically agreed to support Commission approval of, and full cost recovery for, the wind projects described.

With directed preferences for job creation in Appalachian Ohio, and a focused attempt to support Ohio veteran employment, these proposed projects attempt to satisfy two very real economic development challenges facing our State. The deployment of such projects in the manner proposed can have a meaningful impact not only in job creation and other localized economic benefits, but correspondingly on increased development of renewables in Ohio. RESA witness Stephen Bennett testified that he had "concerns" about the Stipulation proposal for 900 MW of renewable energy and inferred that such a proposal was not only a poor idea, but a subsidy that would not be beneficial and should not be approved by the Commission. (RESA Ex. 1.) Conversely, on cross-examination, Mr. Bennett stated that in certain places, such as Illinois, where "subsidies" were created and used for the development of renewables (notably wind in Illinois) the "subsidies were very effective" and "a lot of wind generation was built." (Tr. XXII at 5557.)

While Ohio has yet to develop its rules under the CPP, these renewables projects can play a significant part in the manner in which Ohio ultimately addresses CPP requirements. They will become part of the portfolio of renewable assets available within Ohio and unlike many alternative projects currently being discussed in Ohio, they will not only be supported by portion of the renewable community, but be backed by a viable financial model and a build schedule ensuring their viability, all which will have been subjected to thorough Commission input and review.

Additionally, Stipulation Section III.I.4 commits AEP Ohio and MAREC to work together on advocacy for renewable energy siting policy and a reasonable renewable portfolio standard as Ohio moves forward in its deliberations regarding the recent freeze of the mandates of SB 310. (Jt. Ex. 1 at 32.) This commitment between a renewables entity and an Ohio investor owned utility to jointly work on addressing renewable policy in Ohio will add much to the discussions currently underway. What happens with renewable policy in SB 310 will be a result of many voices and much effort. The collaboration facilitated through the coordination of the resources and mutual transfer of knowledge between AEP Ohio and MAREC, a direct result of the Stipulation, intends to provide clarity and definition to renewable energy policy in Ohio. Such a conjoined effort to move renewable policy forward will be an immeasurable benefit to the citizens of Ohio. Further, in addition to working with MAREC on siting and renewable advocacy, AEP Ohio has additionally committed to advocate independently for a reasonable energy efficiency portfolio standard, bringing additional, much needed, industry and technical expertise that will be needed when the SB 310 freeze is lifted and given the impending implementation of the CPP in Ohio.

- e. The Stipulation commitments that promote retail competition, found in Sections III.C.12 and III.D.7-8, provide significant benefits.
  - i. Section III.C.12 of the Stipulation includes benefits as part of a package that advances the public interest.

The proposed pilot Competition Investment Rider (CIR) found in Section III.C.12 at page 12 of the Stipulation benefits customers as part of the settlement package presented in this proceeding. The CIR is set up as a pilot program to establish a bypassable rider as an addition to the SSO non-shopping rate above the auction price with the purpose of incenting shopping and recognizing that there may be costs associated with providing retail electric service that are not

reflected in SSO bypassable rates.<sup>14</sup> (AEP Ohio Ex. 52 at 5; Jt. Ex. 1 at 12.) RESA witness Bennett testified on cross-examination in support of the idea of unbundling and making sure that the principles of cost causation are followed when asked if the CIR is a benefit. (Tr. XXII at 5592.) This pilot program is one that will be filed in AEP Ohio's upcoming ESP proceeding if the PPA Rider application is approved in this case.

The settlement hearing cross examination provided further evidence of the benefits associated with the CIR provision of the Stipulation. Mr. Allen testified that (if approved in the upcoming ESP) this program will benefit customers that chose to shop because they would be getting the benefit of a lower price plus the credits provided to all distribution customers under the CIR. (Tr. XVIII at 4634.) Both shopping and non-shopping customers would receive the benefit from a more robust marketplace if more CRES providers are able to offer more innovative products.

The Commission previously recognized the benefits of incentivizing customer shopping in Ohio. Mr. Allen discussed some of these incentives provided by the Commission over the years in his testimony during the hearing. He stated that the Commission implemented a shopping incentive related to AEP Ohio as far back as the original electric transition plan case around 2000 and then again as part of the *ESP II* proceedings. (Tr. XX at 4928.) He also pointed out that the Commission approved a discounted capacity to CRES providers to incent additional shopping. (*Id.*) Ultimately, Mr. Allen reiterated the point that the goal of provisions like the CIR is to grow the market for shopping customers and to allow more opportunity for CRES providers to enter the market and to provide more innovative offering to customers as a market is developed. (*Id.*)

<sup>&</sup>lt;sup>14</sup> AEP Ohio witness Allen gave a detailed example of how the CIR may be applied (Tr. XVIII at 4630-4634) with a correction to the units used in the example (*id.* at 4926-4928).

The nature of how the CIR is proposed provides other benefits related to this pilot program. Mr. Allen pointed out that the implementation of the pilot is not binding because the ultimate decision is up to the Commission in a future proceeding. (Tr. XX at 4642.) Counsel for OCC questioned whether the CIR would simply incent CRES providers to increase their offerings in the wake of the increased SSO price. (Tr. XX at 4639.) Mr. Allen testified that his experience with Ohio tells him that CRES must be able to offer significant discounts off of the SSO to get customers to migrate. (*Id.*) Mr. Allen went on to say that the level of discount is something that will need to be explored in the upcoming ESP proceeding and the process laid out by the Stipulation provides that this will be an issue in that case and that all parties to that case will have the opportunity to present evidence and advocate for and against the CIR in that case. (Tr. XX at 4641.)

This concept of agreeing to a settlement term that commits to raise the issue in a future proceeding is a valuable benefit. In fact, this approach directly addresses RESA witness Bennett's expressed concern that issues in the Stipulation "should be discussed and debated through an appropriate proceeding." (RESA Ex. 1 at 6.) Mr. Bennett agreed that there is value in a utility offering to include a program like the CIR in an ESP filing. (Tr. XXII at 5592.) The commitment to seek a pilot program that could have benefits for all customers is a benefit and the fact that the issues can be discussed and debated further in that future docket is also a benefit of this being included in the Stipulation.

# ii. Section III.D.7 represents benefits as part of a package that advances the public interest.

The proposed Pilot Supplier Consolidated Billing Program found in Section III.D.7 of the Stipulation benefits customers. (Jt. Ex. 1 at 12-19.) Under this provision, AEP Ohio agreed to work with Staff and Signatory Parties to establish a two-year pilot program to implement a

Supplier Consolidated Billing program with CRES Signatory Parties. (Jt. Ex. 1 at 16-17; AEP Ohio Ex. 52 at 7.)

The benefits from this pilot program are found in the steps being taken at the pilot level to explore implementation of this idea. RESA witness Bennett testified that there is not currently anyone administering supplier consolidated billing on the electric side of the industry. (Tr. XXII at 5593.) Mr. Bennett acknowledged that a pilot in this area is a step forward. (*Id.*) Mr. Bennett did raise a concern about what information would be useful from the pilot because he was unsure of the details of the program and who would receive the information. (*Id.* at 5594.) But then Mr. Bennett agreed that he understood that the Commission Staff would be an active partner in this pilot program and that "partnering with Staff is always a beneficial thing." (*Id.*) Mr. Bennett also discussed how the retail supply related programs included in the Stipulation are being discussed in other places, but that AEP Ohio did not support implementation at that time. (*Id.*) His point actually highlights the salient point that the Stipulation provided an avenue for a program he finds beneficial and that has been discussed in the industry but not implemented. Thus implementation now should be viewed by RESA's expert witness as a benefit.

Mr. Allen also testified that implementation details provided in the Stipulation provide some benefit. Mr. Allen stated that one benefit of the Stipulation is that the CRES Signatory Parties participating in the pilot agreed to pay half the costs of the pilot. (Tr. XVIII at 4644-4645.) Mr. Allen testified that half the cost of the program could be around \$375,000. (Tr. XIX at 4714.) Those are costs avoided by AEP Ohio and its customers, even though they benefit through enhanced retail competition.

The supplier consolidated billing pilot will provide Staff, the utility and CRES providers all experience and information related to implementation of such a program on the electric side

of the industry. This information will be valuable for the Commission and the industry as a whole as retail supply issues are discussed in the future. The Stipulation has the extra benefit of dividing the cost of this step forward between the competitive suppliers and the utility. The supplier consolidated billing program is a benefit as part of the package under review by the Commission.

## iii. Section III.D.8 represents benefits as part of a package that advances the public interest.

The AEP Ohio commitment to file a proposal for a pilot related to customer enrollments found in Section III.D.8 benefits customers as part of the settlement package presented in this proceeding. (Jt. Ex. 1 at 19.) Due to this provision in the Stipulation, AEP Ohio committed to propose a pilot program providing an EDU third-party agent call transfer process to educate and enroll interested customers moving and initiating service and to establish a procedure for the offering of a standard discount rate off the price to compare. (Jt. Ex. 1 at 19; AEP Ohio Ex. 52 at 7.)

RESA witness Bennett testified that the idea behind the pilot in the Stipulation could be very valuable conceptually. (Tr. XXII at 5595-5596.) He testified that program could be beneficial to customers and retail markets, but that he was concerned about the details of the program because implementation can change benefits. (*Id.*) He testified that the movement forward to propose implementation of this type of program was a small piece of the benefit but again the effectiveness of the program was an issue and that the Stipulation did not provide details. (Tr. XXII at 5596-5597.) However, Mr. Bennett then admitted that he was unaware that the details had already been filed in the 12-3151-EL-COI docket. (Tr. XXII at 5596.) He then agreed that the separate docket where the details were filed would constitute a proceeding where RESA and other parties could comment and help shape the program. (*Id.*) Finally, in response

to the question of whether this other docket fit the standard as an appropriate docket that he provided on page 6 of his settlement testimony to allow for discussion and debate, he responded that it sounds like an appropriate docket. (Tr. XXII at 5596-5597.) Hence, the industry will have input on the details before the program is implemented and the benefits expected from RESA expert Stephen Bennett should also be realized. The commitment to file a pilot program in Case No. 12-3151-EL-COI is already underway, and the benefits associated with its inclusion in the Stipulation are real.

f. The Stipulation commitments regarding energy efficiency and peak demand reduction, found in Sections III.D.2-5 and III.D.14-15, provide significant benefits.

There are a number of provisions in the Stipulation dealing with the advancement of the energy efficiency and peak demand reduction programs (EE/PDR) in the AEP Ohio territory. These provisions range from an increased investment in Ohio hospital programs to an increased partnership with the low income advocate Ohio Partners for Affordable Energy (OPAE) to oversee certain programs to ensure it is reaching all levels of residential customers. AEP Ohio witness Allen testified to both the benefits and relationship of the EE/PDR provisions in relation to the PPA Rider requested in this case. Mr. Allen testified that the EE/PDR costs in the Stipulation relate to energy efficiency programs and the interruptible credit relates to peak demand reduction. (Tr. XVIII at 4563.) He testified that both of these have the effect of reducing the peak within the AEP zone which ultimately results in moving down in the production curve in PJM which results in more stable rates for customers. (Id.) Mr. Allen concluded that the EE/PDR and PPA Rider as proposed are both looking at ways to produce more stable rates for customers in the near and long term. (Id.) Each of these programs, described below, provide an important part of the overall package presented to the Commission for approval and provide the benefits supported by Mr. Allen.

## i. Section III.D.2 represents benefits as part of a package that advances the public interest.

The proposed expansion of the EE/PDR relationship with the Ohio Hospital Association (OHA) and hospitals in the AEP Ohio territory found in Section III.D.2 of the Stipulation benefits customers as part of the settlement package presented in this proceeding. The provision utilizes the currently approved funding levels and targets savings at hospital facilities in the AEP Ohio territory. (Jt. Ex. 1 at 13-15; AEP Ohio Ex. 52 at 6.) These provisions are aimed at assisting Ohio hospitals that serve all Ohio citizens as well as the EE/PDR benefits outlined by AEP witness Allen above. As indicated in the Stipulation, all of the provisions within Section III.D.2 are contingent upon continued approval and existence of an EE/PDR plan with approved funding and any other necessary mechanism to ensure the continued recovery of net lost distribution revenues and continued shared savings. (Jt. Ex. 1 at 15.) The continued investment in the EE/PDR provisions necessarily requires the existence and appropriate structure of an EE/PDR program.

The commitments involving EE/PDR programs for hospital customers are divided up into different areas. First there is a commitment to provide \$400,000 in funding to the OHA to promote and obtain significant participation and energy/demand savings through the EE/PDR programs. (Jt. Ex. 1 at 13-14.) The OHA will work to provide education to the hospital facilities related to energy efficiency and demand reduction. (*Id.* at 14.) OHA will also serve to meet directly with the hospital facility directors to champion the EE/PDR benefits. (*Id.*) OHA will also partner with AEP Ohio to develop and automate Energy Star benchmarking for OHA members, an effort that will support a broader offering to other customer segments. (*Id.*) The other funding commitment in the Stipulation relates to the incentives for qualifying projects. The Stipulation provides up to \$600,000 a year for incentives for hospital facilities with

qualifying EE/PDR projects under the AEP Ohio program. (*Id.*) This will provide an extra incentive for hospitals to implement EE/PDR projects. (*Id.*) OHA and AEP Ohio will work together collaboratively to determine the level provided to each project, but there is an enumerated preference for smaller hospital facilities with below the average Energy Star scores. (*Id.*) The Stipulation also includes a focus on rural hospitals with its Continuous Energy Improvement program with the goal of improving each participating hospital's energy efficiency. (*Id.* at 15.)

This section of the Stipulation also includes a commitment on Volt-Var Optimization deployment and alternative feed service charges. Section III.D.2.d of the Stipulation states that AEP Ohio will prioritize circuits with OHA members for any Volt-Var Optimization deployments over the term of the Affiliate PPA. (*Id.* at 14.) This prioritization will take into account the benefit to the circuit in comparison to others and construction/staging considerations. (*Id.*) The Stipulation also provides for an update to the Alternative Feed Service (AFS) rates for OHA members to a uniform rate. (*Id.* at 15.) Mr. Allen testified that this fits within AEP Ohio's efforts to provide uniform rates between the two rate zones. (Tr. XVIII at 4551.)

# ii. Section III.D.3 represents benefits as part of a package that advances the public interest.

The Stipulation also includes an EE/PDR development focused on the Community

Assistance Program (CAP), as outlined in Section III.D.3 of the Stipulation. (Jt. Ex. 1 at 15-16.)

This provision provides for involvement by OPAE in the 2016 and 2017 implementation of the

CAP program. (*Id.* at 15.) The CAP program provides energy efficiency for customers

including, among other things, weatherization and efficient lighting. (Tr. XX at 4976.) The

implementations of the subsections of Section III.D.3 are subject to certain requirements for cost
and shared savings recovery by AEP Ohio. (Jt. Ex. 1 at 16.)

The 2016 provision provides funding to OPAE for direct involvement in the CAP programs during the 2016 calendar year. The Stipulation calls for \$200,000 out of the currently approved budget to be allocated to OPAE to provide direct assistance with a) design and management of the bulk purchasing of refrigerators and other EE measures; b) provide software and manage the temporary data reporting; c) provide monitors to administer Quality Assurance/Quality Control; and d) manage the training of Community Action Agencies on the AEP Ohio data system and weatherization education. (Jt. Ex. 1 at 15-16.) RESA witness Bennett confirmed that OPAE has an existing relationship with a number of community agencies. (Tr. XXII at 5570.) This relationship will provide value as AEP Ohio seeks to gain EE/PDR savings in partnership with these local agencies.

The 2017 provision relates to the management and administration by OPAE of the CAP program. The expectation is that the program of efficiency programs will have an \$8 million budget out of which OPAE will receive a 5% management fee to oversee and manage the program. (Jt. Ex. 1 at 16; Tr. XX at 4929.) OPAE previously administered this program at the 5% management fee in 2014, when the budget was \$9 million. (Tr. XX at 4953.) Company witness Allen provided testimony consistent with that of RESA's witness Bennett, that OPAE is uniquely situated to administer the program because of its strong relationships with community actions agencies that help to identify the customer that would benefit the most from the program. (Tr. XX at 4950.) The benefit is the involvement of a partner with past experience and a unique relationship with the agencies that can identify customers who will directly benefit from the programs in electric savings and in turn help the customer base as a whole as energy efficiency goals are reached through greater savings.

## iii. Section III.D.4 and 5 represent benefits as part of a package that advances the public interest.

The provisions of Sections III.D.4 and 5 at page 16 of the Stipulation provide benefits to the package under review by the Commission. Subsection 4 provides for transferring 50% of the EE/PDR rider costs for transmission and sub-transmission voltage customers to the economic development rider (EDR) through May 31, 2024. (Jt. Ex. 1 at 16.) Mr. Allen testified that one benefit of the transfer from the EE/PDR rider's costs is that this ensures that customers that are able opt out of the EE/PDR rider pursuant to statute will now continue to make payments for these costs through the EDR. Subsection 5 provides for 50% of the IRP credits from the EE/PDR rider to be transferred to the EDR. (Jt. Ex. 1 at 16.) These provisions constitute the area of the transcript where Mr. Allen first raised the relationship of the EE/PDR provisions to the PPA Rider purpose and the resulting benefit of producing more stable rates for customers in the near and long term. (Tr. XVII at 4565.)

## iv. Section III.D.14-15 of the Stipulation represents benefits as part of a package that advances the public interest.

The provision regarding a working group, found in Section III.D.14 of the Stipulation and the provision related to energy savings goals under Section III.D.15 are part of the package that provides benefits for Commission review in this proceeding. (Jt. Ex. 1 at 27.) Both of these programs relate to the implementation of energy efficiency and peak demand reduction. As such each fit within the rationale provided by Mr. Allen that the effect of the EE programs results in moving down in the production curve in PJM and results in more stable rates for customers. (Tr. XVIII at 4565.)

The working group commitment found in Section III.D.14, provides an opportunity for interested parties and Staff to discuss a pilot program for future descending clock default supply auctions where, after the auction is completed but before the market clearing price is announced,

EE providers would be able to competitively bid to supply EE projects. (AEP Ohio Ex. 52 at 8; Jt. Ex. 1 at 27-28.) In short, this group will discuss a pilot to include EE projects in future SSO auctions. (AEP Ohio Ex. 52 at 8.) This opportunity for discussion fits RESA witness Bennett's request that certain issues be discussed and debated through an appropriate proceeding." (RESA Ex. 1 at 6)

The provision regarding energy efficiency goals working group, found in Section III.D.15 of the Stipulation, is also part of the package that provides benefits for Commission review in this proceeding. (Jt. Ex. 1 at 27.) This provision calls for AEP Ohio to develop and submit for Commission approval a 2017-2019 EE/PDR plan to achieve an energy savings goal of 1.33% annually and a demand reduction goal of 0.75% annually. (AEP Ohio Ex. 52 at 8; Jt. Ex. 1 at 28.) The provision includes an agreement by AEP Ohio to continue its current practice of bidding eligible peak demand reduction achievements into PJM capacity auctions for 2017-2019 with any capacity revenues shared. (Jt. Ex. 1 at 28.) The agreement also includes a commitment by Sierra Club to support the approval of budgets necessary to reach these goals, which could assist in avoiding further litigation in the future. (*Id.*) The potential for increased energy efficiency that is in line with the guidance of the General Assembly's policy directives are benefits of these provisions to be considered when considering the Stipulation as a package.

g. The Stipulation other commitments, found in Sections III.B and III.D.6, also provide significant benefits.

Section III.B of the Stipulation provides that AEP Ohio will make additional commitments in order to continue to proactively and cooperatively work to improve the PJM markets and advance initiatives that ultimately will benefit retail customers in Ohio:

1. Through May 31, 2024, AEP Ohio will advocate in good faith before PJM and FERC for market enhancements such as a longer-term capacity product, and any other market improvements. Before making any such filing, AEP Ohio will inform Staff of its position and the rationale behind it.

- 2. Beginning June 1, 2016, and continuing through May 31, 2024, AEP Ohio will provide a public, annual update to the Commission on the state of wholesale electricity markets from AEP Ohio's perspective.
- 3. In the event that PJM has not obtained approval for a longer term capacity product to address State resource adequacy needs by September 1, 2017, the Commission will solicit comments from interested parties no later than October 30, 2017, addressing the State's long term resource adequacy needs.

(Jt. Ex. 1 at 9-10.) These advocacy commitments will help ensure that important policy and economic issues relating to long-term capacity resources will be openly debated and will help further align the interests of AEP Ohio, its customers and the Commission.

Separately, Section III.D.6 of the Stipulation provides that AEP will maintain a nexus of operations (including employees) in Ohio relating to operation and support for the PPA Units for the duration of the PPA Rider. AEP intends to maintain its corporate headquarters in Columbus, Ohio for the term of the PPA Rider. (Jt. Ex. 1 at 16.) This commitment is valuable and significant, as AEP's operations (including the corporate support employment levels) have important positive impacts on central Ohio's economy.

In sum, Sections III.B and III.D.6 provide additional benefits that can only be achieved as a result the Stipulation.

## C. Numerous provisions of the Stipulation will aid the Commission in preparing for Clean Power Plan compliance.

As discussed above, *see supra* Part VI.A.3.a.vi, AEP Ohio accounted for the likely impact of the Clean Power Plan ("CPP") in its financial projections in this proceeding, but the precise mechanism by which the CPP will be enforced in Ohio remains unknown because the State has not yet submitted its implementation plan. No matter what implementation path the State ultimately choses, however, the environmental, renewable energy resources, and energy efficiency provisions of the Stipulation discussed above will provide numerous benefits in terms of CPP compliance. The retirement and repowering commitments, along with the commitment

to pursue the development of 900 MWs of wind and solar resources, can be viewed as critical steps in lowering the State's carbon emissions in preparation for meeting CPP targets. And the energy efficiency and demand response provisions further AEP Ohio's ongoing efforts to utilize those alternative methods for reducing carbon emissions. As the Commission begins the early stages of considering CPP compliance, this Stipulation provides the Commission substantial clarity regarding future planning and preserves numerous options for meeting carbon emissions targets. That is an important, additional benefit of the Stipulation that merits separate emphasis.

### D. The positive MRO test findings made in the *ESP III* decision are still applicable and are only enhanced through adoption of the Stipulation.

In its *ESP III* decision, the Commission found that AEP Ohio's modified ESP, including the zero-dollar placeholder PPA Rider, was more favorable in the aggregate than the expected results under R.C. 4928.142 and therefore satisfied the statutory test set forth in R.C. 4928.143(C)(1). *ESP III*, Opinion and Order at 94-95. Specifically, the Commission found that ESP III will provide significant quantitative and qualitative benefits that would not be possible under a market rate offer ("MRO"). *Id*.

The Commission confirmed its MRO test analysis in its May 28, 2015 Entry on Rehearing in the *ESP III* case, clarifying that the plan's quantifiable benefits over the ESP term that would not be possible under an MRO total \$53,064,000. *ESP III*, Entry on Rehearing at 52. The Commission also affirmed its finding that it was not necessary to attempt to quantify the impact of the PPA Rider in that analysis, given that the rider was a placeholder and had been set to zero and that any future costs associated with the rider were subject to future proceedings – namely, this one. *Id.* at 56.

As set forth in detail throughout this brief, AEP Ohio's present PPA Proposal will provide significant, long term, net benefits to both customers and AEP Ohio. If the Commission

agrees and approves AEP Ohio's proposal, it will be because the Commission recognizes that the proposal will benefit AEP Ohio's customers, and that the benefits to customers will exceed the proposal's expected costs. For purposes of the statutory MRO test conducted in *ESP III*, then, AEP Ohio's PPA Rider will constitute an additional quantitative and qualitative benefit of the ESP that can be added to those benefits the Commission has already recognized.

In their testimony addressing the MRO test, OCC witnesses Hixon and Haugh focus on only one half of the relevant inquiry here. Based on OCC witness Wilson's flawed analysis in his Supplemental Direct Testimony (OCC Ex. 35, at 5-10), Mr. Haugh opines (after incorporating by reference Ms. Hixon's testimony) that the Commission's approval of the PPA Rider would result in a net charges to customers of \$580 million over the remaining portion of *ESP III'* s term. (OCC Ex. 9 at 6-7; OCC Ex. 33, at 19-21.) That position, of course, disregards the PPA Rider's substantial benefits, which the Commission must consider both in deciding whether to approve the rider and in considering the rider's impact on the MRO test. As Exhibit WAA-2 to AEP Ohio witness Allen's Supplemental Direct Testimony, AEP Ohio Exhibit 52, demonstrates (based on the modifications Mr. Allen made to AEP Ohio witness Pearce's Exhibit KDP-2 to AEP Ohio Ex. 3), even before considering the many qualitative benefits that will flow from approval of the PPA Rider, the rider will provide a net quantitative benefit to customers of more than \$209 million. (AEP Ohio Ex. 52 at Ex. WAA-2.)<sup>15</sup>

By her own admission, Ms. Hixon's position (and, thus, Mr. Haugh's) also ignores the Commission's obligation to engage in more than a strict numerical comparison and consider proposals "as a total package," undertaking "both a quantitative and qualitative analysis." *ESP III*, Opinion and Order at 94. (*See also* Tr. IX at 2297.) The Commission should decline to

 $<sup>^{15}</sup>$  \$92 million benefit (2016) + \$96 million benefit (2017) + (5/12) of \$51 million benefit (2018) = \$209 million benefit.

engage in the logical fallacy that Ms. Hixon and Mr. Haugh advocate. Instead, as set forth above, because the PPA Rider will confer a *net*\_benefit on customers over the term of ESP III, the Commission should approve the rider and add that net benefit to the already significant benefit of AEP Ohio's ESP that the Commission recognized in the *ESP III* decision.

#### VII. THE STIPULATION PACKAGE DOES NOT VIOLATE ANY IMPORTANT REGULATORY PRINCIPLE OR PRACTICE.

The third and final prong of the three-part test asks whether a stipulation "violate[s] any important regulatory principle or practice." *In re Columbus S. Power Co.*, Opinion and Order at 21. The Stipulation here violates no important regulatory principle or practice.

# A. The PPA Proposal is not an impermissible "subsidy" but rather is fully consistent with existing wholesale market structures.

Several Intervenors have alleged that AEP Ohio's PPA Proposal is an impermissible "subsidy" that is inconsistent with existing wholesale market structures. (*See, e.g.*, IMM Ex. 3 at 2; OCC Ex. 12, at 8-16; OMAEG Ex. 29 at 6; OCC Ex. 11 at 3; RESA Ex. 1 at 3.) But the Commission's decision in this proceeding should be based on the PPA's likely stabilizing effect on *retail* rates, not any alleged effects on wholesale markets. In any event, Intervenors' claims are meritless. Cost-based compensation for generation – the principle feature of the Affiliate PPA that Intervenors critique as "inconsistent with competition" in PJM – is not an impermissible "subsidy." To the contrary, cost-based compensation for generation is *commonplace* in PJM. As discussed below, tens of thousands of megawatts of generation have, for many years, received cost-based compensation for generation while fully participating in the PJM energy and capacity markets. These cost-based retail ratemaking models for generation have not "undermined" the PJM markets, and neither will the Affiliate PPA.

1. The Commission's evaluation of the PPA Proposal should be limited to its effects on retail rates, not any alleged effects on wholesale markets.

As an initial matter, Intervenors' alleged effects on the PJM markets are outside the scope of this proceeding and the Commission's jurisdiction. Potential effects of the PPA Proposal on the wholesale markets should not play a part in the Commission's determination in this proceeding. This proceeding is limited to the *retail rate* treatment of the voluntary PPA transaction at issue here, and thus the Commission should focus only on the likely effects of the PPA Proposal on *retail* rates – in particular, the PPA Proposal's likely stabilizing effect on retail rates. Indeed, as described above, the Affiliate PPA is a wholesale contract subject to FERC's exclusive jurisdiction. As a result, AEP Ohio is not asking the Commission to approve the Affiliate PPA itself or make any finding about whether the Affiliate PPA rates and terms are just and reasonable under the Federal Power Act. Whether the Affiliate PPA is just and reasonable is a determination within FERC's authority and beyond the Commission's reach.

Critically, moreover, the Affiliate PPA satisfies all current FERC and PJM regulations, including FERC's restrictions on affiliate transactions, as discussed below. *See infra* Part VII.B. If Intervenors nonetheless believe that the PPA is somehow "inconsistent" with competitive principles in the wholesale markets or would somehow cause a deleterious effect to those markets (as described below, neither of those propositions is true), the Commission is not the proper forum to make those arguments. Indeed, some Intervenors have already brought their grievances to FERC by filing a FERC complaint. *See* FERC Docket No. EL 16-33-000. That complaint will be adjudicated by FERC through either a dismissal or a decision on the merits, if appropriate. Here, the *only* question before the Commission is whether to approve the requested retail rate treatment of the Affiliate PPA (*i.e.*, whether to include the Affiliate PPA (and OVEC

entitlement) in AEP Ohio's PPA Rider). Alleged effects on the wholesale market should not be considered by the Commission in making that determination.

2. The Market Monitor's claim that the PPA Proposal is "inconsistent" with competition in PJM is refuted by the existence of numerous other examples of cost-based compensation for generation in PJM.

Even if the Commission were to address Intervenors' claims regarding alleged effects on the PJM markets, those claims ring hollow given that the features of the Affiliate PPA about which they complain are commonplace in PJM. Intervenors argue that the Affiliate PPA's cost-based rate is a "subsidy" that is "inconsistent" with "competition" in PJM. (*See, e.g.*, IMM Ex. 2 at 4; OCC Ex. 12 at 6; OMAEG Ex. 29 at 6; OCC Ex. 11 at 3; RESA Ex. 1 at 3.) Intervenors also argue that the PPA Proposal will encourage AEP Ohio to bid the PPA capacity at prices that are below "competitive" levels, thus somehow "distorting" or "undermining" capacity prices in PJM and leading to disincentives to build new generation. (*See, e.g.*, IMM Ex. 2 at 5; OCC Ex. 12 at 6; OMAEG Ex. 29 at 6; RESA Ex. 1 at 4.)

But Intervenors' witnesses (most notably, Dr. Bowring, the PJM Independent Market Monitor) repeatedly admitted under cross-examination that there are countless other examples in PJM of cost-based compensation for generation, as demonstrated below. These admissions directly refute Intervenors' claims that the PPA Proposal is an impermissible "subsidy" that is "inconsistent" with existing PJM market structures. Intervenors' admissions also refute their claims that the affiliate PPA will somehow distort capacity prices or competition in PJM. If Intervenors' claims about the Affiliate PPA's effects on wholesale markets were true, capacity prices in PJM would have long ago been "distorted" or "undermined" by the large amount of generating capacity that already receive cost-based compensation. But as described below, that has not occurred. The PJM markets have functioned perfectly well notwithstanding the proliferation of cost-based compensation for generation that is indistinguishable from the

Affiliate PPA. (Tr. XXI at 5256 (Market Monitor expressly admits that "every auction" that has been conducted in PJM has "produced competitive results, and the behavior of participants was competitive").)

Most notably, generation resources owned by the Dominion utility in Virginia participate fully in *both* the PJM energy markets and the PJM capacity markets, yet they simultaneously receive cost-based compensation under Virginia's traditional cost-of-service retail regulation. (Tr. XII at 3057-3058.) Dominion currently owns 18,000 megawatts of generation, which is six times the size of the PPA Proposal and roughly 10% of all capacity in PJM. (*Id.*) Moreover, Dominion has recently built – or is in the process of building – several new generating facilities, all of which will participate in the PJM energy and capacity markets yet also receive (or will receive) cost-based compensation from retail ratepayers. (Tr. XII at 3060-62.) Thus, Dominion receives cost-based compensation for its generation resources in precisely the same manner that Intervenors criticize here with respect to the Affiliate PPA. No matter what the PJM energy and capacity auction prices are, Dominion's 18,000 megawatts of generation receives full cost-based compensation from its retail ratepayers.

Circumstances similar to Dominion's also exist for municipal utilities and cooperative utilities throughout PJM. Municipal utilities and cooperative utilities throughout PJM own generation resources and participate fully in both the PJM energy markets and the PJM capacity markets, yet they also receive cost-based compensation from ratepayers for their generating units. (Tr. XII at 3037.) Such municipal utilities and cooperative utilities exist in all thirteen states in PJM. (Tr. XII at 3038.) One notable example is the Eastern Kentucky Power Cooperative ("EKPC"). EKPC owns 3,000 megawatts of generation – roughly the same size as the PPA Proposal. (Tr. XII at 3036.) Yet like other cooperatives, EKPC participates in the PJM

energy and capacity auctions *and* receives cost-based compensation for its generation resources. (*Id.*)

Moreover, there are numerous other States in PJM that retain cost-based compensation for generation, including West Virginia, Kentucky, Indiana, Michigan, and Tennessee. (Tr. XII at 3038.) Unlike Dominion, which fully participates in the PJM capacity markets, many of the investor-owned utilities in these States have elected the Fixed Resource Requirement option and thus do not bid most of their generation into the PJM capacity auctions. Nonetheless, these investor-owned utilities – which own tens of thousands of megawatts of generation – fully participate in the PJM *energy* markets, and they are permitted to bid a certain amount of excess capacity into the PJM capacity markets. In the AEP system, for example, AEP Ohio's affiliate utilities in Indiana, Michigan, Kentucky, West Virginia, and Virginia have elected the FRR option and may bid up to 1,300 megawatts of capacity in the PJM capacity markets – which is nearly half the size of the Affiliate PPA. (Tr. XX at 4908.)

In addition, there are numerous power purchase agreements in PJM that coexist alongside the PJM energy and capacity markets. Dr. Bowring, who monitors bilateral transactions as the Market Monitor, confirmed the existence of several PPAs between cost-regulated electric distribution utilities and independent coal-fired generators. (Tr. XII at 3068-3074 (listing PPAs in PJM).) Although Dr. Bowring did not know the specific cost structure of any of these PPAs, he and other witnesses acknowledged that it is typical for distribution utilities in PJM to pass through the net costs of PPAs in retail rates – exactly what AEP Ohio is proposing here. Indeed, AEP Ohio itself has passed through the net cost of PPAs in its retail rates on multiple occasions, both currently and in the past. As the Commission knows, AEP Ohio is currently passing through the net cost of two roughly 100 megawatt PPAs with wind facilities in its Alternative

Energy Rider. See In re Fuel Adjustment Clauses of Columbus S. Power and Ohio Power Co., Case Nos. 09-872-EL-FAC, Opinion and Order at 12 (Jan. 23, 2012); ESP II, Opinion and Order at 17-19; ESP III, Opinion and Order at 35. Moreover, AEP Ohio previously passed through the net costs of a PPA with the Lawrenceburg Generating Facility in AEP Ohio's Fuel Adjustment Clause, and the net costs of AEP Ohio's OVEC entitlement also previously have been recovered in AEP Ohio's retail rates. See In re Application of Columbus S. Power for Approval of an Electric Security Plan, Case Nos. 08-917-EL-SSO, Opinion and Order at 13 (Mar. 18, 2009).

Accordingly, Intervenors' claims that the PPA Proposal is a "subsidy" that is "inconsistent" with competitive markets in PJM is belied by the numerous examples of cost-based compensation in PJM. If the PPA Proposal were an impermissible subsidy within PJM markets, then, at a minimum, the following would also be impermissible subsidies: Dominion's 18,000 MW of generation with cost-based compensation, as well as its many new plants being developed; *all* generation owned by municipal and cooperative utilities with cost-based compensation in PJM, including EKPC's 3,000 MW; generation in the seven PJM states that retain cost-based retail rates for generation, including the FRR entities in those states that fully participate in the energy markets and bid excess capacity in the capacity auctions; and all PPAs in PJM in which the net cost of the wholesale transaction is recovered by a utility in retail rates. But those forms of cost-based compensation for generation are not impermissible "subsidies," nor are they "inconsistent" with PJM market principles. Rather, they are an integral part of PJM. A substantial percentage of all generation in PJM has received cost-based compensation since the advent of PJM's energy and capacity markets.

Furthermore, the well-established and wide-spread existence of cost-based compensation for generation in PJM refutes Intervenors' claims concerning the PPA Proposal's alleged effects

on competition in PJM. Intervenors claim that the PPA Proposal will encourage AEP Ohio to bid the PPA capacity at below "competitive" prices to maximize PPA Rider revenue for ratepayers. (See, e.g., IMM Ex. 2 at 5; OCC Ex. 12 at 6; OMAEG Ex. 29 at 6; RESA Ex. 1 at 4.) However, Intervenors' witnesses have admitted that PJM is an artificial construct, not a pure market where buyers and sellers can agree to any freely-negotiated commercial terms. (See, e.g., Tr. X at 2489 (OCC witness Rose: the "current RTO (wholesale) and retail access-based model is a composite of different markets that are highly regulated and frequently adjusted by FERC and the states" (emphasis added)); see also id. (OCC witness Rose: the "past 20 years" of efforts to bring competition to electric markets have merely "replace[d] a complex cumbersome and expensive regulatory system with a complex, cumbersome, and expensive deregulatory system" (emphasis added)).) More to the point, PJM's regulated market includes detailed rules about how units are bid in and no party – including the Market Monitor – has alleged (let alone demonstrated) that the PPA Proposal would cause those rules to be violated. Thus, Intervenors' claim that the Affiliate PPA will encourage bids that are not "competitive" is incorrect and misguided.

In any event, the same incentives that Intervenors allege with respect to the PPA Proposal would be true of *any* cost-based compensation for generation in PJM. If the PPA Proposal would encourage certain bidding behavior of AEP Ohio, then cost-based compensation for generation would encourage the exact same bidding behavior for Dominion's 18,000 megawatts of generation; EKPC's 3,000 megawatts of generation and all other megawatts owned by municipal and cooperative utilities; and any megawatts owned by an FRR entity bidding excess capacity. In all of those cases, the bidder will be compensated for its costs through retail rates

regardless of the auction clearing price, and thus the bidder would face the same incentive to maximize revenue for retail customers.

Thus, if Intervenors' claims about the PPA's alleged effects on the wholesale markets were true, the PJM markets would have long ago been harmed from the incentives caused by all of the other examples of cost-based compensation for generation. But, of course, the PJM markets have functioned perfectly well notwithstanding the proliferation in PJM of cost-based compensation for generation that is indistinguishable from the PPA Proposal. Indeed, Dr. Bowring expressly admitted that "every auction" that has been conducted in PJM has "produced competitive results, and the behavior of participants was competitive." (Tr. XXI at 5256.)

In sum, what Intervenors are asking the Commission to do is to deny itself (and Ohio ratepayers) a valuable tool for achieving retail rate stability that other States in PJM have not hesitated to use themselves – and have used to a far greater extent than AEP Ohio is proposing here. The States of Virginia, West Virginia, Indiana, Michigan, Kentucky, Tennessee, and North Carolina – all of which are fully or partially in PJM – have determined that cost-based compensation for generation benefits retail customers. If those states can reach that conclusion without harm to PJM's markets, so too can Ohio.

## 3. The Market Monitor's desire to change the MOPR is no reason to deny the PPA Proposal.

Dr. Bowring tells the Commission that he believes that the PJM rules should be changed so that the existing Minimum Offer Price Rule ("MOPR") is drastically expanded to include all forms of "subsidies" in the PJM market, including the PPA Proposal. (IMM Ex. 2 at 6-7.) But Dr. Bowring's desire to change the MOPR is no reason to decline to adopt the Stipulation or deny the PPA Proposal. The current MOPR applies only to new gas-fired generation supported by certain State subsidies. (Tr. XXI at 5216.) If it applies, the MOPR requires a new gas unit to

bid in the PJM capacity auctions at the cost of new entry ("CONE"). (IMM Ex. 2 at 6-7.) Once a MOPR-covered unit clears one capacity auction, the MOPR no longer applies, and the unit is free to bid pursuant to the same rules that govern other generation resources not subject to the MOPR. (Tr. XXI at 5238.)

Dr. Bowring says that he would like the MOPR to expand in a number of ways. Most strikingly, Dr. Bowring believes that the MOPR should be changed so that it applies to all generators in PJM – both existing and new units – that receive what Dr. Bowring calls "subsidies." (Tr. XXI at 5224-5249.) Specifically, Dr. Bowring would expand the MOPR to require minimum capacity bids from all investor-owned utilities in Virginia, West Virginia, Kentucky, North Carolina, Tennessee, Indiana, and Michigan, insofar as those utilities receive cost-based retail compensation for their generation. (Tr. XXI at 5224.) This would include all 18,000 megawatts of Dominion's existing generation (Tr. XXI at 5241); all of the new generation facilities Dominion is building (id.); and all of AEP Ohio's affiliate utilities that are currently FRR, if they were to begin bidding in the capacity auctions (Tr. XXI at 5224). Dr. Bowring would also expand the MOPR to cover all municipal and cooperative utilities in PJM that receive cost-based retail compensation for generation, including EKPC with its 3,000 megawatts of generation. (Tr. XXI at 5245.) Dr. Bowring would expand the MOPR to apply to all generators in PJM with PPAs, at least so long as the net cost of the PPAs was recovered by the buyer in retail rates. (Tr. XXI at 5246-47.) Dr. Bowring would expand the MOPR to apply to all renewable resources that are the beneficiaries of State renewable portfolio standards. (Tr. XXI at 5249-50.) And Dr. Bowring would even expand the MOPR to cover, on a "case by case" basis, generators that receive tax subsidies. (Tr. XXI at 5248-49.)

Critically, moreover, Dr. Bowring would also expand the time period for which the MOPR applies to a unit. (Tr. XXI at 5238.) Currently, the MOPR applies until a unit clears one capacity auction, and then the minimum price restriction expires. But Dr. Bowring would eliminate this expiration provision. He believes that the MOPR should require minimum bids from applicable generators in all capacity auctions, even if the unit clears one or more capacity auctions with a price-mitigated bid. (Tr. XXI at 5238.)

Dr. Bowring acknowledges that this Commission is not empowered to change the MOPR or any other PJM rules; only FERC may amend the PJM tariff. (Tr. XXI at 5224-25.) Instead, Dr. Bowring's point appears to be that, if the Commission were to approve the PPA Proposal, Dr. Bowring would propose – and FERC would supposedly adopt – Dr. Bowring's MOPR expansion. In that eventuality, the PPA Units would be required by the MOPR to bid at certain minimum levels, thus decreasing the likelihood that the PPA Units would clear the capacity auctions and decreasing the likely capacity revenue that will flow through the PPA Rider to customers. That hypothetical chain of events, however, is not grounds to deny the PPA Proposal.

As an initial matter, the Commission should not engage with the question of whether Dr. Bowring's MOPR proposal reflects sound policy for the wholesale markets. Suffice it to say that there may be valid arguments for why FERC should reject Dr. Bowring's extreme proposal on its merits. But those arguments should be made to – and considered by – PJM and FERC, not this Commission. If Dr. Bowring goes forward with his MOPR expansion proposal, AEP Ohio and many others parties (including, for that matter, this Commission, if it so choses) will have ample opportunity to describe to PJM and FERC the merits (or lack thereof) of Dr. Bowring's proposal and whether such an approach would be consistent (or conflict with) existing FERC policies.

But the current proceeding is not the proper forum for such a debate. The Commission's work in general and this proceeding in particular is focused on the rules and policies applicable to *retail* rates. The Commission should evaluate the likely effect of the PPA Proposal on retail ratepayers based on *existing* PJM rules – in particular, the Commission should focus on the stabilizing effect that the PPA Proposal will likely have on retail rates. The Commission should resist Dr. Bowring's invitation to engage in speculation about what PJM's rules *should* be and the impact on the PPA Proposal of rule changes that FERC *might* approve at some point in the future.

In any event, Dr. Bowring's MOPR proposal is unlikely to garner the kind of widespread support that is usually necessary to change PJM rules. Dr. Bowring admitted that he has not had any conversation with anyone at PJM to determine whether PJM would consider supporting his proposal. (Tr. XII at 5224.) As Dr. Bowring acknowledged, moreover, the PJM stakeholder process that gives rise to most PJM rule changes involves over 600 stakeholders and requires a supermajority approval. (Tr. XXI at 5225-26.) As AEP Ohio and its affiliate entities know from long experience, finding sufficient support among PJM stakeholders for even simple market reforms can be exceedingly difficult given PJM's diverse membership and governance structure. Moreover, Dr. Bowring's MOPR expansion proposal – which Dr. Bowring acknowledges would be "significant" and "controversial" (Tr. XXI at 5225, 5227) – would likely garner strong and vocal opposition by numerous stakeholders. Because Dr. Bowring's proposal would require minimum bids from all investor-owned utilities receiving cost-based retail compensation for generation, it would no doubt be opposed vociferously by Dominion and other utilities in Virginia, West Virginia, Indiana, Michigan, Tennessee, and North Carolina, as well as by State commissions in those States. It would also be opposed by municipal and cooperative utilities in PJM, who would be subject to the MOPR expansion, as well as by environmental advocates,

since Dr. Bowring would make no exemption for subsidies for renewable resources such as state renewable portfolio standards. Dr. Bowring's MOPR proposal would negatively affect dozens if not hundreds of stakeholders in PJM and would be exceedingly controversial. Its low likelihood of garnering sufficient support in the PJM stakeholder process – let alone its chances of being accepted by FERC and affirmed on appeal – mean that Dr. Bowring's MOPR proposal should not meaningfully affect the Commission's analysis here.

## B. Once the Commission finds that the Affiliate PPA is prudent and benefits ratepayers, FERC's affiliate transaction restrictions are inapposite.

Some Intervenors have criticized the PPA Proposal on the ground that it is a transaction among affiliates – AEP Ohio and AEPGR. For example, Exelon/RESA witness Campbell asserted in his direct testimony that the PPA Rider may violate "FERC restrictions on affiliate transactions, which were designed to protect customers served by franchised public utilities from inappropriately subsidizing their affiliates and causing financial harm to customers." (Exelon/RESA Ex. 1 at 29.) These Intervenors have now taken their criticisms to FERC by filing a complaint alleging that AEP Ohio's proposed Affiliate PPA violates FERC's affiliate transaction rules. *See* FERC Docket No. EL 16-33-000.

Intervenors' FERC complaint will, of course, be adjudicated before FERC, and AEP Ohio has every confidence that Intervenors' claims will not succeed in that forum. As relevant here, however, it is important to note that FERC has exempted Ohio utilities from its restrictions on affiliate transactions because *this Commission* has shown that it is capable of protecting retail ratepayers from any alleged affiliate abuse. Specifically, FERC has recognized that "the Ohio Commission now has, and will continue to have, the ability to ensure a properly developed procurement plan and to oversee a fair administration of such a plan in order to protect retail customers." *See In re FirstEnergy Solutions Corp.*, Order Denying Rehearing, 128 FERC

¶ 61,119, ¶ 20 (July 31, 2009). Thus, FERC has declined to apply its affiliate restrictions to transactions between a retail utility in Ohio and its generation affiliate because FERC has recognized that this Commission possesses the ability to review the prudence of such transactions and to protect retail ratepayers from any alleged "affiliate abuse." *See id.; see also* FERC Docket Nos. ER14-593-000 *et seq.* (approving waiver of affiliate sales restrictions for AEP Ohio). That same rationale applies equally here: FERC's affiliate restrictions do not apply to the proposed Affiliate PPA because, among other reasons, *this Commission* is fully capable of protecting customers from any alleged "affiliate abuse."

It is vital for the Commission to recognize, therefore, that AEP Ohio's PPA Proposal gives the Commission numerous, detailed opportunities to protect ratepayers from any alleged "affiliate abuse." As an initial matter, all aspects of the PPA Proposal and its impacts on retail customers have been presented to the Commission for its careful review in this proceeding. As discussed throughout this brief, the Commission should find that the Affiliate PPA is a prudent wholesale purchase with many benefits for retail customers. That finding necessarily entails that the PPA Proposal does not reflect any alleged "affiliate abuse" but rather is a sound affiliate transaction that benefits ratepayers.

Moreover, the PPA Proposal includes a rigorous review process for the Commission to continue to review the prudence of AEP Ohio's incurrence of PPA costs on a going-forward basis. As described above, *see supra* Part VI.A.5.a, the Commission will conduct annual financial and managerial audits of the PPA rider, much in the same way the Commission currently conducts such audits for AEP Ohio's fuel adjustment clause. In the managerial audits in particular, the Commission will review AEP Ohio's decisions on the PPA operating committee, which will include a review of decisions related to PPA Unit capital expenditures, as

well as operational and management costs. *See supra* Part VI.A.5.a. In this way, the Commission is provided significant visibility and oversight of ongoing PPA Rider costs, and if there were any allegation of "affiliate abuse" related to ongoing PPA Rider costs, the Commission would have every opportunity to investigate the facts surrounding such an allegation and, if appropriate, disallow retail cost recovery in the PPA Rider.

It is also significant that AEP Ohio has committed in the Stipulation and its Amended Application to full information sharing with the Commission and Staff to aid the Commission's ongoing oversight of the PPA Rider. In particular, the Stipulation reflects a commitment to provide "AEPGR fleet information on *any* cost component" if made "pursuant to a reasonable Staff request (as determined by the Commission)." (Jt. Ex. 1 at 7 (emphasis added).) In addition, AEP Ohio witness Vegas committed to "provide, on a periodic basis as determined by the Commission, summaries and/or details of the [Operating] Committee's actions." (AEP Ohio Ex. 1, at 27.) Thus, the Commission and Staff will be able to review detailed information regarding PPA Unit costs being passed through the PPA Rider, and this gives the Commission the tools necessary to detect any alleged "affiliate abuse" and ensure that ongoing PPA Unit costs are appropriate to pass on to ratepayers.

Finally, as the Commission is aware, there is a body of statutes and Commission regulations that govern interactions between AEP Ohio and its affiliates (including AEPGR). *See, e.g.*, R.C. 4928.17(A)(2) (corporate separation plan must prevent "unfair competitive advantage" and "abuse of market power"); R.C. 4928.17(A)(3) (corporate separation plan must ensure that an electric distribution utility does not provide "undue preference or advantage" to competitive affiliate); OAC 4901:1-37-04(A)(1) ("structural safeguards" to ensure that an electric utility "function[s] independently" of its affiliate); OAC 4901:1-37-04(A)(3) (safeguards

to prevent "cross-subsidies" between a utility and its affiliate); OAC 4901:1-37-04(B)-(C) (provisions governing separate accounting and financial arrangements between utility and its affiliate); OAC 4901:1-37-04(D) ("code of conduct" concerning affiliate information sharing and business practices). AEP Ohio's corporate separation plan, moreover, implements the statutory and regulatory directives by establishing AEP-specific rules and procedures relating to structural safeguards, separate accounting systems, training and internal compliance monitoring, and a code of conduct policy that all employees of AEP Ohio and its affiliates must follow. *In re Application of Ohio Power Company for Approval of Full Legal Corporate Separation*, Case No. 12-1126-EL-UNC, Finding and Order (Oct. 17, 2012); Entry on Rehearing (Apr. 24, 2013). As AEP Ohio witnesses Vegas, Thomas, and Allen confirmed, AEP Ohio's corporate separation plan and all of its provisions, including the code of conduct, are currently in force and will remain in effect throughout the term of the PPA Proposal. (*See, e.g.*, Tr. II at 350; Tr. V. at 1258-59; Tr. XVIII at 4487-88.)

In sum, FERC's rules for affiliate transactions give this Commission a critical role in ensuring that wholesale purchases are prudent and beneficial for ratepayers. The PPA Proposal provides the Commission an opportunity to carry out this role by carefully reviewing the prudence of the Affiliate PPA and conducting ongoing oversight of PPA Rider costs. Insofar as the Commission finds that the Affiliate PPA is prudent and benefits ratepayers, FERC's affiliate transaction restrictions are inapposite.

# C. The PPA Proposal will ease the transition to competition in Ohio and encourage shopping.

In addition to alleging that the PPA Proposal will harm the wholesale markets, several Intervenors make a related argument that the PPA Proposal will harm the *retail* competitive supply market in Ohio. (*See*, *e.g.*, RESA Ex. 1 at 4; OMAEG Ex. 29 at 6.) But the exact

opposite is true. By limiting customers' exposure to volatile retail rates, the PPA Proposal will ease the transition to competition in Ohio and *encourage* shopping.

Since the passage of Senate Bill 3 in 1999, AEP Ohio has worked with the Commission to fulfil the Commission's often-stated goal of providing customers a gradual transition to competition. Now, however, all of AEP Ohio's customers – shopping and non-shopping alike – are fully exposed to the volatility of market rates. As discussed above, *see supra* Part VI.B.2.b, shopping customers have witnessed substantial swings in CRES rates in recent years. Following the *ESP III* decision, moreover, non-shopping customers' generation supply rates are now set through AEP Ohio's competitive SSO auction process, and other SSO auction rates have also increased markedly due to volatile market factors. Further severe price swings in the future could lead to substantial customer backlash and even calls for reregulation, potentially setting back the effort to transition to competition.

The PPA Proposal, therefore, will ease the final transition to competition in Ohio. By smoothing out severe increases and decreases in market prices for both shopping and non-shopping customers, the PPA Proposal will partially insulate customers from the full volatility of the market. In so doing, the PPA will decrease the likelihood that customers will demand reregulation because of severe and unpredictable changes in their electric bills.

Moreover, the PPA Proposal's market-price-hedging effect will encourage shopping. As discussed above, *see supra* Part VI.B.2, the CRES market has failed to provide sufficient price-hedging products of its own. CRES contracts are typically limited to a short period of time, such as 1-3 years, and allegedly "fixed" CRES rates are often not fixed at all. As a result, some customers are reluctant to shop for generation because they cannot protect themselves from market price spikes. But as a limitation on shopping customers' exposure to volatile market

rates, the PPA Proposal will encourage customers to shop by providing protection against costly market swings. Thus, far from *discouraging* retail competition in Ohio (*see*, *e.g.*, RESA Ex. 1 at 4; OMAEG Ex. 29 at 6), the PPA Proposal will in fact *encourage* retail competition by providing a critical protection against volatile market rates that the competitive market itself has failed to provide.

- D. The PPA Proposal's cost-based compensation model represents sound State regulatory policy.
  - 1. State regulatory policy does not require an absolute devotion to competition but rather encourages some cost-based hedges to market volatility.

Intervenors allege that the cost-based compensation model reflected in the PPA Proposal is at odds with State policy. (*See*, *e.g.*, OCC Ex. 11 at 19; OMAEG Ex. 29 at 8.) But Intervenors' arguments all suffer from the same flaw: They incorrectly assume that Ohio utility policy requires a complete, unquestioned devotion to competitive compensation for generation. (*See*, *e.g.*, Tr. XX at 5079 (OMAEG witness Hill's opinion is based on his incorrect belief that "there is a state policy" that "requires a completely free market for generation service").)

Intervenors' assumption is false: Following the passage of Senate Bill 221 in 2008, the General Assembly has authorized the Commission to adopt a hybrid approach to utility regulation that relies on *both* competitive and cost-based principles. For instance, Senate Bill 221 expressly authorized an electric distribution utility, as part of an ESP, to build new generation resources supported by cost-based rates. *See* R.C. 4928.143(B)(2)(b)-(c). Moreover, as the Commission has already recognized, Senate Bill 221 authorizes AEP Ohio's PPA Rider as a means of stabilizing retail rates and mitigating the volatile effect on retail rates of total reliance on competition. *See ESP III*, Opinion and Order at 19-22. Intervenors may wish that the General Assembly had adopted a complete devotion to competition, but that is simply not the case. The

General Assembly has authorized the Commission to protect customers from volatile competitive rates by implementing limited forms of cost-based compensation for generation, and as the Commission has already determined (*see ESP III*, Opinion and Order at 19-22), the PPA Proposal is directly supported by that statutory authority.

## 2. The Commission should reject Dr. Bowring's call to blindly pursue the "market paradigm" as contrary to State policy.

In particular, the Market Monitor asks the Commission to adopt a complete devotion to competition that finds no support in State policy. In making this argument, Dr. Bowring draws a distinction between two "paradigms" – the "market paradigm," which he believes the Commission should follow at all costs, and the "quasi-market paradigm," which he disfavors.

(IMM Ex. 2 at 5.) Dr. Bowring believes the Commission should reject the PPA Proposal because it "is not consistent with the market paradigm." (*Id.*)

Critically, however, Dr. Bowring admitted on cross-examination that provisions of Senate Bill 221 – which Dr. Bowring had not reviewed when he filed his initial testimony in this proceeding (Tr. XXI at 5211) – represent the *quasi-market* paradigm. (Tr. XXI at 5235 ("[Q.] [Y]ou would agree that Senate Bill 221 in Ohio, if implemented, would reflect outcomes that are consistent with the quasi-market paradigm, correct? [Dr. Bowring:] Yes.").) Thus, although *Dr. Bowring* may favor the "market paradigm," the *Ohio General Assembly* has expressly authorized this Commission to pursue retail ratemaking policies consistent with both the market paradigm *and the quasi-market paradigm*. As a result, Dr. Bowring's position – that the Commission should *only* pursue the market-based paradigm – is directly contradicted by Ohio law and policy. In passing Senate Bill 221 and authorizing the Commission to approve an ESP, the General Assembly gave the Commission numerous tools to mitigate the effects of volatile market prices on retail ratepayers, and as the Commission has already concluded, these tools include a rate

stability provision like AEP Ohio's PPA Rider. *ESP III*, Opinion and Order at 19-22. To decline to employ these tools because they represent the "quasi-market paradigm" would be to adopt a blind devotion to "competition" that the General Assembly has expressly rejected.

Moreover, on cross examination, Dr. Bowring admitted that all of the numerous examples of cost-based compensation in PJM discussed above, *see supra* Subsection VII.A.2, also reflect his disfavored quasi-market paradigm. (Tr. XXI at 5210.) Thus, even if Dr. Bowring is right that the PPA Proposal is more consistent with the quasi-market paradigm, that paradigm is commonplace in PJM, and when Dr. Bowring encourages the Commission to pursue *only* the "market paradigm," he is asking the Commission to deny itself a valuable tool relied on by many other States in PJM.

Indeed, Dr. Bowring has unfairly singled out the PPA Proposal for criticism and is asking the Commission to adopt a market structure that he has never asked other States to adopt. For instance, Dr. Bowring has never intervened in any retail ratemaking proceeding before the Virginia State Corporation Commission to request that Dominion be denied cost-based retail compensation for its generation. That is true not only for Dominion's existing 18,000 megawatts of generation but also for Dominion's new plants – Dr. Bowring never intervened to request that the Virginia Commission deny cost-based retail compensation for Dominion to build its new generation facilities, even though Dr. Bowring admits that these plants are being built pursuant to a "subsidy" akin to the PPA Proposal. (Tr. XII at 3059, 3062.)

In sum, Dr. Bowring would have this Commission blindly pursue an abstract concept of "competition" at the expense of policies that could bring many benefits for retail ratepayers.

(See, e.g., Tr. XII at 3036-37 ("[Q.] If you knew, with certainty, that the PPA rider over its term would be a credit to consumers, would your position still be the same? [Dr. Bowring]: Yes.").)

But the Commission has repeatedly emphasized the importance of rate stability and achieving a more balanced approach using regulatory tools – so it should remain within its authority over *retail* rates and focus on the retail rate stability that the PPA Proposal will provide retail ratepayers.

## E. The Stipulation's proposed allocation of EE/PDR, IRP, and PPA Rider credits and costs does not violate any regulatory principle or practice.

OCC witness Fortney opines that certain provisions in the Stipulation violate "the fundamental rate-making principle that the customers who cause the costs should be the customers to pay for those costs." (OCC Ex. 32 at 4.) Specifically, he argues that the Stipulation "cause[s] financial harm to residential customers" by transferring 50% of EE/PDR Rider costs for transmission and sub-transmission voltage customers and 50% of IRP credits from the EE/PDR Rider to the EDR Rider. (*Id.* at 3-5 (citing Jt. Ex. 1 Section III.D.4, III.D.5.) He also contends that the Signatory Parties' "straight allocation by demand of the PPA costs and revenues unfairly and arbitrarily assigns a disproportionate share of those costs to the Residential class." (OCC Ex. 32 at 5 (citing Jt. Ex. 1 Section III.A.4).)

Each of OCC's arguments is nothing more than a criticism of the Signatory Parties' proposed rate design and thus does not, and cannot, demonstrate that the Stipulation violates any regulatory principle or practice. As the Commission knows, and as it and the Ohio Supreme Court have recognized, the Commission has "considerable discretion in matters of rate design." *Indus. Energy Users-Ohio v. Ohio Power Co.*, 140 Ohio St. 3d 509, 2014-Ohio-4271, ¶ 27 (citing *Consumers' Counsel v. Pub. Util. Comm.*, 125 Ohio St. 3d 57, 2010-Ohio-134, ¶ 20; *Citywide Coalition for Util. Reform v. Pub. Util. Comm.*, 67 Ohio St. 3d 531, 534 (1993)).

Because the Commission has broad discretion over such matters, its approval and adoption of the Signatory Parties' proposals regarding the collection of certain EE/PDR Rider costs, including

IRP credits, through the EDR Rider and the allocation of PPA costs and revenues will not violate the third prong of the test for stipulations.

Moreover, and tellingly, although OCC now advocates *against* the recovery of a portion of AEP Ohio's IRP credits through the EDR, OCC witness Fortney conceded at hearing that *OCC took the opposite position less than 10 months ago in the ESP III case*. (Tr. XXI at 5386.) There, OCC argued that the costs of the IRP credits *should* be collected through the EDR "[t]o assure that the costs of those credits are born[e] by all customers. Otherwise, mercantile customers who are receiving the benefits of the IRP-D may opt out from the EE/PDR rider and pay nothing for the benefits." (*Id.* (quoting *ESP III*, OCC Mem. Contra. AEP Ohio AFR at 28 (Apr. 6, 2015)).) Mr. Fortney also agreed that the IRP credits relate to peak demand reduction and are appropriate for a demand allocation in rate design, as the Signatory Parties have proposed here. (*Id.* at 5387.) It is disingenuous for OCC to argue that the proposed treatment of the IRP credits violates any regulatory principle or practice in the face of OCC's opposite position on this issue just last year and Mr. Fortney's testimony at hearing.

Finally, to the extent he offered one, the Commission should disregard Mr. Fortney's opinion regarding the allocation of the PPA Rider because it lacks any record support or analysis. Although he first opined that "[t]he proper allocation should be a combination of demand and energy" (OCC Ex. 32 at 6), Mr. Fortney testified at hearing that he was not making any recommendation regarding what allocation OCC believes would be appropriate. (Tr. XXI at 5377.) Next, he testified that, in the absence of a study and as a "fallback position," he would recommend an energy allocation. (*Id.* at 5379-80.) Mr. Fortney conceded, however, that he has not performed any study or analysis as a part of his testimony in this case. (*Id.* at 5381-82.)

In the absence of any analysis to support Mr. Fortney's position, it is inappropriate to modify the Signatory Parties' current cost allocation methodology. *See ESP III*, Opinion and Order at 68 (declining to adopt IEU-Ohio's recommendations regarding allocation of BTCR costs and finding that "it would be inappropriate to modify AEP Ohio's current cost allocation methodology" because the recommendations, like Mr. Fortney's present proposal, "would have an unknown impact on customer bills," lacked "any analysis"). It also goes without saying that Mr. Fortney's unsupported opinions do not demonstrate that the Signatory Parties' proposal to allocate the PPA Rider credits and costs on a demand basis violates the third prong of the three-part test.

#### F. Arguments that other provisions of the Stipulation also violate important regulatory principles or practices are premature and otherwise misguided.

Certain of the parties opposing the Stipulation also contend that several other provisions of the Stipulation, in addition to the provisions that specifically recommend approval of the PPA Rider, also violate important regulatory principles or practices. For example, OCC witnesses Dormady and Hough argue that AEP Ohio's commitment in Section III.C.12 of the Stipulation to include in an Application to extend its current ESP III a pilot program that establishes a bypassable Competition Incentive Rider violates regulatory principles and practices because it will be unduly complex, unfair across customer classes, discriminatory, and inefficient. (OCC Ex. 36, at 9-12; OCC Ex. 33 at 10.) Mr. Haugh also contends that AEP Ohio's commitment in Section III.D.7 of the Stipulation to establish a supplier consolidated billing pilot program, while confirming AEP Ohio's right to seek rate recovery of its 50% share of the costs to implement the program eligible for recovery in a future rate proceeding, improperly imposes costs on customers that should be borne by CRES providers alone. (OCC Ex. 33 at 10-11.)

As another example, OCC witness Dormady, RESA witness Bennett, and Dynegy witness Ellis contend that the costs of converting Conesville Units 5 and 6 to natural gas cofiring should be borne by competitive generation suppliers, not AEP Ohio customers. They claim that AEP Ohio's agreement to use its best efforts to seek Commission approval for recovery of those costs through the PPA Rider, Section III.D.9 of the Stipulation conflicts with the deregulatory principle. (OCC Ex. 36 at 7-8; RESA Ex. 1 at 9; Dynegy Ex. 2 at 10-12.) In a similar fashion, Mr. Dormady and Mr. Bennett also claim that AEP Ohio's commitments in Section III.I of the Stipulation to develop 500 MW nameplate capacity of wind energy projects and 400 MW nameplate capacity for a solar energy project(s) in Ohio, subject to Commission approval and cost recovery (based on a PPA structure) through the PPA Rider, violate the same deregulatory principle. (OCC Ex. 36 at 16; RESA Ex. at 8.)

All of these criticisms are without merit. The underlying concerns and objections are misguided, and more to the point at this juncture, they are premature. Parties opposing the Stipulation may criticize AEP Ohio's voluntary commitment to include a provision to establish a CIR provision in its expanded ESP III filing or question the benefits the proposed provision would provide. Such criticisms, however, cannot and should not be adjudicated in this proceeding. As Mr. Allen explained specifically in the case of provisions that AEP Ohio will include in its application to extend its ESP III, such as the CIR, AEP Ohio will make detailed proposals and provide cost impacts supporting each of those provisions outlined in Section III.C of the Stipulation in that application. (Tr. XIX at 4681, 4743-44, 4764-65.) AEP Ohio does not seek preapproval of those provisions from the Commission in this case. (Tr. XIX at 4765.) Parties interested in those proposals will have an opportunity in the expanded ESP proceeding to present their positions on them. (Tr. XXI at 5037-38.)

The same point applies to the other provisions that these parties criticize as violating important regulatory principles. Thus, Mr. Haugh's criticisms that customers should bear no part of the cost of the pilot supplier consolidated billing program, and that CRES providers should bear all of those costs, are wrong-headed in the first instance because all customers benefit from an evaluation of whether and how consolidated supplier billing may be implemented successfully. However, the Stipulation does not grant rate recovery of those costs. Instead, while it makes 50% of the costs of the pilot program eligible for recovery through a future rate proceeding, it reserves the cost-recovery decision for that future proceeding. That is the forum in which OCC's concerns can be evaluated appropriately.

Similarly, with regard to recovery of the costs of converting Conesville Units 5 and 6 to natural gas co-firing, Section III.D.9 of the Stipulation clearly reserves to the Commission the authority to review and approve recovery of the costs through the PPA Rider. While AEP Ohio is committed to using its best efforts to obtaining all necessary regulatory approvals, including approval of the costs of conversion, Section III.D.9 clearly contemplates a proceeding in which the Commission will review AEP Ohio's cost recovery proposal and in which interested parties may participate and voice any concerns that they might have about that proposal.

Finally, the same points also apply to AEP Ohio's commitments, in Section III.I.1 of the Stipulation, to develop 500 MW nameplate capacity of wind energy projects in Ohio and, in Section III.I.2, to develop 400 MW nameplate capacity for a solar energy project(s), also in Ohio. The Stipulation Sections III.I.1.e and III.2 provide that cost recovery through the PPA Rider for each wind and solar project proposed for development, which is a condition to AEP Ohio fulfilling its development commitments, will be subject to Commission review and approval in separate future RDR filings. Interested parties will be able to participate and voice

their concerns in those future proceedings. In addition, the Stipulation specifically provides that, in reviewing such applications, the Commission will consider among other relevant matters, the economics and proposed PPA price associated with each project, as compared to other available market prices for such projects. (*Id.*) Furthermore, those future proceedings are likely to be conducted with the benefit of the General Assembly's decisions in hand regarding Ohio's energy efficiency portfolio standard post-SB 310, which will assist the Commission in its review of the applications.

All of the arguments that these parties have made contending that these other provisions of the Stipulation also violate important regulatory principles or practices are misguided.

Moreover, they are premature. They may raise their concerns about how those provisions will be implemented in the future proceedings that the Commission will conduct for that purpose.

#### VIII. CONCLUSION

For the foregoing reasons, the Commission should adopt the Stipulation without modification.

Respectfully submitted,

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#### CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the foregoing *Initial Brief* in *Support of the Stipulation and Recommendation* has been served upon the below-named counsel and Attorney Examiners via electronic mail this 1<sup>st</sup> day of February, 2016.

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