

**BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the 2018 Long-Term Forecast Report of Ohio Power Company and Related Matters.)))	Case No. 18-501-EL-FOR
In the Matter of the Application of Ohio Power Company for Approval to Enter into Renewable Energy Purchase Agreements for Inclusion in the Renewable Generation Rider.)))))	Case No. 18-1392-EL-RDR
In the Matter of the Application of Ohio Power Company for Approval to Amend its Tariffs.)))	Case No. 18-1393-EL-ATA

REPLY BRIEF OF INTERSTATE GAS SUPPLY, INC. AND IGS SOLAR, LLC

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I. INTRODUCTION

The world was very different in 2008 when the General Assembly passed Amended Senate Bill 221 (“SB 221”). Energy prices and demand were continually rising. Parties legitimately questioned whether there would be sufficient generation capacity available to meet demand at a reasonable price. Consequently, the General Assembly established a hybrid form of regulation through which electric distribution utilities could potentially maintain their generation if they could provide reliable service at a price better than the market.

Of course, these concerns never materialized due in large part to the exploration and extraction of shale natural gas, which came into fruition as the ink was still drying on SB 221. Following the successful development of shale gas, Ohio has experienced

nearly a decade of low electricity prices. Rather than embrace the clear benefits that markets have delivered to Ohio customers, parties in favor of AEP Ohio's proposal attempt to ignore the plain language of the law and its historical context.

To be clear, Interstate Gas Supply, Inc. and IGS Solar, LLC (collectively "IGS") support the development of renewable energy resources. IGS also recognizes that the state of Ohio is poised for great surge in renewable resource development, particularly in the solar market. But market-based development of renewable resources is unlikely to occur if the Public Utilities Commission of Ohio ("Commission") grants Ohio Power Company's ("AEP Ohio") request to subsidize 900 megawatts of solar and wind resources, which would cut the competitive market off at the knees. AEP Ohio has not offered any legitimate basis to stunt the competitive market in violation of Ohio policy.

To the extent that the Commission truly desires to advance development of renewable energy resources, rather than picking winners and losers, IGS urges the Commission to focus on eliminating existing barriers and establishing competitively neutral incentives.

II. BACKGROUND

In this case, AEP Ohio requests that the Commission find that there is a need to build at least 900 megawatts of renewable energy resources. The proposed finding of need would pave the way for AEP Ohio to collect a non-bypassable charge under R.C. 4928.143(B)(2)(c) of the electric security plan statute. If AEP Ohio has its way, it will enter into renewable energy purchase power agreements ("REPAs"), resell the power into the wholesale market, and sell the associated renewable energy credits. It will flow the

difference between the cost it pays under the REPAs and the revenue it receives through a non-bypassable rider.

Following a hearing, opposing briefs were filed by the Commission Staff, IGS, the Industrial Energy Users-Ohio (“IEU-Ohio”), the Office of Ohio Consumers’ Counsel (“OCC”), Ohio Manufacturers’ Association (“OMA”), Kroger Company, and the Ohio Coal Association (“OCA”). The opposing parties include the majority of customer parties and the majority of developers of renewable energy resources that intervened in this proceeding. The briefs of these parties proactively anticipated and rebutted the arguments in favor of AEP Ohio’s proposal. These parties are in agreement that (1) AEP Ohio has failed to demonstrate that additional renewable resources are needed under R.C. 4928.143(B)(2)(c), because AEP Ohio concedes it does not need additional generation to meet either a reliability concern or to satisfy its renewable mandate benchmarks; (2) a survey cannot provide a basis of need under Ohio law; (3) the claimed economic benefits are illusory and misleading; (4) AEP Ohio price projections are based upon a flawed and unreliable projection of market prices; and (5) the market can do a far better job than AEP Ohio of meeting consumer preferences—just as the market has done a better job over the last ten years.

AEP Ohio’s initial brief alleged that the Commission should grant its request for six reasons, which, as identified above, were proactively addressed by the opposing parties:

1. A survey that AEP Ohio alleges that customers want AEP Ohio to develop renewables, and, according to AEP Ohio, customers’ desire translates to a need that the market has failed to satisfy.
2. AEP Ohio’s proposed renewable facilities will provide benefits (bill credits) to customers on a net present value basis.

3. Developing renewable projects in Ohio that are deliverable to AEP Ohio's service territory can help reduce congestion costs and ultimately transmission rates.
4. New in-state renewable projects will provide local and statewide economic benefits.
5. New in-state renewable projects will help reduce Ohio's importation of power at the prices charged by out-of-state generation suppliers.
6. New in-state renewable projects will promote fuel diversity, advance the development of renewable technology, and help reduce carbon emissions.¹

Similar arguments were set forth in the initial joint brief of Sierra Club, Ohio Environmental Council ("OEC"), National Resources Defense Council ("NRDC") (collectively, "Conservation Parties"), and the briefs of the Mid-Atlantic Renewable Coalition ("MAREC"), Ohio Partners for Affordable Energy ("OPAE") and the Ohio Energy Group.

In response, IGS was tempted to provide a blow for blow response to each incorrect and unfounded claim regarding the alleged benefits of AEP Ohio's proposal. But, that is unnecessary, given that the entirety of AEP Ohio's proposal is built on a flawed, unlawful definition of need. The Commission lacks authority to make customers involuntary investors in generation resources when there is no threat to the reliability of the electric grid. To the extent that the Commission follows the law and interprets "need" to carry out the General Assembly's intent, the balance of the arguments in support of AEP Ohio's proposal can be relegated to background noise that the Commission should ignore.

¹ AEP Ohio Brief at 12.

III. ARGUMENT

A. Proponents Unlawfully Define Need

In this case, the Commission must render a determination on the meaning of need contained in R.C. 4928.143(B)(2)(c). Given the posture of this proceeding, the Commission should be cognizant that any determination in favor of need will likely be reviewed by the Supreme Court of Ohio. In interpreting a statute, the Court has held on numerous occasions that the “paramount concern in construing a statute is legislative intent.” *Ohio Neighborhood Finance, Inc. v. Scott*, 139 Ohio St.3d 536 at ¶ 22 (2014). All statutes which relate to the same general subject matter must be read in *pari materia*. See *Maxfield v. Brooks*, 110 Ohio St. 566 (1924). All provisions of the Revised Code bearing upon the same subject matter should be construed harmoniously. *Couts v. Rose*, 152 Ohio St. 458, 461 (1950). Finally, the Court has determined that statutory construction should seek to avoid absurd results. *Gulf Oil Corp. v. Kosydar*, 44 Ohio St.2d 208, 217 (1975).

Proponents of AEP’s proposal argue for a broad interpretation of “need.”² They claim that “need” and “resource planning projections” are not defined, therefore the Commission has broad discretion to determine the meaning of these sections of the law to fit their proposed outcome. Further, the proponents of AEP Ohio’s proposal allege that the Commission’s rules support the conclusion that the Commission has broad discretion to define vague and ambiguous statute.³ Moreover, they allege that limiting a finding of

² AEP Ohio Brief at 9-21.

³ *Id.* at 12,16-17.

need to situations where there is insufficient resource adequacy would render the statute a “dead letter” given the role of PJM Interconnection.⁴ Finally, they allege that the ambiguity in the statute permits the Commission to conclude that if customers desire that AEP Ohio construct additional renewable resources, this is a sufficient basis to find there that is a need to construct such resources.⁵

Under principles of statutory construction, the arguments in favor of finding need to construct renewables—without a reliability concern, but instead based upon the desires of a portion of AEP Ohio’s customers—simply cannot withstand appellate review, even if the Commission has the desire to indulge this misguided proposal. There is simply no basis to adopt a warped and misguided definition of need, which would turn the intent of Chapter 4928 on its head.

1. The plain language of R.C. 4935.04 states that “resource planning projections” must demonstrate how reliability will be maintained; therefore, such projections can only support a finding of “need” when there is a reliability concern

Contrary to AEP Ohio’ claim that there is no statutory guidance to light the way, R.C. 4935.04(C)(1) gives meaning to “resource planning projections.” That section requires an EDU submitting a long-term forecast report (“LTFR”) to provide: “A *year-by-year, ten-year forecast of **annual energy demand, peak load, reserves, and a general description of the resource planning projections to meet demand.***”⁶ The statute indicates that the resource planning projections are submitted to show how an EDU will

⁴ *Id.* at 15.

⁵ *Id.* at 26-40.

⁶ R.C. 4935.04(C)(1) (emphasis added).

“meet demand.” In the same sentence, demand is referred to as “energy demand.” Moreover, annual energy demand, peak load, and reserves are terms used for purposes of evaluating and maintaining reliability. Given that resource planning projections are intended to identify how an EDU will obtain resources to maintain reliability; resource planning projections can only support a finding of “need” to mitigate a reliability concern. Attempts to establish a finding of need for any other purpose are beyond the Commission’s authority.

2. R.C. 4935.01 does not expand the definition of need

The Conservation Groups alleges that R.C. 4935.01 supports an expansive definition of need, because under that section the Commission is required to “reasonably balance requirements of state and regional development, protection of public health and safety, preservation of environmental quality, maintenance of a sound economy, and conservation of energy and material resources.”⁷ This argument misses the mark.

R.C. 4935.01 lays out the Commission’s obligations with respect to energy forecasting, and those obligations are disconnected from the issues to be determined in an LTFR proceeding. Indeed, the information to be contained in an LTFR and the scope of an LTFR proceeding is governed by Section 4935.04, Revised Code. Under that Section, the Commission’s role is limited to determining whether the LTFR is complete, accurate, and reasonable. And, unlike the Commission’s obligations to consider state-wide impacts, specific EDU filing are focused solely on the ability to satisfy the energy and peak demand requirements within their service territory.

⁷ Conservation Groups Initial Brief at 7.

Moreover, as discussed below, while the Commission should focus on ensuring environmental quality and energy conservation, there is already a comprehensive statutory scheme designed to govern those policy objectives from an electricity perspective.⁸ And, as discussed below, the procurement of renewable resources has been designated as a component of competitive service, which cannot be the subject of a non-bypassable, market distorting surcharge under R.C. 4928.143(B)(2)(c).⁹

3. The plain meaning of R.C. 4928.64(E) and R.C. 4928.143(B) further illustrates that renewable generation cannot be subject to a non-bypassable charge as proposed by AEP Ohio

To the extent that the plain meaning of resource planning does not provide clarity, the clear language of R.C. 4928.64(E) and R.C. 4928.143(B) further illustrates that renewable generation cannot be subject to a non-bypassable charge. First, R.C. 4928.64 establishes a clear, coherent policy framework for purposes of procuring renewable energy to serve Ohio customers. The requirements were placed equally on EDUs and CRES providers, making the procurement of renewable energy a component of competitive service.

To ensure a level playing field in this respect, the General Assembly required that all costs incurred to support procurement of renewable energy pursuant to R.C. 4928.64 must be bypassable.¹⁰ If that were not enough of a signal from the legislature that the cost associated with renewable resources were not intended to be recovered through a non-bypassable charge, the point was hammered home in the preamble to R.C.

⁸ See R.C. 4928.64 and R.C. 4928.66.

⁹ R.C. 4928.143(B).

¹⁰ R.C. 4928.64(E).

4928.143(B). In that section, the law stated that an ESP may include certain provisions, except provisions that conflict with, among other things, R.C. 4928.64(E), which requires the cost of renewables to remain bypassable. Accordingly, AEP Ohio's proposal to redefine need conflicts with the plain language of the law and the obvious intent of the General Assembly.

4. PJM's role does not render R.C. 4928.143(B)(2)(c) a dead letter

AEP alleges that need cannot mean resource adequacy because at the time SB 221 was passed, the Ohio EDUs were already required to transfer control of their transmission facilities to PJM interconnection.¹¹ AEP Ohio alleges that because PJM is responsible for wholesale markets that provide resource adequacy, limiting the definition of need to reliability concerns would make the law a dead letter.¹² AEP Ohio's claim is without merit for several reasons.

First, the General Assembly enacted Amended Substitute Senate Bill 221 ("SB 221") ten years ago. In the energy world, ten years is a lifetime. While the world looks different today than it did when SB 221 was passed, the appropriate historical context shows that, while R.C. 4928.143(B)(2)(c) has gone unutilized, it was hardly a dead letter at the time it was enacted.

At the time that SB 221 was passed, there were serious concerns over PJM's ability to maintain resource adequacy at reasonable prices. Peak demand and electricity prices were rising year after year but the capacity markets were not providing just and

¹¹ AEP Ohio Initial Brief at 14.

¹² *Id.* at 14-15.

reasonable rates.¹³ Indeed, in the months leading up to the passage of Senate Bill 221, PJM and FERC were in the process of revamping the “Reliability Pricing Model (RPM) to establish new market rules that will enable PJM to obtain sufficient energy to reliably meet the needs of consumers within PJM.”¹⁴

At the time, there were substantial concerns regarding the status of the wholesale market. In the proceeding leading to the modification of the capacity market, PJM itself had identified concerns regarding the ability to maintain resource adequacy: “PJM stated that it anticipates multiple reliability violations in parts of eastern PJM, including northern New Jersey, and expects violations soon in the Delmarva and the Baltimore-Washington areas.”¹⁵ Moreover, PJM believed that “reliability problems are likely to extend to other parts of PJM in the near future, despite existing adequate supplies in those areas, because much of PJM’s generation fleet is very old (and thus, may soon be retired), and because current market revenues are likely to be insufficient to sustain.”¹⁶ “PJM demonstrated that in some areas, the addition of new generating units to the system will lag dramatically behind the anticipated growth in demand.”¹⁷

While parties were hopeful that PJM’s new capacity market would ensure reliability at reasonable prices, it would take several years before the new paradigm would be fully

¹³ Tr. Vol. I at 73; *In re Application of Columbus Southern Power Co.*, 128 Ohio St. 3d. 512 at ¶ 4 (2011)

¹⁴ *PJM Interconnection, L.L.C.*, ER05-1410-001, Order Denying Rehearing and Approving Settlement Subject to Conditions at 1 (Dec. 22, 2006) (hereinafter “RPM Order”).

¹⁵ *Id.* at 2.

¹⁶ *Id.* at 2-3 (citations omitted).

¹⁷ *Id.* at 3.

implemented. Specifically, the RPM Order contemplated phasing in its new locational delivery requirements, such that “all 23 Locational Delivery Areas will be established for the delivery year 2010-2011.”¹⁸ Given the uncertainty around the functionality of wholesale markets, it is not surprising that SB 221 created a safety valve—just in case wholesale markets did not provide for sufficient reliability.

Second, while PJM is responsible for ensuring reliability, it cannot direct any entity to construct generation to meet load; thus, SB 221 contained a narrow provision that would permit the construction of new generation if it was needed for a reliability perspective. Indeed, there are examples where other PJM-member states have taken action to mandate the construction of new generation, despite PJM’s responsibility to assure resource adequacy.¹⁹ Particularly, after the passage of SB 221, “[a]round 2009, Maryland electricity regulators became concerned that the PJM capacity auction was failing to encourage development of sufficient new in-state generation.”²⁰ To rectify the perceived shortfall in generation capacity, “Maryland solicited proposals from various companies for construction of a new gas-fired power plant at a particular location, and accepted the proposal of petitioner CPV Maryland, LLC (CPV).”²¹

Third, at the time that SB 221 was passed, PJM had a very limited role for purposes of maintaining resource adequacy in Ohio. At the time, shopping levels were

¹⁸ *Id.* at 25.

¹⁹ *Talen v. Hughes*, 136 S. Ct. 1288, 1294 (2016).

²⁰ *Id.*

²¹ *Id.*

insignificant²² and all utilities served the SSO through either their owned or affiliate generation resources. It was anticipated that an ESP would in fact be offered by an EDU through its own generating assets to the extent that it can do so at prices below the otherwise applicable market rate.

Fourth, while PJM controlled the Ohio utilities transmission facilities, they were in many respects vertically integrated utilities. For example, the AEP Ohio zone of PJM has only been subject to competitive market capacity pricing since June 1, 2015.²³ From the time AEP Ohio joined PJM until the resolution of what is commonly referred to the *Capacity Case*, which dragged on for several years, AEP Ohio relied upon its own generation assets (some of which were located out of state) to serve the capacity needs of its Ohio footprint.²⁴ Rather than participating in PJM's base residual capacity auction, AEP Ohio submitted a fixed resource requirement plan that was intended to permit an EDU to satisfy its reliable requirements through a traditional integrated resource plan, with specific assets identified to serve peak load.²⁵ The Commission explicitly noted this

²² *In re Application of Columbus Southern Power Co.*, 128 Ohio St. 3d. 512 at ¶ 28 (2011) ("The record showed that AEP has had 'virtually no' shopping in the last eight years, including no residential shoppers.") see also *In the Matter of the Application of Columbus Southern Power Company and Ohio Power Company for Approval of a Post-Market Development Period Rate Stabilization Plan*, Case No. 04-169-EL-UNC, Opinion and Order at 5 (Jan. 26, 2005); see *In the Matter of the Application of Columbus Southern Power Company for Approval of an Electric Security Plan; an Amendment to its Corporate Separation Plan; and the Sale or Transfer of Certain Generating Assets*, Case Nos. 08-917-EL-SSO, *et al.*, Entry on Rehearing at 25 (Jul. 23, 2009).

²³ *In the Matter of the Commission Review of the Capacity Charges of Ohio Power Company and Columbus Southern Power Company*, Case No. 10-2929-EL-UNC at 10 (Jul. 2, 2012) (hereinafter "*Capacity Case*").

²⁴ *Id.* ("the Company has committed to ensuring that adequate capacity resources exist within its footprint during this timeframe.")

²⁵ Under PJM rules, "[a]n investor-owned utility, electric cooperative, or public power entity may elect this alternative if it demonstrates the capacity to satisfy the entire capacity obligation for all load, including load growth, in the applicable Fixed Resource Requirement service area for the term of the entity's participation in the Fixed Resource Requirement alternative." *PJM Interconnection, L.L.C.*, ER05-1410-001, RPM Order at 17 (Dec. 22, 2006).

in the *Capacity Case*, stating, “[a]s an FRR Entity, AEP-Ohio notes that it does not procure capacity for its load obligations in PJM’s RPM auctions or even participate in such auctions”²⁶ Accordingly, the role of PJM—one that has been quite limited at times—does not render R.C. 4928.143(B)(2)(c) a dead letter; just one that has fortunately not been needed.

Interpreting need to situations where a new generation resource is needed to resolve a reliability concern would not render the law a dead letter and lead to an absurd result. Indeed, reliability was the *only* concern that the General Assembly had in mind when it passed the law. The construction of renewable resources was addressed by the General Assembly in R.C. 4928.64 pursuant to the renewable mandates. And costs incurred to construct renewables must be bypassable under R.C. 4928.64(E). Construing these statutes together, the General Assembly has provided that the recovery of renewable generation costs is not eligible for a non-bypassable surcharge under R.C. 4928.143(B)(2)(c). Likewise, interpreting the ESP statute to permit non-bypassable cost recovery for renewable generation development beyond the levels contemplated by the RPS would lead to an absurd result that the General Assembly did not intend.

5. The Commission’s rules do not support a finding of need; rather, the rules dictate that an IRP should demonstrate how an EDU utilizes renewable resources pursuant to R.C. 4928.64 on a bypassable basis

AEP Ohio claims that the Commission’s rules and orders establishing such rules support its position. While AEP is correct that the Commission’s IRP rules address renewable resources, it is not in the way that AEP Ohio suggests. The Commission’s rules provide that R.C. 4928.64 is responsible for renewable resource development and

²⁶ *Capacity Case*, Opinion and Order at 15 (Jul. 2, 2012); see also RPM Order at 17.

any IRP must identify how the long-term forecast report makes “use of alternative energy resources *pursuant to section 4928.64* of the Revised Code...” as well as the “[t]he availability and potential development of alternative energy resources *pursuant to section 4928.64* of the Revised Code for generating electricity.”²⁷ Of course, R.C. 4928.64(E) specifically requires all costs incurred to supply renewable energy to be bypassable. Thus, the IRP should make use of renewable resources in compliance with the law.

Nothing in the Commission’s rules suggest that the Commission may find that there is a need to construct renewable resources and recover the attendant cost through a non-bypassable charge. AEP cherry picks a sentence from the Commission’s order authorizing the rules regarding IRPs.²⁸ But the referenced Commission order merely discusses “alternative resource strategies”, not renewable resource strategies and whether such resources may be subject to non-bypassable charge. In any event, the Commission’s rules must be interpreted as to not conflict with the statutory scheme.²⁹ Given the plain language of R.C. 4928.64(E) and the definition of resource planning contained in R.C. 4935.04, the Commission’s rules cannot be interpreted to support a finding of need in this proceeding.

²⁷ OAC 4901:5-5-06(A)(1) and (2)(emphasis added).

²⁸ AEP Ohio Initial Brief at 16.

²⁹ See *Youngstown Sheet & Tube Company v. Lindley*, 38 Ohio St. 3d 232, 234 (1988).

6. Turning Point does not support a finding of need

AEP Ohio alleges that the *Turning Point* case holds that need is broader than the need for capacity and energy. While the *Turning Point* case correctly rejected AEP Ohio's request to subsidize generation resources, no party appealed the proceeding to the Supreme Court of Ohio. Therefore, the Commission's holding in that case provides little insight into how the Supreme Court may interpret R.C. 4928.143(B)(2)(c). Although the Commission in that case interpreted need to be broader than resource adequacy, AEP Ohio has failed to satisfy the Commission's standard in that case, given that AEP concedes that it will have no difficulty satisfying its requirements under R.C. 4928.64.

7. State Policy does not support a finding of need

The proponents of AEP Ohio's proposal allege that state policy favors a finding of need. In reality, it is antithetical to the pro-competitive policies contained in R.C. 4928.02, which favor customer empowerment and choice. It is the state policy to "[p]rovide coherent, transparent means of giving appropriate incentives to technologies that can adapt successfully to potential environmental mandates,"³⁰ but there is nothing transparent or appropriate about picking winners and losers. Nor is it appropriate to flood the market with renewable energy credits, which will distort the market to the detriment of other renewable resources that rely upon such RECs. As other states have shown, renewable energy development is better served by competitive neutral incentives.³¹

³⁰ R.C. 4928.02(J)

³¹ IGS Ex. 11 at 17-19, 23.

Moreover, while it is the state policy to “[f]acilitate the state’s effectiveness in the global economy,”³² authorizing an across-the-board rate increase would make manufacturers less effective in the global economy. Rather than ensuring resource “*options they elect* to meet their respective needs,”³³ AEP Ohio proposes to select a handful of renewable resources and mandates that all customers to pay for their attendant costs. Likewise, rather than ensuring “*diversity of electricity supplies and suppliers*, by giving customers effective choices over the selection of those supplies and suppliers *and by encouraging the development of distributed and small generation facilities*,”³⁴ the proposal would result in the construction of a handful of one-and-done facilities, which would tank the REC market and make the development of distributed generation facilities less economic. Finally, the proposal would violate R.C. 4928.143(B)(2)(h), by permitting AEP Ohio to recover the cost associated with a competitive service through a non-bypassable rate from all distribution customers.

B. Even under its own concocted legal theory, AEP Ohio has not established that there is a need to construct renewable generation resources

Putting the law and General Assembly’s clear intent aside for a moment, IGS will attempt to engage certain particularly egregious portions of the briefs submitted in support of need, which were not proactively addressed in IGS Initial Brief. Because a case for need does not, and cannot, rest on an actual need for additional generation resources to meet demand, AEP Ohio alleges that customers want AEP Ohio to build additional renewable resources. AEP Ohio then claims that it will be economically beneficial for

³² R.C. 4928.02(N).

³³ R.C. 4928.02(B).

³⁴ R.C. 4928.02(C).

customers and the local economy to move forward with its proposal, because it is apparent that the market has failed to deliver renewable energy options to customers. IGS Initial Brief addressed many of these arguments; therefore, IGS will respond only briefly.

1. Neither the survey nor public comments provide support to construct 900 MWs of renewable generation

Significant portions of AEP Ohio's brief attempt to establish that its customers want more renewable resources and they are willing to pay more for them. According to AEP Ohio, want=need.³⁵ Moreover, AEP Ohio and other parties argue that all the public comments support the proposal and no party undertook their own survey³⁶ to show a different customer preference.

As IGS demonstrated in its testimony and initial brief, want and need are not the same thing. "A want is something you desire to have, but it is not actually needed."³⁷ Establishing a finding of need based upon either a survey or customer preferences would lead to absurd results in the ratemaking process. Likewise, requiring each intervenor to undertake their own survey—if that were even possible, given that only AEP Ohio has access to the e-mail addresses of its customers—would further exacerbate this absurdity and ultimately lead to the trial of cases within the court of popular opinion rather than before the Commission.

³⁵ AEP Ohio Initial Brief at 27-45; Conservation Groups Initial Brief at 1-2.

³⁶ AEP Ohio Initial Brief at 36-38.

³⁷ IGS Ex. 11 at 14.

In any event, the survey presented by AEP Ohio fails to provide any reliable evidence regarding the issues in this case. AEP Ohio's own survey only asked customers whether AEP procures sufficient renewables to meet the SSO requirements, and then whether the SSO should be based upon a larger amount of renewables.³⁸ That alleged customer preference, however, provides very little probative value for purposes of determining whether AEP Ohio should enter into renewable purchase agreements and make all customers—not just SSO customers—responsible for the consequences.³⁹ Moreover, the proposed REPAs do not actually deliver renewable energy to customers, because AEP Ohio intends on selling the renewable energy credits—in fact, the REPAs will deliver no energy whatsoever to customers.⁴⁰ Thus, the alleged customer preference identified by the survey is disconnected from the outcome that AEP Ohio proposes in this case.

AEP Ohio's claim that customers are willing to pay more for renewables is also flawed. While the survey asked customers whether they would pay more, the survey did not identify how much customers were already paying for renewable energy.⁴¹ Thus, the willingness to pay section of the survey is based upon a flawed baseline.

AEP Ohio and other parties claim that public comments support approving AEP Ohio's proposal.⁴² AEP Ohio goes so far as to claim that no party voiced opposition to its

³⁸ AEP Ohio Ex. 6 at TH-1 p. 17 of 41; see IGS Initial Brief at 19-20.

³⁹ *Id.*

⁴⁰ IGS Ex. 11 at 16.

⁴¹ See AEP Ohio Ex. 6 at TH-1 p. 20-21 of 41.

⁴² AEP Ohio Initial Brief at 5, 26; Conservation Groups Initial Brief at 2

proposal. Perhaps AEP Ohio failed to review the several hundred negative comments provided in direct response to the Navigant survey.⁴³

Regardless, the Commission does not give public comments weight in Commission proceedings because “public comments are not considered evidence regarding the truth of the matters asserted therein”⁴⁴ In AEP Ohio’s prior purchase power agreement case, which was intended to provide compensation to its aging coal fired power plants, “[t]he majority of written comments express opposition to the PPA proposal.”⁴⁵ Many of those comments were filed by supporters of the Sierra Club and NRDC. Those comments were given no weight then; they should be given no weight now.

In any event, the public comments provide little value to resolving the issues in this proceeding. Many of them are simply form comments submitted through Sierra Club’s and NRDC’s websites.⁴⁶ A review of these comments quickly reveal that many the individuals are not customers of AEP Ohio.⁴⁷ Likewise, the presence of individuals at public hearings provides little probative information, given that Sierra Club actively

⁴³ IGS Ex. 11 at Ex. MW-2.

⁴⁴ *In the Matter of the Application of the Ohio Edison Company, the Cleveland Electric Illuminating Company, and the Toledo Edison Company for Approval of their Energy Efficiency and Peak Demand Reduction Program Portfolio Plans for 2017 through 2019*, Opinion and Order at 6 (Nov. 21, 2017).

⁴⁵ *In the Matter of the Application Seeking Approval of Ohio Power Company’s Proposal to Enter into an Affiliate Power Purchase Agreement for Inclusion in the Power Purchase Agreement Rider*, Case Nos. 14-1693-EL-RDR, Opinion and Order at p. 8. (Mar. 31, 2016).

⁴⁶ https://act.sierraclub.org/actions/National?actionId=AR0127176&fbclid=IwAR1L2F60-uxM-5RzODTW3AZk1Knaz3bz_uN9EAei5hKHidZEWiGA-Hjcr3M&id=7010Z000001qmKAQAQ (allegedly supported by 1,191 Sierra Club members); see also <https://act.nrdc.org/letter/ohio-solar-181116?>

solicited its members through Facebook to appear at the public hearing.⁴⁸ This add little value other than to show that Sierra Club's and NRDC's members desire renewable resources, which could be administratively noticed from those organizations' purpose statements. These members, however, cannot claim to represent the views of all customers. Giving weight to the comments of Sierra Club and NRDC members would be equivalent to allowing a minority political party to pass legislation without a majority vote.

2. There is no evidence of market failure; rather the market is primed to meet a diverse range of customer preferences for renewable energy

For the first time in this case, AEP Ohio has alleged that the market has failed to provide renewable energy options to customers to meet their preferences.⁴⁹ AEP Ohio's argument is a logical fallacy. AEP Ohio itself concedes that it has not calculated the quantity of renewable energy that customers want.⁵⁰ But one must know the actual desired quantity of a good or service before one may conclude that the market has failed to deliver the required amount. Given this fact, there is no possible factual basis to conclude that the competitive market has not delivered the quantity of renewables that customers desire.

Indeed, AEP Ohio's own survey only asked *customers whether AEP procures sufficient renewables to meet the SSO requirements*, and then whether the SSO should be based upon a larger amount of renewables.⁵¹ AEP never asked customers whether

⁴⁸ <https://www.facebook.com/events/340444389847546/>

⁴⁹ AEP Ohio Initial Brief at 3,6, 60-61, and 78.

⁵⁰ IGS Ex. 11 at MW-1.

⁵¹ See IGS Initial Brief at 19.

they feel there are sufficient renewable options in the market. Moreover, neither the survey nor AEP Ohio attempted to quantify the amount of renewable generation that will be developed by the competitive market.⁵² Thus, even if the survey data is accurate, the only potential failure is AEP not proposing to supply a greater portion of the SSO through renewable energy.

Since AEP Ohio has not identified the alleged quantity of renewable energy that customers desire or the amount of renewable resources that the market will develop, AEP Ohio has provided no evidence to suggest that the market has failed to deliver renewables to meet customers' desires.

Likewise, the record evidence suggests that CRES providers are meeting and exceeding the renewable energy benchmarks set forth in SB 310.⁵³ Further, the market contains numerous options for renewable energy, including significantly larger quantities than would be achieved by the proposal.⁵⁴ There are options available to all types of customers. Therefore, AEP Ohio cannot legitimately claim that its proposal fills a gap or underserved market segment in any fashion.⁵⁵

AEP Ohio in portions of its brief claims that the competitive markets failed to develop in-state, utility scale renewables.⁵⁶ Other parties make similar claims. But, it is not clear why utility scale renewables should be the standard for development or why the

⁵² Tr. Vol. I at 86.

⁵³ IGS Ex. 11 at 9.

⁵⁴ See IGS Initial Brief at 47-49.

⁵⁵ *Id.*

⁵⁶ The term "utility scale" or "large scale" is used in AEP Ohio's brief over 70 times.

Commission should prioritize the development of in front of the meter resources. Such resources are less favorable than behind the meter solar from both an economic development and grid efficiency perspective.⁵⁷ Moreover, renewable energy is renewable energy whether it is produced by large scale generation or on a residential rooftop. The only distinguishable difference is that AEP Ohio's proposal would require all customers to support its proposal through an involuntary line item on their monthly electric bill.

3. AEP Ohio's proposal will cost all customers money

AEP Ohio incorrectly alleges its proposal will benefit its customers and the local economy. AEP Ohio's claim is based upon (1) an unreliable forecast of market prices; and (2) a one-sided and misguided projection of economic impacts. Based upon more reasonable price projections and a more complete picture, it is clear that the proposal will cost customers over \$175 million within the ESP period⁵⁸ and discourage economic development within the state of Ohio.

a. AEP Ohio's alleged locational marginal price suppression benefits are illusory

AEP Ohio alleges that witnesses Torpey and Ali demonstrated that the introduction of zero-dispatch cost resources into the wholesale energy market will suppress locational marginal prices ("LMPs") and therefore reduce the rates that all customers pay.⁵⁹ Other parties parrot this argument. As IGS identified in its Initial Brief, AEP Ohio only tells half

⁵⁷ IGS Ex. 9 at 6, 12; *see also* IGS Initial Brief at 45-49.

⁵⁸ *Supra* Section III(B)(3)(e).

⁵⁹ AEP Ohio Initial Brief at 47-49.

of the story, leaving out the additional costs that its proposal would place on all customers.⁶⁰

PJM has already identified that large installations of renewable resource may cause other external costs, which may outweigh the price suppressive impacts of the resources.⁶¹ PJM concluded that “[w]ith increasing levels of wind and solar generation, it will be necessary for PJM to carry higher levels of reserves to respond to the inherent variability and uncertainty in the output of those resources.”⁶² The cost of these services are recovered from all load serving entities.⁶³ Because the costs related to these services cannot be predicted or hedged, load serving entities must include a risk premium in their retail rates. The attendant costs and related risk premium may outweigh the price suppressive impacts alleged by AEP Ohio. Therefore, the Commission should give no weight to AEP Ohio’s alleged LMP price suppression benefit of \$31 million on a net present value basis.

b. AEP Ohio’s projection of market prices is not reliable

AEP Ohio’s projection of the price impacts of the proposed renewable facilities is based upon the fundamentals forecast created by AEP Ohio witness Karl Bletzacker.⁶⁴ IGS’ initial brief proactively identified the major flaws in Mr. Bletzacker’s forecast;

⁶⁰ IGS Initial Brief at 24-26.

⁶¹ *Id.*

⁶² IGS Ex. 2 at 14.

⁶³ Tr. Vol. II 446, 449.

⁶⁴ AEP Ohio Initial Brief at 24, 51-53.

therefore, IGS will briefly respond to a few of the more egregious points in AEP Ohio's initial brief.⁶⁵

AEP Ohio alleges that it has provided the only forecast in the record, stating that "Mr. Leanza acknowledged that he is not offering, and has not prepared, his own forecast."⁶⁶ AEP Ohio further alleged that natural gas futures do not provide an accurate predictor of actual future market prices.⁶⁷ AEP Ohio claims that futures are not liquid after a few years, and the Commission reached this same conclusion in AEP Ohio's purchased power case.⁶⁸ Mr. Leanza proactively addressed each of these points.

Contrary to AEP Ohio's claim, Mr. Leanza testified that there is liquidity on CME Group through 2024.⁶⁹ Thus, there are actual prices available within the time period that corresponds with the current ESP. Moreover, after 2024, there are considerable transactions that take place "on ICE [Intercontinental Exchange] or in the broker market or other liquid markets."⁷⁰

⁶⁵ IGS Initial Brief at 25-32.

⁶⁶ AEP Ohio Initial Brief at 52.

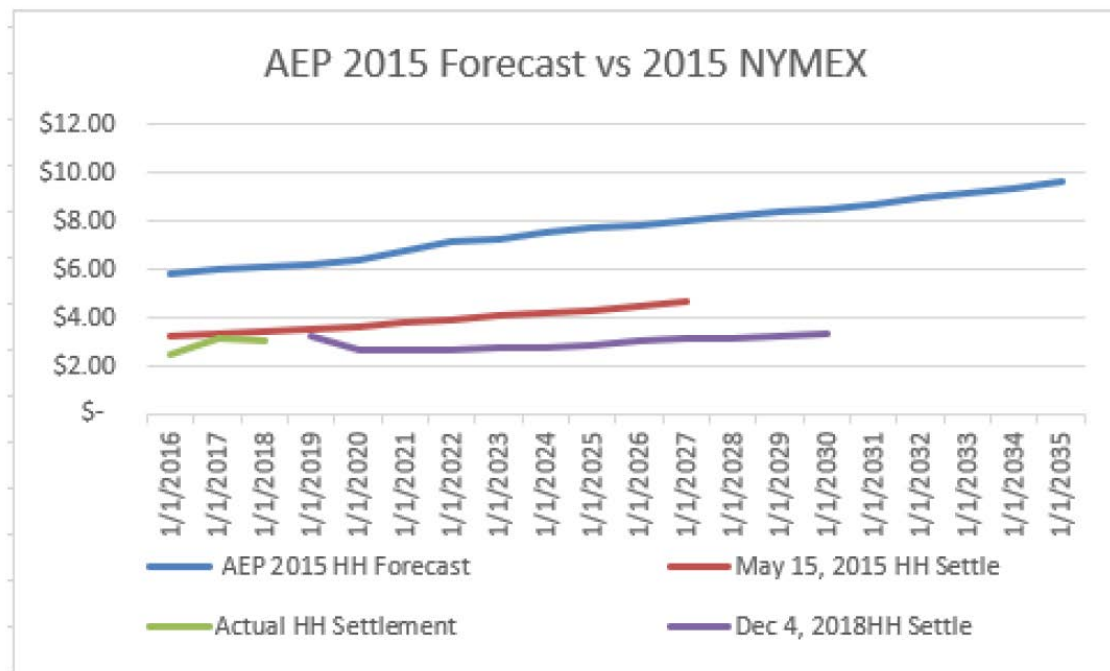
⁶⁷ *Id.* at 52-53.

⁶⁸ *Id.* at 53.

⁶⁹ Tr. Vol. IX at 2630.

⁷⁰ Tr. Vol. IX at 2631.

Moreover, as Mr. Leanza testified, over the last several years, NYMEX futures transactions have done a much better job at predicting future prices than AEP Ohio's fundamental forecast.⁷¹



In retrospect, these facts are laid bare. In the PPA case, based upon the fundamental forecast provided by witness Bletzacker in the PPA case, AEP Ohio alleged that the PPA rider would provide “a net credit of \$721 million.”⁷² After the Federal Energy Regulatory Commission (“FERC”) intervened and prevented the PPA from going into effect, AEP Ohio’s generation resources were required to participate directly in the competitive market. Because “AEP’s forecasting of commodity prices was so far out of touch with

⁷¹ IGS Ex. 13 at 10.

⁷² *In the Matter of the Application Seeking Approval of Ohio Power Company's Proposal to Enter into an Affiliate Power Purchase Agreement for Inclusion in the Power Purchase Agreement Rider*, Case Nos. 14-1693-EL-RDR, *et al.*, at 79 (Mar. 31, 2016).

reality that approximately months after Mr. Bletzacker's forecasting testimony, AEP took an economic impairment of \$2.3 Billion . . . ⁷³ American Electric Power's 8K reveals that its generation business wrote the book value of these plants down to nearly zero value.⁷⁴ Had the generation resources produced a profit—as AEP Ohio had predicted—no economic impairment would have been recorded. This should provide a cautionary tale that reliance upon AEP Ohio's fundamentals forecast may result in severe economic consequences.⁷⁵

AEP Ohio's initial brief does no better defending its projection of a burden on CO2 emissions. AEP Ohio claims that (1) it has historically included a forecast of a CO2 burden in its fundamentals forecast; and (2) such a burden would impact generation resources.⁷⁶ AEP Ohio's reasoning does not make a convincing case. The fact that AEP Ohio has historically included a CO2 burden in its forecast doesn't make it acceptable or reliable, though it may explain why AEP Ohio's fundamental forecast has consistently overstated market prices. There is currently no rule to regulate the emission of CO2 that would impact generation resources located in Ohio. Until there is a concrete rule limiting the emission of CO2, it would be patently unreasonable to rely upon such an assumption. Moreover, to the extent that a burden on CO2 ultimately materializes, the Commission and market participants would have sufficient lead time to evaluate and consider its

⁷³ IGS Ex. 14 at 9; see *also* Tr. Vol. IX at 2640.

⁷⁴ IGS Ex. 13 at Ex. PL-2 at 2 ("As of December 31, 2016, the remaining net book value of these assets is \$57 million.")

⁷⁵ Tr. Vol. IX at 2640.

⁷⁶ AEP Ohio Initial Brief at 53-54.

impact on market pricing. Such an approach would make much more sense than simply assuming there will be a market paradigm shift in nearly ten years.

c. AEP Ohio's probabilistic simulation is misleading and unreliable

AEP Ohio alleges that under its “probabilistic simulation,” the proposed facilities will result in a net benefit 99.9% (wind) and 100% (solar) of the time.⁷⁷ Of course, AEP Ohio's claim assumes that the Base Fundamental Forecast is accurate.⁷⁸ AEP Ohio failed to consider any scenarios in which there is no carbon tax.⁷⁹ Given that AEP Ohio's “probabilistic simulation” failed to model credible scenarios, the Commission should give this evidence no weight.

d. AEP Ohio's discount rate is understated and therefore inflates its projected benefits

AEP Ohio alleges that its proposal—errors identified above aside—will result in \$173 million in net present value benefits for customers.⁸⁰ The record is uncontroverted inasmuch as present value is the current value of a future sum of money or a stream of cash flows given a specified rate of return.⁸¹ For purposes of determining the present value (or cost) of AEP Ohio's proposal, AEP Ohio utilized a discount rate of 8.5%.⁸² This

⁷⁷ AEP Ohio Initial Brief at 5, 45, and 54.

⁷⁸ Tr. Vol. V at 1312 L 15-21.

⁷⁹ *Id.*

⁸⁰ AEP Ohio Initial Brief at 5.

⁸¹ Tr. Vol. VI at 1540.

⁸² Tr. Vol. V at 1290.

rate is based upon AEP Ohio's weighted average cost of capital.⁸³ But the money at issue is not AEP Ohio's—it is customers' money.⁸⁴

AEP Ohio's affiliates have concluded that “[d]iscount rates for residential investments vary dramatically and are based on each individual’s financial situation.”⁸⁵ AEP Ohio concedes that residential customer discount rates are often higher than 8.5%. Indeed, the integrated resource plan AEP Ohio's affiliate filed in Arkansas assumed that residential customers may value capital at a discount rate of 10% or even higher.⁸⁶ Had AEP Ohio used a discount rate of 10% or higher, the net present value of its proposal would be lower.⁸⁷

This impact of this error is magnified by the structure of AEP Ohio's proposal. Specifically, AEP Ohio's projects that the resources do not break even on a nominal basis until after the introduction of an alleged carbon burden in 2029.⁸⁸ Given that AEP Ohio has backloaded the benefits of its proposal, AEP Ohio's flawed discount rate further overstates the benefits that AEP Ohio projects customers will receive.

⁸³ *Id.*

⁸⁴ Tr. Vol. VI at 1541-42.

⁸⁵ IGS Ex. 8 at p. 52. (containing an excerpt of the integrated resource plan filed by Southwester Electric Power Company).

⁸⁶ *Id.* at 1540.

⁸⁷ *Id.* at 1541.

⁸⁸ AEP Ohio Ex. 14 at JFT-1 at 21 and 22.

e. Based upon more realistic expectations of market prices, the ESP would flunk the MRO vs. ESP price test by approximately \$100 million

AEP Ohio alleges that the current ESP is more favorable than the otherwise applicable market rate offer outcome by \$78.5 million and that the proposed renewable energy resources further improve that result.⁸⁹ As IGS identified in its initial brief, AEP Ohio's proposed renewable facilities will cost customers money during the ESP period even under AEP Ohio's projections of market prices.⁹⁰ Based upon more realistic market prices, it is clear that the proposed renewable facilities cause the current ESP to flunk the ESP vs. MRO test by approximately \$100 million.

As IGS witness Leanza testified, "AEP's forecast is well above what the market believes gas prices are valued at through 2030."⁹¹ Mr. Leanza identified that in reality, natural gas is trading at prices significantly lower than witness Bletzacker projects. AEP Ohio's overstatement of natural gas prices translates into overstated power prices.⁹² "Using the average Heat Rate of 9.63 from AEP's Nominal Forecast, a \$1.00 increase in the price of natural gas will increase power prices by approximately \$9.63 or \$1.00 times the heat rate ratio."⁹³ "[T]he price difference of \$3.09 translates to an overinflated power price by approximately \$29 per megawatt hour in 2030."⁹⁴

⁸⁹ AEP Ohio Brief at 11.

⁹⁰ IGS Initial Brief at 33-34.

⁹¹ IGS Ex. 13 at 5.

⁹² IGS Ex. 13 at 6.

⁹³ *Id.* at 6.

⁹⁴ *Id.*

The current electric security plan will end on May 31, 2024.⁹⁵ Conservatively assuming that AEP Ohio's forecast is overstated by \$19 per megawatt hour in each year (the overstatement is actually higher), it is clear that the proposed solar resources will rack up \$67.7 million in losses through the end of the ESP term.⁹⁶

Year	Capacity (Nameplate)	Solar Energy	Capacity Factor	Solar Energy Cost	AEP Market Projection	Solar Total Cost	AEP Projected Revenue	Actual Energy Revenue	Loss
	MW	MWh	%	\$/MWh	\$/MWh	\$	\$	\$	\$
2021	400	812928	0.232	\$ 45.00	\$ 37.80	\$36,581,760.00	\$ 30,728,678.40	\$15,283,046.40	\$ 21,298,713.60
2022	400	809424	0.231	\$ 45.00	\$ 39.20	\$36,424,080.00	\$ 31,729,420.80	\$16,350,364.80	\$ 20,073,715.20
2023	400	805920	0.23	\$ 45.00	\$ 40.50	\$36,266,400.00	\$ 32,639,760.00	\$17,327,280.00	\$ 18,939,120.00
May-24	400	802416	0.229	\$ 45.00	\$ 41.80	\$36,108,720.00	\$ 33,540,988.80	\$18,295,084.80	\$ 7,422,348.00
									\$ 67,733,896.80

Even if one assumes that the solar resources receive capacity compensation, the revenue only reduces the projected losses by a few million dollars within the ESP period.⁹⁷

Likewise, under more realistic market expectations, the proposed wind resources would rack up \$109 million in losses within the ESP period.⁹⁸

⁹⁵ *In the Matter of the Application of Ohio Power Company for Authority to Establish a Standard Service Offer Pursuant to R.C. 4928.143, in the Form of an Electric Security Plan*, Case Nos. 16-1852-EL-SSO, *et al.*, Opinion and Order at 5 (Apr. 25, 2018).

⁹⁶ These losses can be easily calculated simply by reducing AEP Ohio's \$ per MWh market price (JFT-1 at 21 (Column H)) by \$19 per and multiplying that amount by the projected solar energy output (Column D) and subtracting that amount from the total solar energy cost

⁹⁷ See AEP Ohio Ex. 14 at JFT-1 at 21 (Column L) and 22 (Column L).

⁹⁸ These losses can be easily calculated simply by reducing AEP Ohio's \$ per MWh market price (JFT-1 at 22 (Column H)) by \$19 per and multiplying that amount by the projected wind energy output (Column D) and subtracting that amount from the total wind energy cost.

Year	Capacity (Nameplate)	Wind Energy	Capacity Factor	Wind Energy Cost	AEP Market Projection	Wind Total Cost	AEP Projected Revenue	Actual Energy Revenue	Loss
	MW	MWh	%	\$/MWh	\$/MWh	\$	\$	\$	\$
2021	500	1357800	0.31	\$ 40.00	\$ 34.10	\$54,312,000.00	\$ 46,300,980.00	\$ 20,502,780.00	\$ 33,809,220.00
2022	500	1357800	0.31	\$ 40.00	\$ 35.20	\$54,312,000.00	\$ 47,794,560.00	\$ 21,996,360.00	\$ 32,315,640.00
2023	500	1357800	0.31	\$ 40.00	\$ 36.20	\$54,312,000.00	\$ 49,152,360.00	\$ 23,354,160.00	\$ 30,957,840.00
May-24	500	1357800	0.31	\$ 40.00	\$ 37.50	\$54,312,000.00	\$ 50,917,500.00	\$ 25,119,300.00	\$ 12,163,625.00
									\$ 109,246,325.00

Including capacity revenue in the calculation only reduces the projected loss by \$1 million.⁹⁹

In total, the proposed renewable facilities would cost customers over \$176 million. AEP Ohio's purported LMP price suppression impacts—approximately \$1-2 million per year on a nominal basis¹⁰⁰—cannot overcome this deficit, even if one ignores the additional costs that the proposed renewable facilities would place on the system.¹⁰¹ Consequently, AEP Ohio's proposal turns the ESP from a \$78.5 million benefit to \$100 million loss, which causes the ESP to flunk the MRO test.

Of course, the losses associated with AEP Ohio's proposal only grow over time. As IGS witness Leanza identified, based upon a more realistic view of market prices, AEP Ohio has overstated the price of energy by between \$19-\$29 per megawatt hour.¹⁰² The differential between AEP Ohio's forecast and reality is greater and closer to \$30 per

⁹⁹ See AEP Ohio Ex. 14 at JFT-1 at 21 (Column L) and 22 (Column L).

¹⁰⁰ See AEP Ohio Ex. 14 at JFT-1 at p. 20 Table 4 (subtracting projected load cost with renewables from load cost without renewables).

¹⁰¹ IGS Initial Brief at 24-26.

¹⁰² IGS Initial Brief at 28-29.

megawatt hour after 2025.¹⁰³ Thus, AEP Ohio's proposal is also not in customers' best interests over a longer-term view.

4. The projects will have little impact on Ohio's generation mix, except for the possibility of discouraging market-based development of generation resources

AEP claims that Ohio has been a net importer for years and that this gap will continue to widen.¹⁰⁴ AEP Ohio claims that the "addition of up to 900 MW in renewable energy resources in Ohio could help ameliorate this imbalance."¹⁰⁵ AEP Ohio's argument rings hollow for several reasons.

First, the physical location of generation resources is irrelevant. The electrons do not suddenly become shy when they come to a state line. What matters is that electricity is deliverable where it is needed over transmission lines. Perhaps that is why when AEP Ohio was vertically integrated it relied upon several thousand megawatts of out-of-state baseload generation to serve its customers.¹⁰⁶

Second, there is nothing wrong with Ohio's current generation portfolio. AEP Ohio's proposal is a manufactured solution desperately seeking a problem where none exists. Ohio is currently experiencing a prolonged period of historically low electricity prices.¹⁰⁷ These prices exist because PJM's markets are working.

¹⁰³ See IGS Ex. 13 at 14. This gap widens significantly in 2028.

¹⁰⁴ AEP Ohio Initial Brief at 62,64-65.

¹⁰⁵ AEP Ohio Initial Brief at 65.

¹⁰⁶ Tr. Vol. I at 101-103.

¹⁰⁷ Tr. Vol. I at 97.

Third, the General Assembly itself has determined that the location of generation resources is of no moment. Through the passage of Senate Bill 310, the General Assembly explicitly eliminated the requirement that load serving entities must procure electricity from resources that are physically located within the state of Ohio.¹⁰⁸ A stronger indication of the General Assembly's intent is harder to find for purposes of establishing policy on the location of generation resources.

5. AEP Ohio's proposal will discourage more beneficial market-based approaches

AEP Ohio further argues that its proposal is complementary to market-based development rather than as a substitute for such resources.¹⁰⁹ AEP Ohio goes as far to claim that IGS testified that the flood of renewable energy credits will not impact the development of renewable resources by the market.¹¹⁰ AEP Ohio mischaracterizes the record and its arguments are disconnected from reality.

Contrary to AEP Ohio's misleading claim, IGS did not testify that the flood of RECs will have no impact on the development of renewable resource.¹¹¹ Rather, witness Rengstorf stated IGS has assumed that the supply and demand for RECS grow on a normal scale, and "[w]e didn't price in the additional flow of these RECs which we view would suppress pricing, so we have not begun to do that."¹¹² The depression of REC

¹⁰⁸ IGS Ex. 11 at 7-12.

¹⁰⁹ AEP Ohio Initial Brief at 77-78.

¹¹⁰ *Id.*

¹¹¹ *Id.* at 78.

¹¹² Tr. Vol. IX at 2598.

prices will discourage the development of renewable resources and harm the economics of existing projects because:

The sale of REC revenue is factored into every single Ohio project that we build, and dependent on the time that the project was built and the forward curve for Ohio SRECs or Ohio RECs at that time, the number could be different, but they are an important piece of the economic equation for each project that we build.¹¹³

Thus, AEP Ohio's proposal will tank the REC market and frustrate the development of market-based renewable resources. Coexistence may only occur to the detriment of the market. Indeed, IGS witnesses Rever and Haugen testified that participation of subsidized renewable resources negatively impact the market.¹¹⁴

Moreover, the market-based resources that AEP Ohio's proposal would replace provide a more favorable outcome, given that market-based resources may actually deliver a renewable product to customers. "AEP would not be retiring SRECs or RECs on customer's behalf but rather would sell the RECs generated by the generation facilities into the wholesale REC market."¹¹⁵ According the Federal Trade Commission's rules, under 16 C.F.R. § 260.15(d), "[i]f a marketer generates renewable electricity but sells renewable energy certificates for all of that electricity, it would be deceptive for the marketer to represent, directly or by implication, that it uses renewable energy."¹¹⁶ "By law, a customer is not being supplied by renewable generation unless the REC or SREC from the facility is retired by the customer, or an entity acting on the customer's behalf."¹¹⁷

¹¹³ *Id.* at 2597.

¹¹⁴ Tr. Vol. VI at 1789-92; Tr. Vol. IX at 2584.

¹¹⁵ IGS Ex. 11 at 16.

¹¹⁶ 16 C.F.R. § 260.15(d) (Titled Renewable Energy Claims).

¹¹⁷ IGS Ex. 11 at 16.

Thus, AEP Ohio's proposal does not even achieve the purpose for which it is intended, since "AEP's customers would not actually be supplied electricity by the renewable generation facilities."¹¹⁸

Recognizing that the competitive market is well positioned to meet the desires of Ohio customers, AEP Ohio alleges that utility solar provides greater job benefits than behind the meter solar.¹¹⁹ The entirety of AEP Ohio's argument is based upon an outdated news article from the State of California. AEP Ohio's cross-examination of Mr. Rengstorf revealed that he had never read the article¹²⁰ and he disagreed with its conclusion.¹²¹ A closer examination of the referenced article identifies that the analysis is largely focused on the difference between union and non-union jobs within the State of California—as of five years ago. Regardless, as IGS witness Rengstorf testified based upon current trends in the solar market, behind the meter solar contributes a higher economic stimulus per megawatt installed.¹²²

Indeed, IGS is clearly doing a better job of creating jobs within Ohio than what has been touted by AEP Ohio. According to AEP Ohio, its proposal will result in the creation of 3870 jobs in the short term and approximately 50 jobs in the long-term.¹²³ It is ironic

¹¹⁸ *Id.*

¹¹⁹ AEP Ohio Initial Brief at 66.

¹²⁰ Tr. Vol. IX at 2585.

¹²¹ *Id.* at 2599.

¹²² *Id.*

¹²³ AEP Ohio Initial Brief at 5, 57.

that AEP Ohio alleges that behind-the-meter projects result in a boom and bust cycle, when it appears to be projecting that very result. AEP Ohio proposes a very short-term stimulus through its one-and-done approach, with long-term impacts that barely matches the amount of jobs that IGS Solar, LLC has already created (not including employees of IGS that perform service for IGS Solar, LLC) by deploying approximately 125 MWs of solar.¹²⁴ Perhaps, that is because IGS has developed several different projects in various locations, tailoring complex solutions to meet the individual needs of specific customers, rather than simply constructed a one-and-done utility scale projects that lack customer-specific benefits.

IGS' growth over the past decade provides an example of how competitive markets—without direct subsidies—provide far better job creation than government intervention. In 2010, IGS employed less than 200 people. Today that number approaches 900, which reflects the creation of approximately 100 jobs per year.¹²⁵ These results demonstrate that the competitive market is well positioned to stimulate the local economy—well, as long as the Commission does not pick winners and losers and tilt the competitive playing field against Ohio businesses that desire to invest in developing renewable resources within this state.

To the extent that the Commission truly desires to advance development of renewable energy resources, IGS urges the Commission to focus on competitively neutral

¹²⁴ IGS Ex. 12 at 2.

¹²⁵ IGS Ex. 11 at 3.

incentives. The market is well poised to meet the actual preferences of consumers—whether that amount is greater or smaller than AEP Ohio proposes in this case.

6. The Commission should not rush Phase 2 before a final order in this case

AEP Ohio and others argue that the Commission should proceed to hold hearings in “Phase 2.”¹²⁶ These parties argue that haste is needed to ensure that the proposed projects may go into service prior to the expiration of the Production Tax Credit and Investment Tax Credit.¹²⁷ Enough resources have already been wasted on these proceeding, the Commission should not further waste resources by placing the broken cart before a hobbled horse. AEP Ohio has not demonstrated that there is a need in this case to construct additional resources.

Moreover, AEP Ohio’s fear mongering over the ITC and PTC lack merit. Based upon AEP Ohio’s own testimony, the cost of installing renewable resources is falling faster than a stone.¹²⁸ Even if AEP Ohio’s argument had any merit—which it doesn’t—delay may result in even lower costs for customers without current tax credits. For example, while the ITC is currently set to reduce from a 30% reduction to 10%, the installed cost of solar panels are falling at a rate that makes up for the lost tax incentives.

AEP Ohio’s LTFR projected that the cost of utility scale solar would be \$1.6 per watt in 2021.¹²⁹ With the ITC, this installed cost translates to approximately \$1.12 per

¹²⁶ AEP Ohio Initial Brief at 79-80.

¹²⁷ *Id.*

¹²⁸ AEP Ohio Ex. 14 at JFT-1 at 13.

¹²⁹ *Id.*

watt.¹³⁰ By AEP Ohio's own testimony, the installed cost of solar in 2022 is projected to be approximately \$1.30-1.40 per watt, which translates to approximately \$1.17 per watt, which is nearly the same price.¹³¹

AEP Ohio's testimony is also based upon stale information. AEP Ohio testified that more recent projections predict that solar costs (both utility scale and residential rooftop) will fall even further than AEP Ohio predicted.¹³² These additional market efficiencies may make up for lost federal tax savings, which AEP alleges support moving forward with phase 2 without a final order in this case. Therefore, IGS urges the Commission to not adopt AEP Ohio's shoot first and aim later approach.

IV. CONCLUSION

AEP Ohio's Amended LTFR application concedes that it does not need to construct generation to satisfy a reliability concern. Given this fact, based upon the plain language of the ESP statute, the balance of Chapter 4928, and historical context regarding the passage of SB 221, it is clear that AEP Ohio's proposal to construct 900 MWs of renewable generation lacks merit. The purported desire of a portion of AEP Ohio's customers to develop additional renewable resources within this state does not translate to a need to do so in contravention to the General Assembly's policy framework. This is especially true given that customers have access to several different renewable energy products through the competitive market.

¹³⁰ \$1.6 per watt multiplied by .7 = \$1.12 per watt.

¹³¹ \$1.30 per watt multiplied by .9 = \$1.17 per watt.

¹³² Tr. Vol. V at 1351-52.

Rather than indulging AEP Ohio's request to return to a bygone era, the Commission should focus its efforts on eliminating barriers to deployment of customer sited generation. In doing so, the Commission can empower individual customers to deploy clean renewable resources to meet actual consumer preference, whether it is greater than or less than what AEP is proposing in this case.

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing *Reply Brief of Interstate Gas Supply, Inc. and IGS Solar, LLC*, was served this 27th day of March 2019 via electronic mail upon the following:

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/s/ Joseph Olikier

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Summary: Reply Brief electronically filed by Mr. Joseph E. Olikier on behalf of IGS Energy and IGS Solar, LLC