

**BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the 2018 Long-Term)
Forecast Report of Ohio Power Company) Case No. 18-501-EL-FOR
and Related Matters.)

In the Matter of the Application Seeking)
Approval of Ohio Power Company's)
Proposal to Enter into Renewable Energy) Case No. 18-1392-EL-RDR
Purchase Power Agreements for Inclusion)
in the Renewable Generation Rider.)

In the Matter of the Application of) Case No. 18-1393-EL-ATA
Ohio Power Company to Amend its Tariffs.)

INITIAL BRIEF OF INDUSTRIAL ENERGY USERS-OHIO

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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 Seeking Approval of Ohio Power Company's Proposal to Enter into Renewable Energy Purchase Power Agreements for Inclusion in the Renewable Generation Rider.)) Case No. 18-1392-EL-RDR

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INITIAL BRIEF OF INDUSTRIAL ENERGY USERS-OHIO

I. INTRODUCTION

Under strictly defined conditions, an electric distribution utility ("EDU") may seek a nonbypassable charge for the life of a new generation facility. One of the conditions that the EDU must demonstrate is that there is a need for the facility based on resource planning projections. R.C. 4928.143(B)(2)(c).

In this case, Ohio Power Company ("AEP Ohio") is seeking a determination that there is a need for 900 MWs of renewable generation that it has agreed to develop if it receives full cost recovery. AEP Ohio, however, does not provide any resource planning projection that shows a need for 900 MWs of renewable generation and concedes that the generic resources are not needed to maintain reliability or satisfy renewable energy requirements. Over the objection of parties opposing its request, AEP Ohio nonetheless claims there is a need for the generic facilities based on evidence it says shows that customers want renewable energy and that the generic resources will provide electricity,

over a 20-year term of purchase power agreements, at a lower cost than comparable generation priced at market.

For several reasons, the Public Utilities Commission of Ohio (“Commission”) should deny AEP Ohio’s request for a finding of need for 900 MWs of generic renewable generation. First, AEP Ohio has not provided resource planning projections to support a finding of need as required by R.C. 4928.143(B)(2)(c), and it concedes that the generation is not needed for system reliability. Second, the generic resources are not necessary to meet renewable energy requirements. Available renewable resources will satisfy renewable energy requirements under R.C. 4928.64 for years to come. Third, AEP Ohio’s alternative justification for the finding based on customer desires for renewable generation does not satisfy the statutory requirement to show need under R.C. 4928.143(B)(2)(c), and even if the Commission accepted AEP Ohio’s alternative definition of need, the supporting testimony is not credible because it is methodologically unsound and fails to demonstrate that any customer’s desire for renewable energy is not being met.

II. ARGUMENT

A. AEP Ohio Seeks a Finding of Need for 900 MWs of “Generic” Renewable Generation¹ Without a “Traditional Analysis of Integrated Resource Planning ‘Need’”

In its Amendment to the 2018 Long-Term Forecast Report (“Amendment”) through which it is seeking a finding of need for 900 MWs of renewable generation, AEP Ohio has offered a confused justification of the need for them. In the September 19, 2018

¹ AEP Ohio represents that it is seeking a finding of need for at least 900 MWs of renewable energy projects. AEP Ohio Ex. 2 at 1. For ease of discussion, this brief will adopt a convention of referring to a need for 900 MWs.

Amendment, AEP Ohio asserted that it need not provide any demonstration of need based on “a traditional analysis of integrated resource planning ‘need’”; instead, it intended “to demonstrate that there is a need for [it] to continue to satisfy its SSO obligation through an ESP that includes at least 900 MWs of in-state renewable energy projects.” AEP Ohio Ex. 2 at 4.

The use of the generation proposed to be needed in the Amendment, however, does not alter the manner in which AEP Ohio would satisfy the SSO obligation. The SSO obligation requires an EDU to provide a generation service to those customers that are not shopping. R.C. 4928.14, 4928.141, and 4928.143(A). Under AEP Ohio’s current ESP, AEP Ohio secures that generation through a series of auctions.² The Amendment does not propose any change to the auction process used to secure generation resources to serve default customers.

Rather than seeking to change the manner in which AEP Ohio secures default service generation, the Amendment requests a finding of “need” so that AEP Ohio is authorized to purchase the attributes of several “generic”³ renewable generation facilities under renewable energy purchase agreements. AEP Ohio Ex. 2 at 5-6. AEP Ohio would

² The default service generation has been procured through an auction process that the Commission approved as part of AEP Ohio’s second ESP. *In the Matter of the Application of Columbus Southern Power Company and Ohio Power Company for Authority to Establish a Standard Service Offer Pursuant to Section 4928.143, Revised Code, in the Form of an Electric Security Plan*, Case Nos. 11-346-EL-SSO, *et al.*, Opinion and Order at 39-40 (Aug. 8, 2012) (“AEP Ohio ESP II”). The Commission reauthorized the use of an auction process to secure generation resources for the SSO in the decision extending the ESP through 2024. *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 16 (Apr. 25, 2018) (“AEP Ohio ESP IV”).

³ After AEP Ohio filed the Amendment, it also filed the rider cases that were consolidated with the Long-Term Forecast case. These cases relate to specific solar facilities. During the course of the hearing, a wind facility was also identified. An entry addressing testimony deferred certain intervenor testimony that related to the specific projects, but AEP Ohio was permitted to advance project specific claims in both the transmission study and economic impact studies discussed later in this brief. Entry (Jan. 14, 2019).

then liquidate the capacity and energy in wholesale markets established by PJM. To the extent that the PJM revenue did not cover AEP Ohio's cost of the renewable energy purchase agreements, all retail customers, not just those taking generation service under the SSO, would be charged the difference under a nonbypassable rider, the Renewable Generation Rider ("RGR"). *Id.* Without approval of the risk-shifting mechanism of the RGR, AEP Ohio would not proceed with the contracts to secure renewable generation. *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.*, Joint Stipulation and Recommendation at 31 (Dec. 14, 2015).

In the Amendment, AEP Ohio concedes two determinative facts: First, PJM is "adequately supplying capacity and energy to the AEP Ohio load zone"; and second, AEP Ohio does not need additional renewable energy credits to satisfy state renewable energy requirements. AEP Ohio Ex. 2 at 3.

To avoid the implications that renewable generation resources were not required for either service to customers or to meet renewable energy requirements, AEP Ohio substituted "want" for "need" and advanced the claim that the projects would address customer interest in renewable generation at a "below market" cost. AEP Ohio Ex. 2 at 7; AEP Ohio Ex. 6 and 10 (Navigant Study); AEP Ohio Ex. 14 (Torpey); Tr. Vol. 1 at 134. It attempted to buttress this claim with additional allegations that a finding of need based on what customers might desire would reduce transmission costs and bring economic benefits to Ohio. AEP Ohio Ex. 2 at 7-9; AEP Ohio Ex. 5 (Ali); AEP Ohio Ex. 12 and 13

(Buser and Lafayette). Finally, AEP Ohio alleged a “generation gap” supported need for new renewable generation resources. AEP Ohio Ex. 2 at 8-9.

B. AEP Ohio Has Not Demonstrated a “Need” for 900 MWs of Renewable Generation

1. R.C. 4928.143(B)(2)(c) requires a showing that generation resources will not satisfy load

Since the adoption of Amended Substitute Senate Bill 3, it is the policy of the State to ensure the availability of unbundled and comparable retail electric service that provides consumers with the supplier, price, terms, conditions, and quality options they elect to meet their respective needs. R.C. 4928.02(B). As part of the execution of that policy, Ohio law provides that retail electric customers of EDUs such as AEP Ohio are afforded the opportunity to choose their generation suppliers. R.C. 4928.03.⁴ While Senate Bill 221 provided for alternative means of securing default service, customer choice remains the law; it cannot be over-ridden unless there is a demonstrated problem with the reliability of generation available to serve customers.⁵

As a result of Senate Bills 3 and 221, Commission authority to set generation-related prices of utility service is limited. R.C. 4928.05(A) and (B). Other than pricing the SSO and exceptions such as R.C. 4928.143(B)(2)(b) and (c), the Commission has limited express authority to approve cost recovery for generation-related facilities. *Id.*⁶ Under R.C. 4928.143(B)(2)(c), the Commission may authorize a nonbypassable surcharge to

⁴ EDUs are limited to being “wires” companies although they retain a default generation service obligation. R.C. 4928.05(A) and 4928.17.

⁵ As AEP Ohio explains in its Amendment, the reason it is pursuing this determination of need is because it agreed to pursue the development of 900 MWs of renewable generation in a settlement resolving its request for another generation-related rider. AEP Ohio Ex. 2 at 1-2; AEP Ohio Ex. 3 at 5-6.

⁶ R.C. 4928.143(B)(2)(b) provides a limited exception for cost recovery for construction work in progress. This section is inapplicable to AEP Ohio’s request for a finding of need.

recover all costs specified in an application related to an electric generating facility that is owned or operated by an EDU but only if “the commission first determines ... that there is need for the facility based on resource planning projections submitted by the electric distribution utility.”

In Case No. 08-888-EL-ORD, the Commission revised its forecast rules to address the requirements of Senate Bill 221, including R.C. 4928.143(B)(2)(c).⁷ *In the Matter of the Adoption of Rules for Alternative and Renewable Energy Technologies and Resources, and Emission Control Reporting Requirements, and Amendment of Chapters 4901:5-1, 4901:5-3, 4901:5-5, and 4901:5-7 of the Ohio Administrative Code, Pursuant to Chapter 4928, Revised Code, to Implement Senate Bill No. 221*, Case No. 08-888-EL-ORD, Opinion and Order at 1 (Apr. 15, 2009). In a discussion of the amendments in the initial order in Case No. 08-888-EL-ORD addressing changes to the forecasting rules, the Commission explained that the long-term forecast report would be used by the Commission to assess “the reasonableness of *demand and supply forecasts* based on anticipated population and economic growth in the state in accordance with Section 4935.04(F)(5).” *Id.* at 42 (emphasis added). To address requests for cost recovery under R.C. 4928.143(B)(2)(c), the revision included new provisions for a streamlined determination of need. In an entry on rehearing in which the Commission revised Rule 4901:5-5-06 to clarify the information needed to support a request for a charge under 4928.143(B)(2)(c), the Commission explained that the rule did not incorporate the full

⁷ After the General Assembly enacted Senate Bill 3, the Commission was under an immediate requirement to adopt rules to implement the new law. As part of a rulemaking, it substantially revised its forecast rules applicable to electric utilities, eliminating many forecasting requirements for EDUs. *In the Matter of the Commission’s Promulgation of Amendments to Rules for Long-Term Forecast Reports Pursuant to Chapter 4925.04, Revised Code*, Case No. 99-1614-EL-ORD, Finding and Order (Apr. 6, 2000).

requirements of the pre-2000 integrated resource planning rules, but “was rewritten to reflect the statutory mandates of SB 221, and streamlined to limit the amount and type of information required from the electric utilities to that which is necessary for the Commission to fulfill its obligations under SB 221.” *Id.*, Entry on Rehearing at 20 (Oct. 15, 2009).

The requirements of the rule are instructive as to the Commission’s understanding of the legislative requirement to show need based on resource planning projections. The determination of need is based on a review of the load and resources of the EDU. Rule 4901:5-5-06(B)(2). Separately, the EDU is to provide an integrated resource plan that addresses how the EDU’s “projected mix of resource options [will] *meet the base case projection of peak demand and total energy requirements.*” Rule 4901:5-5-06(B)(3) (emphasis added). The separately identified integrated resource plan must address reliability and many other factors. The separation of the need finding and the plan to respond to the need is intentional. As the Staff explained, the Company must first demonstrate a reliability concern. Until a need for additional resources is shown, the plan is not necessary or relevant. Staff Ex. 2 at 3.

The structure of the Commission’s rules and the Staff’s reading of the process for determining need comports with the industry’s understanding. As Mr. Lacey explained:

In the field of electric utility regulation, “resource planning” is often referred to as “integrated resource planning,” and is a term that describes the process of identifying energy and capacity resources available to serve current and future demand. Projections of future load and the resources available to serve that load are typically the basis for determining the “need” for additional generating capacity.

Direct Ex. 2 at 9. Similarly, Dr. Lesser stated:

[N]eed in a resource planning sense related to an electric utility having sufficient electric resources—either generating resources or energy efficiency resources—to meet customer demand at all times, and to ensure that customers were provided with reliable service. In other words, “need” means having sufficient electricity supplies to ensure that customers’ lights will always stay on, which includes a minimum amount of excess generating capacity in case of unplanned or forced outages.

OCC Ex. 18 at 23. See, also, OCA Ex. 2, Assessment of AEP Ohio Renewable Generation Rider Application at 30 (need refers to either insufficient generating capacity to meet forecasted demand or insufficient renewable generation resources to meet required renewable generation obligations).

Because the General Assembly has afforded customers a choice in their generation providers, the scope of an exception that would require a customer to pay for an EDU to own and operate an electric generation facility is narrowly confined to those instances when the market fails to deliver a reliable source of electricity. As demonstrated by the requirements of R.C. 4928.143(B)(2)(c) and the Commission’s rule, the determination of need confines the availability of nonbypassable generation cost recovery to those instances in which market forces have failed or will likely fail to deliver generation and energy to retail customers. For AEP Ohio and other Ohio EDUs that are members of PJM, reliability of generation resources is ensured by PJM. AEP Ohio Ex. 3 at 8. Thus, the demonstration of need must be based on a showing that sufficient capacity and energy are not available in the market. *AEP Ohio ESP II*, Opinion and Order at 39-40 (the Commission will first look to the market to build needed capacity; a nonbypassable charge could be authorized only when generation needs cannot be met through the competitive market).

2. AEP Ohio does not need 900 MWs of renewable generation resources to meet projected system load

AEP does not need 900MWs of new renewable generation resources to assure reliability of service to its customers. It concedes as much in its Amendment and supporting testimony. AEP Ohio Ex. 2 at 3; AEP Ohio Ex. 3 at 8. The lack of need also is confirmed by the Long-Term Forecast Report filed in April 2018. As shown by PUCO Forms FE-R6 and FE-R8, AEP Ohio anticipates securing sufficient capacity to meet its summer peak demands with sufficient reserves through purchases without reference to the proposed acquisitions of the output of the generic projects. AEP Ohio Ex. 1 at 106 and 108. Additionally, AEP Ohio does not provide any evidence of a shortfall in the provision of energy to customers. Tr. Vol. 5 at 1382; Tr. Vol. 8 at 2045.

Further, the record demonstrates that PJM can meet capacity requirements of the load in its footprint for the foreseeable future. PJM has 195,000 MWs of capacity available to serve the PJM footprint that has a demand of 168,000 MWs. Tr. Vol. 2 at 427. Recent auctions have successfully secured capacity commitments well in excess of reserve requirements. IEU Ex. 1 at 5. “The regional power market operated by PJM is awash in capacity and there is no indication this situation is likely to change anytime soon.” *Id.* at 5. See, also, Direct Ex. 2 at 8.

Likewise, there is no evidence to suggest a lack of system security due to changes in the generation mix. PJM recently completed a security study addressing the effect of the loss of various resources on reliability. “In the study, PJM looked five years in the future, using a 2023/2024 system model, to analyze more than 300 different scenarios ranging from typical operations to extreme scenarios, considering elements like generation retirements, customer demand, fuel delivery and fuel disruptions.” Direct Ex. 2

at 6 (internal quotations omitted). The study concluded that the PJM system can withstand an extended period of stress while remaining reliable. *Id.* at 6-7.⁸

Based on AEP Ohio's forecast and its own statements, AEP Ohio has not provided a demonstration of a need for 900 MWs of intermittent resources to serve AEP Ohio customers. The evidence concerning PJM's ability to meet capacity needs confirms that there is no need for 900 MWs of renewable generation. Because AEP Ohio failed to demonstrate need based on resource planning projections, this inquiry should be at an end.⁹

3. AEP Ohio has failed to demonstrate that 900 MWs of renewable generation resources are needed to meet state renewable energy requirements

Although R.C. 4928.143(B)(2)(c) by its terms limits the Commission's authority to approve a nonbypassable charge to those instances when the EDU can justify the need for a facility based on resource planning projections, the Commission has suggested that it will consider whether an EDU can seek recovery of costs for renewable generation to meet state renewable energy requirements if it demonstrates that the market will not deliver sufficient renewable resources. *In the Matter of the Long-Term Forecast Report*

⁸ Even the Sierra Club, which provided a long and largely irrelevant critique of the PJM market, conceded that PJM has sufficient capacity to service customers. Tr. Vol. 4 at 920. Sierra Club's critique is that the operation of the PJM markets operates to suppress prices. Sierra Ex. 1. As a result, it argues that renewable resources are less likely to develop in the PJM region than in other RTOs and ISOs. This critique, however, does not alter the fact that PJM can reliably supply customer load. Additionally, the critique is unsupported. For example, the alleged differences in capacity and energy prices among regions are not consistent with Sierra's claims about the adverse effects of capacity markets on renewable energy prices since price variations are driven by more complex differences among the regions. Tr. Vol. 4 at 971-76.

⁹ At the conclusion of AEP Ohio's direct case, IEU-Ohio and several other parties sought a directed decision based on AEP Ohio's failure to demonstrate need based on resource planning projections. For unstated reasons, the motion was denied. Tr. Vol. 6 at 1577-81. The failure to grant the motion is addressed in a later section of this Initial Brief.

of Ohio Power Company and Related Matters, Case Nos. 10-501-EL-COI, *et al.*, Opinion and Order at 25-26 (Jan. 9, 2013) (“*Turning Point*”).

Although the Commission in *Turning Point* offered an alternative basis for demonstrating need for a renewable generation resource, AEP Ohio conceded that it was not seeking a finding of need to satisfy state renewable energy requirements. AEP Ex. 3 at 4. That concession is understandable since AEP Ohio and the other electricity suppliers have sufficient renewable generation resources to meet renewable generation requirements for the foreseeable future. Staff Ex. 1 at 3-4; Tr. Vol. 1 at 166; Direct Ex. 2 at 10-11. More than 2,000 MWs of renewable generation is in the PJM supply queue. Direct Ex. 2 at 15. Not including the capacity of the two projects that AEP Ohio is seeking to contract with, the Ohio Power Siting Board has approved siting applications or has pending applications for 914.9 MWs of solar generation capacity. IEU Ex. 1, KMM-6. The certified resources could provide nearly 36 times the state renewable requirements for 2018. IEU Ex. 1 at 8. Additional planned resources would increase the annual renewable output to 55 times the 2018 state-wide requirement. *Id.* at 9. While some of these projects will not be completed, it is unreasonable to assume that none of them will be. OCC Ex. 18 at 41. As the record demonstrates, markets are working to provide renewable generation resources to meet statutory requirements. *Id.*

Moreover, the market responses are remarkably diverse. IGS Ex. 12 at 3. Utility scale projects are being developed. IEU Ex. 1, KMM-6; Tr. Vol 8 at 2190; OCA Ex. 3 at 36. Financing for large- and small-scale renewable projects is available. Tr. Vol. 8 at 2141 and 2163. Aggregation for utility scale resources is developing. *Id.* at 2191-94. Industrial and commercial customers, in keeping with their sustainability commitments,

are either contracting for renewable credits, constructing their own behind-the-meter facilities, or both. AEP Ex. 4; Tr. Vol 8 at 2140-57 (various efforts by Owens-Corning, JPMorgan, Fifth Third Bancorp, Nationwide, and Kroger). Dozens of offers for residential and commercial contracts, including one from an AEP Ohio affiliate, are marketed as 100% renewables-based. IEU Ex. 4-6; Tr. Vol. 2 at 303-09; OCC Ex. 18 at 74. Individual customers, including low income residential customers and tenants, have or will have the option of securing renewable generation. Tr. Vol. 7 at 1983. In fact, AEP Ohio cannot point to a single customer that desires renewable energy and was denied access to it. Tr. Vol. 2 at 302.

Based on the concessions offered by AEP Ohio and the uncontested record that there is no need for additional capacity to serve the customers of AEP Ohio, AEP Ohio has not and cannot demonstrate a need for 900 MWs of renewable generation resources.

C. AEP Ohio's Alternative Theory to Demonstrate Need Based on Customer Desires for Renewable Energy Is Not Lawful or Reasonable

Undeterred by the fact that there is no need for 900 MWs of new renewable generation to support system reliability or to meet statutory requirements for renewable generation resources, AEP Ohio claims that it can lawfully demonstrate need based on customer surveys and allegations that an addition of 650 MWs of renewable generation, over a period of 20 years based on assumed prices, will provide reduced electric rates. The legal premise on which this demonstration is based is an unsupported claim that the requirement to show need under R.C. 4928.143(B)(2)(c) "does not require a traditional analysis of integrated resource planning 'need'". AEP Ex. 2 at 4.

AEP Ohio's legal premise that it can justify a nonbypassable charge without showing that generation resources are insufficient to meet load is wrong. Further, the

factual claims based on customer desires and the alleged economic benefits of additional generic resources were not credible. A mixed metaphor captures the nature of AEP Ohio's case in chief: it is a house of cards built on a foundation of sand.

1. AEP Ohio's legal claim that R.C. 4928.143(B)(2)(c) does not require a traditional analysis of need is unsupported by Ohio law, Commission rules and decisions, and the industry understanding of the IRP process

AEP Ohio's case is premised on the claim that it can redefine need for generation resources to mean what customers want. The only analysis AEP Ohio offered to support its legal claim that it is not required to demonstrate that there is a need for 900 MWs of renewable generation based on "traditional" integrated resource planning requirements is a series of unconnected statements in the Amendment. First, it asserts that the Commission authorized the RGR in a prior case and AEP Ohio must demonstrate need before the Commission can authorize AEP Ohio to populate the rider. AEP Ohio Ex. 2 at 4. Second, it asserts that the Commission has recognized the importance of renewable generation. *Id.*

The legal claim that AEP Ohio can demonstrate need on something other than resource planning projections is unsupported by Ohio law, Commission rules, and industry understanding of what constitutes a demonstration of need for planning purposes, as discussed previously. Ohio law requires a review of the need based on resource planning projections, and under Commission rules, the EDU must provide evidence of customer demand and the resources (or lack of them) to satisfy that demand. R.C. 4928.143(B)(2)(c) and Rule 4901:5-5-06(B)(2). Industry understanding confirms that the resource planning process addresses the balance of supply and demand. Direct Ex. 2 at 9; OCC Ex. 18 at 23. A showing of resource inadequacy based on the inability

of the EDU to satisfy demand with the available resources must be shown before the Commission will consider alternative resource solutions to meet the supply shortage. Staff Ex. 2 at 3.

AEP Ohio's attempt to push this case through the Commission without a lawful demonstration of need is apparent in the concessions it makes to introduce its alternative theory that customer desires are sufficient to demonstrate need. AEP Ohio understands that need has a well-defined meaning when it states that it is not bound by a "traditional analysis of integrated resource planning 'need.'" AEP Ohio Ex. 2 at 4. Having conceded that generation resources needed to support load are and will continue to be sufficient, it alleges that a finding of "need" should be based on the unremarkable claim that some customers desire or want renewable resources. *Id.* at 7. However, "[t]hese consumer desires do not reflect a resource 'need,'" Direct Ex. 2 at 15, and "customer desires" can be and are being addressed by the market. No Commission order is permitted when customer requirements for reliability are being satisfied by the market. *AEP Ohio ESP II*, Opinion and Order at 39-40.

Moreover, neither the authorization of the RGR nor the Commission's endorsement of renewable generation provides some alternative basis for demonstrating need under R.C. 4928.143(B)(2)(c). While the Commission authorized the RGR as a placeholder rider in the *ESP IV* case, it specifically reserved the question of need and did not discuss the demonstration that AEP Ohio would be required to make to support collection of a charge. *ESP IV*, Opinion and Order at 105. The Commission's endorsement of the value of renewable generation likewise does not alter the requirements that the EDU must provide and prove under R.C. 4928.143(B)(2)(c) and

Rule 4901:5-5-06(B)(2) to show need for a new generation facility. The evidence to support need is spelled out in the Commission's rules and directs the EDU to provide load and resource information. Moreover, the Commission has expressly stated that a need determination would be predicated on a showing that market solutions were inadequate to meet customer need for renewables. In summary, AEP Ohio's attempt to rewrite the need requirement in R.C. 4928.143(B)(2)(c) to mean customer desires finds no legal support in the statute, the Commission's rules and decisions, industry understanding, or the representations relied upon AEP Ohio in the Amendment.

2. The factual claims based on customer desires and the alleged economic benefits of additional generic resources are not relevant or credible

The testimony AEP Ohio presented in this case sought to support its attempt to redefine "need" based on customer desires or wants for renewable generation. Because AEP Ohio's testimony focused on customer desires for renewable generation instead of need for the facilities based on resource planning projections, it was irrelevant to a determination of need.¹⁰ In addition to being irrelevant, the evidence was not credible.

3. The customer surveys were so poorly designed and executed that they do not provide any reliable information of customer desires

AEP Ohio makes two allegations to assert that there is an unmet desire for renewable generation on the part of its customers. First, it points to PJM's alleged indifference toward development of renewable resources. Second, it claims there is "an unfulfilled customer need for development of renewable energy projects deliverable to

¹⁰ Although the evidence was irrelevant, it was admitted over objection. As discussed in later in this Brief, the Commission should grant the motions to strike the irrelevant testimony and base its decision on the corrected record.

AEP Ohio's service territory." AEP Ohio Ex. 2 at 7. It bases the second claim on two surveys performed by Navigant. The record does not support either allegation.

Initially, PJM's alleged "indifference" has not prevented multiple vendors, including AEP Ohio's competitive affiliate, from offering retail customers 100% renewable energy contracts. Additionally, there are utility scale projects, purchase power agreements, corporate-sponsored projects, and community solar projects available in the market now. Customer demand is being supplied without the intervention of AEP Ohio and despite the alleged "indifference" of PJM.

The Navigant-sponsored surveys also do not demonstrate an unsatisfied customer desire for renewable resources.

Navigant provided two customer surveys. The first consists of a sample of 29 respondents identified as large commercial and industrial customers. The second is a survey of small commercial and residential customers that had the stated goal of assessing customers' willingness to pay a premium for renewable generation resources. AEP Ohio Ex. 6, TH-1 *passim*. Navigant admits that the large commercial and industrial study does not provide statistically significant information. AEP Ohio Ex. 6, TH-1 at 14; Tr. Vol. 3 at 578 and 766. Based on the results of a survey of small commercial and residential customers, however, Navigant concludes that "a strong majority of customers believe it is important that AEP Ohio makes greater use of renewable energy above current levels" and that more than half of each group "believe it is important that AEP Ohio provide renewable energy produced in Ohio." AEP Ohio Ex. 6, TH-1 at 6 of 41.

The large customer survey, apart from the fact that the results are not statistically significant, was not designed to identify unmet desires for renewable generation. This

survey asks a series of questions regarding corporate sustainability goals and whether the respondent would be interested in Ohio-based renewable resources. IEU Ex. 10. It does not contain a single question concerning unmet customer desires. *Id.*

Additionally, the large company survey offers little support that there is even any pent-up demand for renewable generation. More than half of the 29 respondents indicated that their companies did not have carbon emission or renewable power goals or they did not know whether their companies had such goals. *Id.*; Tr. Vol. 3 at 714-16.

Navigant also did not explore the current availability of renewable generation. Despite its claim that it conducted a survey of the Ohio renewable market as part of its study, Navigant has no information with regard to the number of companies that have entered into or announced plans to enter into purchase power agreements for wind generation or solar generation; it did not identify the number of companies that have constructed or announced plans to construct renewable generation other than wind or solar; it did not collect or identify any information of the number of companies that have entered into or announced plans to enter into purchase power agreements for renewable generation other than wind or solar; and it has not assessed whether or how AEP Ohio's customers' energy demands are being supplied. *Id.* at 722-23.

Finally, the large customer survey sampling approach, which was not disclosed until the hearing, is so poor that Navigant itself concedes that the results are not statistically significant. As a result, Navigant does not offer any conclusions regarding the unmet demand of large commercial and industrial customers for renewable generation. AEP Ohio Ex. 6, TH-1 at 14 of 41.

The small commercial and residential survey asked customers whether they were interested in purchasing renewable generation and whether they would pay more to secure renewable generation. AEP Ohio Ex. 6, TH-1 at 37-41 of 41. It did not ask the obvious question whether customer desire in renewable generation was going unmet.¹¹ As one of the Navigant witnesses conceded, the survey was designed to measure customer desires and “*how that feeds into their customer need is not an issue that we explored in the survey.*” Tr. Vol. 3 at 641 (emphasis added). Thus, there is no basis for AEP Ohio to conclude that some unmet desire for renewable generation exists.

The failings of the small commercial and residential survey, however, go beyond the lack of a question concerning unmet customer interest in renewable generation. Just as important is the fact that the small commercial and residential survey is filled with significant and obvious methodological errors. As this summary response from Dr. Dormady demonstrates, the list of methodological errors is long:

The Survey was poorly designed. It is biased in multiple ways. It is designed to support a particular policy conclusion—namely that AEP Ohio customers are eager to support development of the proposed renewable projects and would overwhelmingly welcome paying higher electricity bills to support their development. The Survey has many inherent biases, including ... Framing Bias, Hypothetical Bias, Social Desirability Bias, and likely has Selection Bias. The Survey’s underlying approach to estimating customers’ willingness to pay for renewable installations has long been acknowledged by experts to result in biased estimates. The methodology utilized is known to result in survey estimates that greatly diverge from what customers are actually willing to pay. There is no evidence that the Survey designers took these biases into consideration or attempted to mitigate them.

OCC Ex. 24 at 4. Dr. Dormady then provides detailed explanations as to how each of the biases affects the survey and renders its results unreliable. *Id., passim.*

¹¹ Further, as Ms. Medine offered, “Not asked was whether customers wanted to take a 20 year risk that the price under a solar PPA today would be lower in cost 10 years out given the expected decline in solar costs that the U.S. government is forecasting.” OCA Ex. 3 at 34.

The authors of the Navigant study confirmed many of the problems identified by parties in both surveys:

- Navigant did not ask if customers would be satisfied if companies other than AEP Ohio invested in renewable energy. Tr. Vol. 3 at 563.
- Commercial and industrial customers could have been double counted. *Id.* at 570.
- The large customer survey was inherently biased because only those customers that had expressed some interest in renewables were surveyed. *Id.* at 575.
- Contrary to the claim of Navigant that customers overwhelmingly support renewables, more than half of the small commercial and industrial respondents indicated that they were unwilling to pay or unsure whether they would pay an additional amount for renewable generation. *Id.* at 590-91.
- Navigant did not attempt to check the representativeness of its email sampling and there was no attempt to seek a geographically representative sample. It did not investigate willingness to pay based on either bill size or household income. *Id.* at 583, 621-27, and 746-47.
- Navigant did not disclose to respondents that customers were already paying \$2.07 for alternative energy, an amount higher than the bracketed amounts in the survey. *Id.* at 611-12.
- The survey did not inform customers that the cost of the state renewable requirement would likely continue to increase. *Id.* at 614.
- Navigant listed the benefits of renewable energy before asking questions regarding willingness to pay. *Id.* at 618-19.
- Navigant did not ask whether respondents were already securing renewable energy or renewable energy credits. *Id.* at 706-07.
- AEP Ohio employees were not excluded from the small commercial and residential customer survey and Navigant does not know how many employees responded. *Id.* at 725.

As Dr. Lesser correctly concluded, “[t]he Navigant survey is ... a typical ‘feel-good’ survey, which asked questions about the benefits of renewable energy, development of renewable energy within the state, and so forth of a biased and unrepresentative sample of residential, commercial, and industrial customers.” OCC Ex. 18 at 80.

4. The irrelevant and deeply flawed economic analyses of the price effects of adding 650 MWs of renewable generation do not support a finding of need

In addition to offering the Navigant study to support a finding of need, AEP Ohio also offered three economic studies. It claimed that adding renewables would result in a 7¢/MWH reduction in the locational marginal price of energy, produce a credit to customers by operation of the RGR over the twenty-year life of the contracts, and generate state-wide economic benefits associated with construction and operation of two solar generation facilities.

a. Relevance

Again, this evidence misses the point: it does not demonstrate a need to support a nonbypassable charge under R.C. 4928.143(B)(2)(c). While the economic studies might go to questions regarding the proper portfolio of resources that should be invested in if there is a need for generation, see Rule 4901:5-5-06(B)(3), none of the studies demonstrates that customers of AEP Ohio are at risk of not having electricity if AEP Ohio does not purchase the output of 900 MWs of renewable generation. As the hearing demonstrated, moreover, the studies themselves are so fundamentally flawed that the Commission should not accept AEP Ohio's claims concerning them.

b. Transmission and PJM Impact Study

As part of its demonstration that customers might realize some benefit from renewable energy power purchase agreements for 650 MWs of generation, AEP Ohio submitted the results of a study that purported to show that prices would be reduced by 7¢/MWH throughout the AEP Ohio zone. AEP Ohio Ex. 5 (Ali) and 14 (Torpey). The record demonstrates fundamental problems with this claim.

The first problem arises because the study is based on interconnections that were either wrong or inaccurately described, and this mistake then feeds back into the claim that the facility will produce savings. In the initial presentation of the transmission study, AEP Ohio assumed that all facilities would interconnect with AEP Ohio transmission facilities. Tr. Vol. 2 at 409 and Tr. Vol. 12 at 2750-51. In fact, one of the modeled facilities would interconnect with the Dayton Power and Light transmission system. IEU Ex. 14. As AEP Ohio repeated several times (before its witness reversed course in later testimony), the location of the interconnection is critical to proper pricing because of congestion between different transmission zones. Compare Tr. Vol. 2 at 527 (“If there is congestion between the AEP zone and that different zone, then it will have an impact, definitely.”) with Tr. Vol. 12 at 2759 (“it really didn’t matter” because the zones are close together). Since the first iteration of the transmission study used a location for the interconnection that was not correct, no weight should be afforded to either the study or the claim, based on multiple interpolations and extrapolations, that customers would see even the first penny of savings, let alone the next six claimed by AEP Ohio.

The second problem arises because the study offered on the last day of hearing to correct for the snafu in the study presented on the second day of the hearing is also flawed. In the second study, AEP Ohio correctly modeled the location of the interconnection point, but the model assumed the availability of an interconnection facility in 2021. Tr. Vol. 12 at 2764. The interconnection facility, however, is not expected to be operational before December 31, 2021. *Id.* at 2765; IEU Ex. 14. Thus, the transmission study is based on an interconnection facility that will not be available. No interconnection means no electricity can be delivered to the grid.

AEP Ohio nonetheless offers that the Commission can rely on the second study since it is generic. Tr. Vol. 12 at 2765-66. Even studies of generic facilities should have some basis in reality (as AEP Ohio implicitly conceded when it went back and modeled the Hecate solar plant based on an interconnection to the Dayton transmission system), and for 2021 AEP Ohio has ignored the fact that the 400 MWs of solar generation it has modeled cannot reach the transmission grid.

The third problem with the transmission study and the interpolations and extrapolations applied to it is that the end result remains immaterial. The effect of a 7¢/MWH change in price is so small that it is subsumed in potential forecasting error. To put the alleged savings in perspective, a residential customer on average would save 84¢ a year if the customer used 1,000 KWH of electricity a month. (The savings would be even less if one estimated the savings based on the 750 KWH/month assumption used by the Commission in its monthly rate survey.¹²) As Ms. Medine explained, no serious analyst would rely on such a small difference to justify such an important decision as that presented here: whether the Commission will permit AEP Ohio to take one more step toward saddling retail customers with twenty years of risk that its forecasts of savings are as wrong in this case as they have been in the past. OCA Ex. 3 at 18. See, *also*, OCC Ex. 25 at 19 (savings are immaterial).

The fourth problem presented by the transmission study is that accepting it would reward AEP Ohio for attempting to hide the ball. The record bears out that AEP Ohio was

¹² The Commission's utility rate survey assumes a residential customer will use 750 KWH a month. <https://www.puco.ohio.gov/industry-information/statistical-reports/ohio-utility-rate-survey/june/>

aware that its study was inaccurate soon after it filed its direct case, but failed to make corrections over the following two and a half months.

According to Mr. Ali, the original transmission study that assumed the interconnection point was with the AEP transmission system was performed in May 2018. Tr. Vol. 12 at 2750. Based on that study, AEP Ohio filed the Amendment and Mr. Ali's testimony concerning the transmission study on September 19, 2018. PJM released a revised system impact study confirming the change in the interconnection from the AEP transmission system to the Dayton Power and Light system on October 3, 2018. *Id.* at 2751. AEP Ohio provided a discovery response that included the revised impact study on October 24, 2018. *Id.* at 2752. Mr. Ali admitted that he was aware of the change in the interconnection point in October 2018, but presented the testimony he submitted on September 19, 2018 at the hearing on January 16, 2019 without noting any changes to the interconnection point. *Id.* at 2756-57. He did not begin the revision to the transmission study until after he testified on January 16, 2019. *Id.* at 2758-60. By then, of course, he had determined that the change in the interconnection point, previously critical to an accurate measurement of congestion, now caused an "immaterial" effect on the transmission study. *Id.* at 2766.

Under these facts, giving any credence to the flawed studies offered by AEP Ohio, particularly when it knew that a material working assumption was wrong for at least two and a half months, would reward AEP Ohio for behavior that damages the regulatory process. This lack of transparency cannot and should not be permitted or encouraged.

c. Fundamentals Forecast and the AEP Ohio Impact Study

The second part of AEP Ohio's attempt to show that customers would benefit from the addition of 650 MWs of renewable generation is based on a study comparing the costs of securing generation through a renewable contract with the costs of similar generation at anticipated market prices, what AEP Ohio refers to as the "AEP Ohio Impact." AEP Ohio Ex. 14, JFT-1 at 19 and 21-22. In this study, AEP Ohio states customers would incur lower costs over the life of the contracts, though they would suffer increased charges for several years at the start of each. *Id.* The improvement in the positions of the contracts relative to market prices is predicated on the results of a "fundamentals forecast" provided by Mr. Bletzacker. AEP Ohio Ex. 11; AEP Ohio Ex. 14 at 8; Tr. Vol. 5 at 1289. Thus, to the extent that the fundamentals forecast is not reliable, the rest of the analysis is unreliable.

The fundamentals forecast is sensitive to the direction of gas prices. Ex. 11 at 14; IGS Ex. 13 at 3-4. Further, the forecast prices escalate substantially based on the assumption that there will be a carbon burden of some sort beginning in 2028. AEP Ohio Ex. 11 at 8. The evidence concerning each of these factors casts doubt that the prices in the fundamentals forecast can be used to justify a 20-year commitment to shift the risk of these generic projects to customers.

Initially, AEP Ohio's track record for anticipating gas prices is consistently poor. IGS Ex. 13 at 8-10. In particular, its forecast prices diverge substantially from natural gas hub settlement prices. *Id.* at 5. The systematic error in AEP Ohio's forecasts that has occurred for years is readily apparent when year over year forecasts are compared. IEU Ex. 11 and 12. Only when the forecasting is forced to conform prices to actual markets

do the prices reflect the market based prices of natural gas; forecasts of gas prices even a few years out were grossly inflated. *Id.* These inflated prices then drive conclusions about the value of future benefits that are never realized because energy prices do not escalate in the way AEP Ohio has forecasted. IGS 13 at 13.

Likewise, AEP Ohio assumes capacity prices will soar even though the capacity market is awash in capacity. The proposed capacity prices then skew the results of the study to make it appear that customers would benefit from the renewable electric purchase agreements. OCC Ex. 18 at 53 and 56.

AEP Ohio also assumes that there will be some sort of government regulation of carbon, the cost of which will escalate annually. Yet this carbon tax is nonexistent. *Id.* at 46. The non-existent carbon tax, however, produces alleged benefits that AEP Ohio claims from the inclusion of the renewable generation. Tr. Vol. 6 at 1714.

The application of the fundamentals forecast to the generic solar and wind resources also contains errors. For example, AEP Ohio assumes no degradation in the solar generation output despite the fact that solar output degrades over time. *Id.* at 59. Further, it provides no sensitivity analysis for the results even though AEP Ohio has other “high” and “low” energy price cases. Tr. Vol. 5 at 1311-12. Essentially, then, AEP Ohio is betting other people’s money on one, probably significantly inaccurate, estimate of the benefits of adding 650 MWs of “generic” renewable generation to customers’ bills.

d. Economic Impact Study

For the third part of its economic claims concerning the benefits of developing 900 MWs of renewable generation, AEP Ohio relies on an economic impact analysis and asserts that the two solar projects that form the basis of the “generic” 400 MWs of solar

renewable projects will result in substantial economic growth for the area in which they would be constructed and Ohio more generally. According to AEP Ohio, the construction of the plants, through added employment and in-state purchases of solar panels, inverters, and other equipment, will pump hundreds of millions of dollars into the economy and expand tax bases. Additionally, AEP Ohio advances several claims regarding the potential reduction of other social ills in the region where the plants would be located. AEP Ohio Ex. 12 and 13.¹³

As with the Navigant surveys and transmission studies, methodological problems plague the economic impact study. Job gains are double counted. Tr. Vol. 4 at 1134. The benefits from in-state purchases of solar panels are based more on faith than fact since in-state purchases were assumed, not verified. *Id.* at 1135-36. Tax assumptions are also shown to be incorrect. *Id.* at 1138-39. Additionally, the study did not address the losses that would occur as a result of displacing other generation due to output reductions caused by the solar generation or the increase in electric bills that would result from the subsidy paid to cover the above-market costs of the renewable energy power agreements. *Id.* at 1141 and 1143. Underlying all of the analysis are the inputs of investment and labor that drive the impact modeling, which the analysts accepted, apparently with little or no independent check, from AEP Ohio or the developer. *Id.* at 1159-60.

Apart from the methodological issues, the economic impact study also fails to show any unique benefit associated with these projects if they are financed by AEP Ohio's customers through a nonbypassable charge. If these plants were built without the

¹³ This claimed advantage was a late addition to the case and goes unmentioned in the Amendment.

subsidies, the State and local communities would still realize the benefits claimed in the economic impact study. *Id.* at 1087-88 and 1149.

Further, the claimed social benefits are largely unrelated to the construction of the two plants. For example, workforce injuries in mining and gas industries would decline as those businesses decline due to depletion of coal and natural gas, not because AEP Ohio customers would assume the risk if the two renewable electric purchase agreements proved to be uneconomic. *Id.* at 1090 and 1092.

In summary, AEP Ohio's attempt to justify need based on the economic benefit studies is faulty in two ways. First, the economic studies are irrelevant to a determination whether there is sufficient generation to serve AEP Ohio's retail load. Second, the studies themselves are filled with errors that render them incredible on the irrelevant points they are trying to advance.

5. The extraneous issues raised by AEP Ohio to justify a need for 900 MWs of renewable generation expose other harms with the proposal including injury to competition and a breakdown in regulatory oversight

AEP Ohio also presented some novel arguments unrelated to need such as an alleged "gap" in Ohio electric production. Yet it chose to ignore the potential adverse effects of the subsidy it is seeking. As the record demonstrates, a finding of need triggering subsidized purchases would undermine market incentives for new construction and increase customer exposure to higher electricity prices.

AEP Ohio's attempt to paper over the problems with its Amendment by pointing to an alleged electricity "gap" between what Ohio customers consume and what Ohio generators produce is a solution looking for a problem. Ohio customers have consumed more energy than Ohio generators have produced for years. OCC Ex. 18 at 98-101.

There is no reliability issue, however, since Ohio is part of PJM and PJM is awash in capacity. Additionally, PJM recently determined that there is no fuel security issue even under extreme scenarios. IEU Ex. 1 at 5-7; AEP Ohio Ex. 19. Even in the face of the substantial reserves available in PJM, moreover, merchant generators are developing and bringing online substantial amounts of new capacity, both natural gas and renewable, to serve the market in Ohio. IEU Ex. 1 at 7-9. Given the significant amount of excess capacity embedded in the current PJM footprint and the new generation that is entering the Ohio market, the alleged “gap” is meaningless.

Subsidies for unneeded plants, however, are a problem. AEP Ohio has stated that these projects will not proceed without a backstop from retail customers.¹⁴ The backstop approved in the case extending the current ESP is the RGR. *ESP IV*, Opinion and Order at 20-22 (Apr. 25, 2018). Under the rider, all above market costs associated with the liquidation of the power will be borne by retail customers. That rider will assure that AEP Ohio, at a minimum, faces no price risk associated with the purchase and liquidation of the output of the renewable generation. Tr. Vol. 4 at 931. The subsidization of generation resources in the otherwise competitive retail and wholesale markets in Ohio would advance several unwanted outcomes.

First, there will be lost efficiencies as subsidies support assets that are uneconomic. Lower cost plants will not be able to effectively compete as higher cost energy sources bid low with the understanding that any shortfall will be made up by the

¹⁴ This “ground rule” was embedded in the stipulation that created the commitment to develop 900 MWs of renewable generation. *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.*, Joint Stipulation and Recommendation at 31 and 32 (Dec. 14, 2015).

subsidies. The long run effect of these subsidies will be an increase in prices as competitive suppliers leave the market in favor of places where the playing field is not tilted in favor of the EDU. Direct Ex. 2 at 22-23; IGS Ex. 9 *passim*; OCC Ex. 25 at 6.

Second, filling the alleged generation gap in Ohio with subsidized generation would itself be uneconomic since it ignores basic economic principles of competitive advantage. OCC Ex. 18 at 33. If the construction of an additional 900 MWs of renewable generation without subsidies makes economic sense, there is nothing to prevent it from occurring (and in fact much more than 900 MWs is already under development). On the other hand, if construction does not make economic sense, subsidizing such construction assures a welfare reduction for Ohio customers.

Customers also stand to lose in other ways. Despite claims by AEP Ohio, the renewable energy purchase agreements do not provide a hedge on retail electric prices. Customers will not take service under these contracts, which are wholesale agreements between AEP Ohio and the developers. Customers' prices for electricity will be set through either shopping contracts or the SSO auction, not AEP Ohio's deals with solar or wind developers. Customers do not receive a hedge on their retail energy costs.

Moreover, the RGR does not hedge customer prices. Under the RGR, customers will be exposed to the wholesale price changes associated with the liquidation of the power into PJM. Tr. Vol. 7 at 1909. No one can accurately predict where price might land, but even AEP Ohio concedes that customers will incur charges during the first several years of the generic renewable energy purchase agreements. AEP Ohio Ex. 14, JFT-1 at 21-22. As a result, customers' price risk would increase while AEP Ohio would

be held harmless and unexposed to the competitive market for electricity.¹⁵ Repeating that these projects will provide a hedge for customers does not make it true.

At least two additional fundamental problems with AEP Ohio's attempt to secure approval of these "generic" facilities are apparent. First, shopping customers that have secured contracts for renewable energy will be hit twice with renewable generation charges. They will pay the current premium for renewable energy purchased from their competitive retail electric service providers and again under the RGR for a resource they do not have any use for. OMAEG Ex. 16 at 11. Second, the subsidies will remove any discipline the market may have on new construction, potentially leading to overbuilding and excess capacity. Direct Ex. 2 at 8.

D. The Commission Erred When it Failed to Strike Portions of Testimony Presented by AEP Ohio and Several Intervenors That Were Not Relevant to the Determination of Need for 900 MW of Renewable Generation

In a prehearing motion, intervenors sought to strike testimony because it was not relevant to a determination of need. Motion in Limine to Exclude Evidence Purporting to Show Need Based on Economic Impact and Customer Survey or, in the Alternative, Motion to Strike Irrelevant Testimony of AEP Ohio Witnesses by the Office of the Ohio Consumers' Counsel, the Ohio Manufacturers' Association Energy Group, the Kroger Co., the Ohio Coal Association, Interstate Gas Supply, Inc., and IGS Solar, LLC (Jan 7, 2019). Throughout the hearing, intervenors opposing the Amendment continued to object to the admission of testimony of AEP Ohio and several other witnesses supporting the EDU's amendment on the basis that the testimony was not relevant to a finding of need.

¹⁵ Given the numerous methodological errors affecting the fundamentals forecast and the lack of any sensitivity analysis already noted, locking in price today in a declining cost industry makes no sense. Tr. Vol. 7 at 1961.

The testimony that parties sought to strike on grounds of relevance included that listed below. In each instance, the motion was denied.

Table 1		
Exhibit	Motion to Strike	Motion Denied
AEP Ex. 3 (Allen) 4:7 5:7-12 9:8-16:5	Tr. Vol. 1 at 25-34	Tr. Vol. 1 at 34
AEP Ex. 6 (Horner)	Motion in Limine at 7 Tr. Vol. 3 at 546-56	Entry at 8 (Jan. 14, 2019) Tr. Vol. 3 at 556
AEP Ex. 10 (Fry)	Motion in Limine at 7	Entry at 8 (Jan. 14, 2019)
Sierra Ex. 1 (Goggin) 4:8-10 5:9-10 30:1 to 32:12	Tr. Vol. 4 at 883-87	Tr. Vol. 4 at 887
NRDC Ex. 1 (Stebbins) 20:1 to 21:10	Tr. Vol. 4 at 1006	Tr. Vol. 4 at 1006
AEP Ex. 12 (Buser)	Motion in Limine Tr. Vol. 4 at 1006	Entry at 8 (Jan. 14, 2019) Tr. Vol. 4 at 1006
AEP Ex. 13 (LaFayette)	Motion in Limine	Entry at 8 (Jan. 14, 2019)
OPAEx. 1 6:12-13:2	Tr. Vol. 5 at 1187-95	Tr. Vol. 6 at 1196
AEP Ex. 13 5:1-13:6 JFT-1 Sections 6-8	Tr. Vol. 5 at 1284-85	Tr. Vol. 5 at 1285

Separately, motions to strike or defer testimony, based on the January 14, 2019 Entry deferring testimony regarding “Phase 2” issues and an additional explanation of that Entry on the first day of hearing, were raised concerning testimony listed below that was specific to particular solar projects. Entry at 7 and Tr. Vol. 1 at 62. With one exception, those motions were also denied.

Table 2		
Exhibit	Motion to Strike or Defer	Motion Denied
AEP Ex. 12 (Buser)	Tr. Vol. 4 at 1069-77	Tr. Vol. 4 at 1077-78
AEP Ex. 13 (Lafayette)	Tr. Vol. 4 at 1069-77	Tr. Vol. 4 at 1077-78

Table 2		
Exhibit	Motion to Strike or Defer	Motion Denied
OPAE (Reinbolt) 7:13 to 9:2 9:8	Tr. Vol. 5 at 1195-1200	Tr. Vol. 6 at 1200
MAREC Ex. 1 (Burcat) 7:20 to 9:3	Tr. Vol. 8 at 2036-38	Tr. Vol. 8 at 2038

The decisions to permit the witnesses to submit testimony that was not relevant to a determination of need or that addressed Phase 2 issues was error and the Commission should grant the motions to strike and issue a decision on the Amendment based on the corrected record.

Although the Commission is not bound by the Rules of Evidence in contested proceedings, it must exercise its discretion to conduct hearings in a manner that does not prejudice parties. R.C. 4903.22; *Greater Cleveland Welfare Rights Organization v. Public Utilities Commission of Ohio*, 2 Ohio St. 3d 62, 68 (1982). A fundamental consideration in assessing any testimony that is presented in a hearing is whether it is relevant. R. Evid. 402. Evidence having a tendency to make the existence of a fact that is of consequence to the determination of the application more or less probable than it would be without the evidence is relevant. R. Evid. 401.

The issue in this case is the need for additional generation resources to meet the load of customers of AEP Ohio as demonstrated by resource planning projections. R.C. 4928.143(B)(2)(c). The Commission, by decision and rule, has provided the claims that AEP Ohio must address in a forecast case regarding the determination of need, and the two questions before the Commission in this hearing are: (1) under R.C. 4928.143(B)(2)(c) and Rule 4901:5-5-6(B)(2), does AEP Ohio have access to generation resources to meet its expected SSO load; and (2) under the holding of the

Turning Point decision, does AEP Ohio have sufficient resources to meet its renewable energy requirement?

In regard to testimony concerning both the customer surveys and the alleged economic benefits of the “generic” projects identified in Table 1 previously, it was error to deny the motions to strike on the ground of relevance. The testimony concerns customer desires for renewable generation and the alleged economic benefits that might result from AEP Ohio’s decision to enter purchase power agreements for renewable generation. None of the testimony addresses the question of the need for additional resources to satisfy load or renewable energy requirements. Accordingly, the testimony should have been struck as irrelevant.

Additionally, the testimony identified in Table 2 regarding specific projects is irrelevant based on the scope of the hearing set by the Entry issued on January 14, 2019. In that Entry, intervenor testimony regarding the two solar projects for which AEP Ohio has sought approval to include in the RGR was deferred to a second phase of the proceeding if one is necessary. Entry at 7 (Jan. 14, 2019). Nonetheless, AEP Ohio, OPAE, and MAREC were permitted to introduce testimony concerning those specific projects.

Regarding the testimony of Dr. Buser and Mr. LaFayette, the record demonstrates that the admission of that testimony was particularly egregious. The *voir dire* of Dr. Buser established that the economic impact analysis was modeled on the costs of the projects provided by the developers of the specific projects for which AEP Ohio is seeking approval in the second phase. Tr. Vol. 4 at 1062-69 and IEU Ex. 13. Despite this demonstration,

the motion to strike or defer the testimony of Dr. Buser and Mr. LaFayette was denied. Tr. Vol. 4 at 1077-78.

The failure to manage the record has consequences. Because the testimony was admitted, the hearing was extended for several days because the parties were required to address the irrelevant testimony, both by cross examination and the presentation of direct testimony. Further, parties must devote substantial time briefing issues that are unnecessary to the questions before the Commission. The drain of resources caused by the admission of this testimony is real.

Further, the admission sets the stage for error in the final decision of the Commission. If the Commission relies on irrelevant testimony to support a finding of need, that error will trigger further proceedings on the merits of the actual projects that AEP Ohio is pursuing. At some point, this house of cards will fall, but not before the Commission's error causes third parties to expend substantial resources.

The Commission's decision to admit irrelevant evidence thus was both error and prejudicial. At this point, the Commission can still correct the error by striking the irrelevant testimony and deciding the case on AEP Ohio's admissions that the generic facilities are not needed to meet reliability concerns or to address renewable generation requirements.

E. The Commission Erred When it Failed to Direct a Decision Dismissing the Request for a Finding of Need at the Conclusion of AEP Ohio's Direct Case

Because AEP Ohio conceded that the generic resources for which it sought a finding of need were not necessary to meet reliability concerns or statutory requirements and nothing in the direct case of AEP Ohio suggested otherwise, parties opposing the

Amendment moved for a decision denying the request for a finding of need at the conclusion of AEP Ohio's direct case. Tr. Vol. 6 at 1577-79. This motion for a directed decision was denied. *Id.* at 1581. The refusal to direct a decision adverse to AEP Ohio on the Amendment was error since reasonable minds could come to but one conclusion upon the evidence submitted and that conclusion is adverse to AEP Ohio.

In civil actions before a court in Ohio, the Rules of Civil Procedure provide a means of terminating a case by directed verdict. On the conclusion of the opponent's evidence, the adverse party may move and state the grounds for a directed verdict. R.Civ.Proc. 50(A)(1) and (3). If the court, after construing the evidence most strongly in favor of the adverse party, finds that "reasonable minds could come to but one conclusion upon the evidence submitted and that conclusion is adverse to such party, the court shall sustain the motion and direct a verdict for the moving party." R.Civ.Proc. 50(A)(4).

Although not strictly bound by the Rules of Civil Procedure, R.C. 4903.082 directs the Commission to rely on those rules "wherever practicable." The Commission does not have a rule that provides for directed verdict. It also does not have a rule similar to Civil Rule 12(B), but it has issued decisions granting motions to dismiss under standards similar to that presented by Rule 12(B). For example, in a 2009 case, the Commission granted a motion to dismiss an EDU application for inclusion of certain projects in its energy efficiency and peak demand reduction compliance plan because the application demonstrated that the projects did not meet statutory requirements. *In the Matter of the Energy Efficiency and Peak Demand Reduction Program Portfolio of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company*, Case Nos. 09-384-EL-EEC, *et al.*, Entry at 2-3 (Dec. 16, 2009).

The Commission has also dismissed a case following submission of a staff letter to the case docket. In that 2004 case, the Commission granted a motion filed by a railroad track owner seeking dismissal of an application for an exemption of the requirement for school buses and carriers of hazardous materials to stop at a railroad crossing. The dismissal was granted after the Commission Staff submitted a letter demonstrating that the crossing did not meet the statutory requirements for an exemption. *In the Matter of a Request for an Exemption from Stopping for School Buses and Other Motor Vehicles at the Highway/Railroad Grade Crossing Located at U.S. Route 6 (477-636E), Village of Napoleon, Henry County*, Case No. 03-2524-RR-RCP, Entry at 1-2 (June 2, 2004). Thus, the Commission has adopted procedures to terminate cases even without a procedural rule governing dismissal.

The policy underlying early termination of a case is clear: the adverse parties should be afforded relief when the applicant has failed to allege sufficient grounds for relief in its application or failed to meet the burden of going forward with sufficient evidence to support its case.¹⁶ Failure to terminate the case works an injustice on those parties that are forced to respond to an applicant that has not presented sufficient facts to establish a right to relief.

In this case, AEP Ohio, at best, established that some of its customers want renewable generation, but conceded that the generation for which it is seeking a determination of need is not necessary to serve customer load or to comply with statutory

¹⁶ Recognizing the need to grant relief when it is justified, a former Commissioner chastised the Commission for failing to summarily dismiss a Duke Energy Ohio application when parties correctly moved to dismiss because the relief Duke sought would violate terms of an approved stipulation. *In the Matter of the Application of Duke Energy Ohio, Inc., for the Establishment of a Charge Pursuant to Section 4909.18, Revised Code*, Case Nos. 12-2400-EL-UNC, *et al.*, Opinion and Order, Concurring Opinion of Commissioner Lynn Slaby (Feb. 13, 2014).

renewable requirements. That alone justified a directed decision dismissing the Amendment. But even if the Commission were to accept AEP Ohio's misstatement of the applicable law that need based on resource planning projections could be demonstrated by an unmet desire for renewable generation, the record at the conclusion of AEP Ohio's direct case failed to demonstrate that any customer's wants were unfulfilled or could not be met by the competitive market. IEU Ohio Ex. 4-6; AEP Ohio Ex. 4. Upon the evidence submitted, reasonable minds could come to but one conclusion and that conclusion is adverse to AEP Ohio. Accordingly, the Commission should have granted the motion and directed a decision for the IEU-Ohio and the other moving parties.

III. CONCLUSION

Before the Commission can approve the subsidies that AEP Ohio is seeking, the Commission must determine that the generation resources are needed based on resource planning projections. In this case, AEP Ohio has not demonstrated that there is any need for 900 MW of renewable generation to maintain reliable service to its customers or to satisfy its renewable energy requirements. Moreover, AEP Ohio's attempt to redefine the need requirement by presenting customer surveys and economic studies does not provide the Commission with either a lawful or reasoned basis for a finding of need.

Although no one can forecast where prices will be 20 years from now, recent experience with predicting electricity markets should make the Commission wary of any recommendation by any developer, including in this instance an EDU, that it can beat the market. If that were the case, the developer would not need or want a regulatory backstop. It would invest in a resource that had a demonstrated, indeed locked-in, value

and siphon that value for its owners. Yet AEP Ohio will not advance the development of these generic resources without a subsidy. Given AEP Ohio's demand for a backstop, simple business sense casts serious doubt on its claim that customers will benefit from these generic projects.

Given AEP Ohio's concessions and overwhelming evidence supporting those concessions, there is no need for 900 MWs of "generic" renewable resources now or in the foreseeable future.

Accordingly, the Commission should deny AEP Ohio's request for a determination of need for 900 MW of renewable generation.

Respectfully submitted,

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CERTIFICATE OF SERVICE

In accordance with Rule 4901-1-05, Ohio Administrative Code, the PUCO's e-filing system will electronically serve notice of the filing of this document upon the following parties. In addition, I hereby certify that a service copy of the foregoing *Initial Brief of Industrial Energy Users-Ohio* was sent by, or on behalf of, the undersigned counsel for Industrial Energy Users-Ohio, to the following parties of record on this 6th day of March 2019, via electronic transmission, hand-delivery or U.S. mail, postage prepaid.

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