BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application 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 OHIO PARTNERS FOR AFFORDABLE ENERGY

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OHIO PARTNERS FOR AFFORDABLE ENERGY'S REPLY BRIEF

I. Introduction

Ohio Partners for Affordable Energy ("OPAE") herein submits to the Public Utilities Commission of Ohio ("Commission") this reply brief in these proceedings considering the Long-Term Forecast Report and Amended Long-Term Forecast Report ("LTFR") of Ohio Power Company ("AEP Ohio"). AEP Ohio has demonstrated the need for renewable energy projects in Ohio based on the resource planning projections in its LTFR. OPAE supports Commission approval of the projects for the reasons set forth in OPAE's initial brief. Opponents of the projects have presented arguments in their briefs that should not persuade the Commission to find the projects unlawful, unneeded, or anti-competitive. The Commission should agree with the supporters of the projects that AEP Ohio has demonstrated a need that justifies ratepayer investment.

II. AEP Ohio Has Demonstrated Need for the Projects under Ohio Law.

Opponents of the projects claim that Ohio law requires that customer need for electric generation be met through the competitive market. Office of the Consumers' Counsel ("OCC") Brief at 2. Even though Revised Code ("R.C.") 4928.143(B)(2)(c) permits electric distribution utilities to recover from ratepayers the cost of constructing a generating facility if the Commission first determines that there is a need for the facility, opponents claim that the Commission has construed "need" narrowly to mean sufficient resources to meet customers' demand for electricity and to comply with Ohio's renewable energy mandates. Id. at 8-9. Even under the opponents' scenario, the Commission has the authority to construe "need" as the Commission sees fit.

Opponents argue that the Regional Transmission Organization PJM has more than enough capacity to meet its reserve margin. PJM's most recent generation reserve margin forecast shows reserve margins far greater than the 16% reserve margin PJM has determined is required. OCC Brief at 20. What the opponents do not recognize is that, under the PJM market construct, there is no credible scenario under which PJM would not have an adequate capacity reserve. There is no limit on PJM's ability to raise rates to attract generation; therefore, PJM will never be capacity deficient. Relying on PJM's reserve margin as the basis for determining "need" under Ohio law would eliminate the Commission's authority to protect Ohio-specific interests under R.C. 4928.143(B)(2)(c). Relying on PJM capacity reserve margins as a definition of

"need" would render R.C. 4928.143(B)(2)(c) meaningless, contrary to legislative intent and rules of statutory construction. See Ohio Energy Group Brief at 8.

The Commission should recognize that PJM's capacity market limits the availability of renewable resources in the PJM region. The inadequate deployment of renewables is not a natural "market" result but a result of the construct of the PJM capacity market and its incentives for some types of generating resources over others. Under Ohio law, the state must overcome the bias in the PJM capacity market construct to promote diversity of resources, especially renewable resources. R.C. 4928.02(C). The Commission is not only able to do so lawfully, but also obligated to do so on behalf of Ohio retail customers.

Opponents of the projects cite AEP Ohio's Case No. 10-501-EL-FOR, the "Turning Point" case, in which AEP Ohio based its argument for "need" on the ability of the proposed facility to help with Ohio's renewable energy mandates. Opponents claim that the Commission has construed "need" to mean sufficient resources to comply with Ohio's renewable energy mandates. OCC Brief at 8-9. However, in this case, AEP Ohio has not based its "need" request on the need to comply with the mandates but on other needs the projects will meet. The Turning Point case is not precedent for these AEP Ohio projects.

Therefore, the "need" at issue here is not a need for additional capacity resources in the PJM region, nor is the need based on renewable energy mandates. The Commission is not so limited as to restrict its inquiry into need for

either a need in PJM for additional capacity or for renewable energy mandates.

The Commission's authority is much broader than the opponents claim.

Ohio Administrative Code ("O.A.C.") 4901:5-5-06(3)(e)(iii) provides a list of factors that the Commission may consider as part of its review of an Integrated Resource Plan. Key considerations include: (a) rate and customer bill impacts; (b) environmental impacts and costs of the plan; (c) other significant economic impacts and their associated costs; (d) impact of the plan on the financial status of the company; (e) other strategic considerations such as flexibility, diversity, the size and lead time of the commitments, and lost opportunities for investment; (f) equity among customer classes; (g) the impact of the plan over time; and, (h) such other matters the Commission deems appropriate. The Commission has great flexibility in determining the need for additional electric generating facilities. The Commission is not limited by any one factor and may consider any number of factors as the Commission sees fit.

In the Commission's inquiry into "need" under R.C. 4928.143(B)(2)(c), the Commission should also consider whether the projects will advance several important state objectives such as promoting rate stability and protecting consumers from the volatility of market pricing. R.C. 4928.143(B)(2)(d). Under R.C. 4928.143(B)(2)(d), rate stability is a statutory objective. AEP Ohio proposes Renewable Energy Purchase Agreements ("REPAs") that represent a fixed price recovered over 20 years; under the REPAs, prices for energy from the projects would be stable. The projects can limit exposure to supply cost escalations such as natural gas price volatility. With natural gas generation more prevalent than

ever before due to the current, but unsustainable, low cost of natural gas, ratepayers face an increased exposure to natural gas supply cost escalation.

Mid-Atlantic Renewable Energy Coalition ("MAREC") Ex. 1 at 5. The remedy to this risk is to have a diverse set of supply resources for long-term rate stability.

Id. at 6.

Solar energy projects provide a hedge to ratepayers against rising costs.

The REPAs set a price for the life of the contracts that provides 20 year rate stability. Id. at 7. PJM holds capacity auctions for three-year terms; compared to a 20-year REPA, PJM markets represent pricing over a short-term horizon.

Competitive Retail Electric Supply ("CRES") offers and even the Commission's Standard Service Offers are short-term offers, the longest being three years, which coincides with the length of the PJM forward market. Tr. VIII at 2082-2083. These short-term offers should be compared to a 20-year fixed price long-term contract that would protect ratepayers from price volatility. Tr. VIII at 2077.

The Commission should also consider the state policy directives under R.C. 4928.02. The projects are consistent with the state policy to provide consumers with adequate, reliable, safe, efficient, nondiscriminatory, and reasonably-priced retail electric service. R.C. 4928.02(A). AEP Ohio's analysis shows that adding 650 MW of renewable energy resources in Ohio would result in a net present value benefit to AEP Ohio customers of \$173 million. AEP Ohio Ex. 14 at 6. AEP Ohio presented sufficient evidence that the generic renewable resources would help satisfy a "need" for reasonably priced retail electric service consistent with the state policy set forth under R.C. 4928.02(A). The generic

renewable projects have a minimal impact on the customer's bill. Tr. VIII at 2083.

A REPA might start out with a slightly higher price during the early years, but ultimately becomes a very significant benefit to customers who are purchasing electricity. Tr. VIII at 2097. The projects will have a stabilizing effect on prices.

The projects will contribute to diversity of electricity supplies and fuel supplies. R.C. 4928.02(C). At this point, in-state wind and solar generation makes up less than 2% of all energy generated in Ohio. Ohio falls short of advancing renewable energy resources when compared to other states with comparable renewable potential. The Commission has already found that renewable projects provide greater fuel source diversity, which will offset the price volatility impact any single fuel source may have on electric rates. Case Nos. 14-1693-EL-RDR, et al., Opinion and Order (March 31, 2016) at 82-83. Fuel diversity provided by the projects will help protect against over-reliance on one particular fuel source and future carbon regulation.

The projects will promote innovation in Ohio's electric generation. R.C. 4928.02(D). The projects provide a mechanism to support the deployment of a technology "that can adapt successfully to potential environmental mandates." R.C. 4928.02(J). The development of renewable energy will also support future carbon emissions reductions. AEP Ex. 3 at 13.

Renewable projects also protect at-risk populations by ensuring renewable energy at a reasonable cost for all customers. The projects' competitive price and positive health and economic development impacts will act to protect at-risk populations. R.C. 4928.02(L). The projects also provide a mechanism to make

an alternative energy resource available to small businesses, which will be able to take advantage of cost-effective utility-scale renewable energy when small businesses are unable to build or procure individualized renewable options. R.C. 4928.02(M).

The projects will facilitate the state's effectiveness in the global economy by ensuring the availability of clean energy, which many of the largest corporations in the country see as critical to their futures. R.C. 4928.02(N). The projects will also facilitate the state's effectiveness in the global economy because Ohio will be attractive to a broad range of businesses, and employment opportunities in Ohio will increase. When Ohio's energy dollars are reinvested in Ohio through locally produced energy the multiplier effect of economic development is increased to the benefit of Ohio customers and communities. AEP Ohio Ex. 3 at 10. These policies of the state to facilitate economic development should be considered in the Commission's "need" analysis.

The PJM wholesale market is falling short of the level that would optimally serve the economic and environmental interests of AEP Ohio's customers.

Nationally, wind and solar provide around 8.9% of electricity generation, but provide only 2.8% in PJM. Sierra Club Ex. 1 at 5. In PJM, renewable resources have not reached levels at which they begin to reduce energy market clearing prices during hours with high renewable output. Id. at 7. PJM region Renewable Energy Credits trade at a higher price than those in almost all other regions, indicating that PJM renewable supply is inadequate to meet the region's aggregate Renewable Portfolio Standard demand. Id. at 9.

PJM capacity markets incentivize the retention of excess generating capacity, which militates against developing new renewable generating resources. Renewable energy projects generally obtain a relatively large share of their value from the energy market and a relatively small share of their value from the capacity market. Id. at 10. The presence of a capacity market, such as PJM's, drives revenue from the energy market, which tends to prevent recognition of the lower energy prices from renewable generation. Id.

When the Commission exercises its authority under Ohio law to consider these projects, the Commission should find that AEP Ohio has met its burden to demonstrate need for the projects. AEP Ohio has demonstrated need pursuant to R.C. 4928.143(B)(2)(c), R.C. 4928.143(B)(2)(d), and the state policy objectives at R.C. 4928.02. The Commission should approve the projects.

II. Competitive Suppliers Will Not Meet Customer Need for Renewable Energy.

Interstate Gas Supply, Inc. ("IGS") argues that AEP Ohio failed to evaluate renewable development by the competitive market. IGS Brief at 22. IGS also argues that AEP Ohio failed to evaluate the potential of the AEP Ohio projects to crowd out development of other renewable generation sources. Id. at 37. The arguments from marketers are that the Commission should "let the market work" by rejecting AEP Ohio's projects, that customers have several options to obtain renewable energy "should they desire it", and that the Commission should not "pick winners and losers", but should focus on removing barriers to developing renewable generation by marketers. Id. at 43-48.

The Commission's exercise of its authority under R.C. 4928.142(B)(2)(c) is not a threat to retail competition in Ohio. The Commission's finding of "need" for a resource under R.C. 4928.142(B)(2)(c) advances state-specific interests but does not inhibit retail customers from shopping for their generation supplies from marketers. Given that AEP Ohio will recover costs or pass back credits associated with the projects through a non-bypassble charge or credit, the projects will not in any way affect competitive markets or the standard service offers. CRES providers are also not inhibited in any way from developing their own renewable generation resources.

The record in this case makes clear that the growing need for renewable energy cannot be addressed by CRES providers alone. Customers who desire or need renewable energy may not be able to obtain it from the market.

Customers do not have a right to be served by a CRES provider; CRES providers must agree to serve a customer. Only about 35% of AEP Ohio's customers even participate as customers of CRES providers. The other 65% continue to take service from the utility's Standard Service Offer. Tr. I at 153.

Unlike a CRES, the utility has an obligation to serve. The utility is the only entity that can make an offering for all of AEP Ohio's customers to take advantage of economic renewable power over a long period of time. Tr. I at 344, 358, 360.

Several factors limit customers' ability to take CRES renewable offers.

Customers may not have the appropriate credit quality for CRES providers to be willing to serve those customers. Tr. I at 88. Customers may not have access to the scale or the financial wherewithal to take advantage of competitive market

offers. The CRES market cannot meet their need. Customers who want the benefits of renewable energy may be unable to take advantage of renewables except through their utility. Tr. VII at 2078. Whereas CRES may cite to projects built for individual customers, not all customers have the ability to own their own generating facilities, finance their own renewable installations, or pay for long-term contracts. Many customers are left out of financing options. Tr. VIII at 2081-2082.

The competitive market may provide rooftop solar, but customers tend to be affluent with homes that are situated properly so that they can take advantage of rooftop solar. Tr. I at 153. Rooftop solar is a small-scale solar facility that is installed on a customer's roof, and it has very poor economies of scale. There are significant costs associated with rooftop solar that make the cost per kilowatt hour higher than other options. Solar panels do not generate the maximum potential output because they cannot be optimally pointed at the sun during all hours of the day. In rooftop installations, the panels do not track the sun. Tr. I at 343. The economics of rooftop solar facilities are not as favorable as the economics of utility-scale facilities such as the AEP Ohio projects at issue here. As the size of utility-scale projects increase, the costs of mobilization and demobilization, which are only incurred once as the projects are built, improve the cost effectiveness of larger solar projects. Tr. I at 343.

The generic renewable projects under consideration here would receive all of their revenues through the REPAs. Tr. I at 164. One of the challenges with the competitive market developing renewables for customers is that it requires

creditworthy counterparties, and not every entity is creditworthy enough to support long-term REPAs or large-scale renewable projects. Tr. I at 164. In the case of the AEP Ohio projects, the financial risks associated with the building of the facilities and the actual cost of the facilities is borne by the developer, in this case an affiliate of AEP Ohio. Under the REPAs, AEP Ohio customers will have a fixed price. The risk of cost overruns, construction, and the availability of the units is all borne by the counterparties to the REPAs, not the customers. There is no up-side risk to the customer for the cost of power from the projects, because the cost will be fixed. Tr. II at 392-393. If the REPA cost is more than the wholesale revenues that are generated by the projects, the difference would be passed on to customers as a non-bypassable charge. The projects will result in a charge to customers only if market prices are very low. Tr. II at 393. If market prices go up, and the REPA cost is less than the wholesale revenues that are generated by the projects, customers will see a significant benefit. Tr. VIII at 2098.

The projects could not be built without a creditworthy counterparty signing the REPAs. AEP Ohio signing the REPAs facilitates the projects being built. Tr. I at 214-215. Over the last 10 years, 200 MW of solar power have been developed in the State of Ohio. With the REPAs, an additional 400 MW of solar would triple the amount of solar in Ohio. This can only happen with a large creditworthy counterparty like AEP Ohio. Tr. I at 215. There are a limited number of counterparties that can do these types of projects and take advantage of the

scale and economies that come with the projects. Solar projects for 20, 30, 40 MW do not have the same economies of scale as a 100 or 300 MW facility.

The competitive generation market to date has not developed significant sources of solar energy in Ohio. Tr. I at 152. The competitive market may be able to meet the needs of certain commercial and industrial customers, such as Fortune 500 companies, who are able to build their own solar facilities or contract for solar energy. Tr. I at 153. But CRES providers have not and cannot develop renewable resources that would provide similar benefits as utility-scale projects. CRES providers in Ohio have never invested in renewable projects at a scale that is anticipated by the AEP Ohio projects. Tr. V at 1245. CRES may provide small solar projects or make offers for renewable energy to individual customers, but there is no large CRES investment in renewable energy that would achieve goals such as price stability, clean energy, the mitigation of climate change, and economic development. Tr. V at 1246.

The projects are not anti-competitive because retail suppliers still have the ability to serve retail customers. CRES providers make new offers and withdraw them all the time. Nothing in these proceedings will prevent CRES providers from offering whatever they want to offer. The AEP Ohio projects will have a negligible impact on wholesale energy values and a limited impact on competition. They will even give CRES providers a new, low-cost source of Renewable Energy Credits, which can be used to green the energy CRES provide to their customers. The AEP Ohio projects are utility-scale renewable energy that the competitive market cannot provide. Tr. I at 152. The AEP Ohio projects do not displace or prevent

CRES offers, but provide another resource and benefit for customers, the economy of Ohio, and the environment. Tr. I at 345.

III. The Projects Address Urgent Environmental Needs.

OCC's brief relies extensively on the testimony of it witness Jonathan A. Lesser. OCC Exhibit 18. OCC cites its Lesser testimony extensively in its brief for a host of arguments. The Lesser testimony is cited on Page 2-3 of OCC's brief for the proposition that the Ohio General Assembly relies on the marketplace to develop power sources, including renewables, and has a plan for Ohioans to be served by non-utility owned competitive power plants. The Lesser testimony explains that under Ohio law, merchant generators, who can effectively manage the risks, assume the risks and rewards of owning and operating power plants. OCC Brief at 4. While OCC recognizes that R.C. 4928.143 allows for exceptions to the market concept based on need, the Lesser testimony is that there is no "need" for the AEP Ohio projects.

The Lesser testimony contends that the AEP Ohio projects are not needed because of the PJM reserve margin. Id. at 17-18. He testifies that PJM's most recent generation reserve margin forecast shows reserve margins far greater than the 16% reserve requirement PJM has determined is required. Id. at 20. He also claims that there has been a robust development of in-state solar and wind generation in Ohio in spite of the testimony in the record that this is not true. Id. at 26. He claims that AEP Ohio has not demonstrated that there are

economic benefits to customers from the AEP Ohio projects, again a highly disputed proposition in this case. Id. at 31-34.

On the basis of the Lesser testimony, OCC warns that the Commission "should not be fooled by the utility's facile presentation." Id. at 34. The Lesser testimony leads OCC to conclude that the AEP Ohio analysis has "numerous faulty assumptions" that cannot be counted on. Id. The Lesser testimony claims that AEP Ohio's energy independence "has no connection to need" and "is not even tethered to the 21st century reality of a regional market." Id. at 35. The Lesser testimony claims that AEP Ohio's pursuit of energy independence is a "silly economic concept" that is not a reasonable or sound basis for developing instate power plants. Id. OCC cites Lesser that energy independence is not a useful economic concept. Id.

In presenting the Lesser testimony as the voice of reason and sound 21st century reality, OCC ignores the evidence presented at the hearing demonstrating that Jonathan Lesser, who is employed by the Manhattan Institute, is an unreliable witness at best. He has published numerous unprofessional commentaries belittling climate science and efforts to combat climate change. OCC's witness Lesser has penned such articles as "Goldilocks and the Three Climates" ["Although many scientists view global climate change as a serious problem, many others continue to express doubt regarding both its magnitude and causes."] (Sierra Club Ex. 2); "As the Global Climate Turns: the Saga Continues" ["Although some believe the science of global climate change is settled . . ."] (Sierra Club Ex. 3); "Global Warming, Climate Change, Er, Climate

Volatility: 2012 and Beyond" ["The climate has always changed."] (Sierra Club Ex. 4); "The Devil and the EPA" ["The impacts of any reduced CO2 emissions on the climate will not even be measurable."] (Sierra Club Ex. 5); "Outlook-Sunspot Data May Indicate End of Global Warming Trend" ["Science is never settled."] (Sierra Club Ex. 6); "Talk is Cheap: The UN's Doha Conference Strikes Out ... Again" ["Although some see the Doha conference as a rousing success, what Doha reveals is the folly of continued efforts to prevent climate change."] (Sierra Club Ex. 7); "Rethinking Green Energy Mandates" ["Green Energy Mandates have zero impact on climate change"] (Sierra Club Ex. 8); "Goldilocks Chills Out" ["It is not as if those at risk from climate change have been previously immune from risk."] (Sierra Club Ex. 9); "The Drive to Make New York 'Zero Carbon' Is Insane", "New York's Clean Energy Programs: The High Cost of Symbolic Environmentalism", and "New York's Climate Goal: Staggering Costs, No Benefits" (AEP Ohio Ex. 16).

The record demonstrates that OCC witness Lesser is a professional purveyor of doubt on climate science and environmental policies. At the hearing, he re-affirmed his statements. Tr. VI at 1599-1602, 1606, 1609, 1611. While he affirmed his colorful writing mocking climate and environmental issues, he also admitted that he is not a climate scientist. That lack of expertise did not prevent him from opining on climate science and efforts to address climate change. He has no credibility. The Commission should believe only one statement he made: "It's irrelevant what I believe." Tr. VI at 1613.

The environmental advantages of solar photovoltaics for electric generation cannot be understated. Solar panels produce no emissions and use no fuel, so that there is minimal impact on the land and virtually no air or water pollution. The most recent report of the Intergovernmental Panel on Climate Change ("IPCC") makes clear that global warming is a serious threat to the planet, and the negative environmental consequences of fossil-fuel energy use are increasing. With cleaner, safer electric generation sources, there will be fewer premature deaths - and fewer instances of breathing problems caused by emissions from fossil fuel plants, a key concern in Ohio where fossil-fuel generation dominates. https://www.ucsusa.org/clean-energy/coal-and-other-fossil-fuels/coal-air-pollution#.XCzzT1xKiUk. OPAE Ex. 1 at 11.

Adding utility-scale renewable generation in Ohio would significantly reduce air pollution in the region. Sulfur dioxide emissions, nitrogen oxides emissions, and particulate matter emissions would be reduced annually. Sierra Club Ex. 1 at 31. These pollutants cause environmental degradation, including smog and acid rain, and contribute to cardiopulmonary health problems, including asthma, bronchitis, and heart attacks. Id. at 31-32.

In addition to protection from pollution, customers will be protected against climate change and environmental degradation when renewable projects begin to dominate the generation mix. Wind and utility-scale solar have come down in cost to the point where they can displace fossil fuel resources while having a positive long-term impact on rates that residential customers pay. Tr. V at 1232. The development of renewable generation is a cost-effective way of resolving the

problem of excess carbon and other emissions. There is not necessarily a higher cost to put renewable energy on the grid. Tr. V at 1241.

Ohio has few utility-scale solar projects, so construction of these projects will promote the flexibility and diversity of the current generation mix in Ohio.

Data from the EIA indicates that in 2017 "coal fueled 58% of Ohio's net electricity generation, natural gas fueled 24%, and nuclear energy accounted for another 15%." (https://www.eia.gov/state/?sid=OH#tabs-4.) This leaves a mere 3% that is generated by renewable sources. OPAE Ex. 1 at 9.

Climate concerns and the high price of coal and nuclear generation are causing electric utilities to move from fossil-fueled generation. While the use of coal or natural gas power plants will not likely be eliminated in the near future, the long-term trend is to minimize or eliminate the use of fossil fuels and to increase reliance on renewable sources. Ohio is behind other states in the development of solar resources. The renewable AEP Ohio projects will help establish and grow a new Ohio industry. Id. at 11.

The evidence of record shows that residential and small commercial customers are at a disadvantage in terms of the accessibility of solar systems. First, 43% of all residential buildings are not physically suitable for solar panels according to the National Renewable Energy Laboratory.

(https://www.nrel.gov/docs/fy18osti/70901.pdf at 5.) Only 51% of housing occupied by low- and moderate-income families is suitable. Many families with incomes under 80% of the Federal Poverty Line live in rental housing, which is a

major barrier to the deployment of solar panels for these consumers. OPAE Ex 1 at 10.

Utility-scale solar is the least expensive solar option. Utility-scale solar makes solar energy available to customers who cannot put panels on their roofs for either physical or economic reasons. Utility-scale solar also helps keep customers connected to the distribution system because it represents the least-cost option for customers to purchase renewable generation. Id.

Many customers who want renewable energy may not have the appropriate credit ratings, experience, or access to capital to develop renewable energy sources on their own or to enter into long-term contracts to support renewable development. Many customers also do not have sufficient load to justify renewable energy on their own. Ohio will benefit from AEP Ohio developing renewable energy projects because the utility can take advantage of economies of scale, low-cost financing, and development expertise some customers cannot access. Sierra Club Ex. 1 at 33.

Utility-scale solar also overcomes the barriers small businesses face to securing renewable power. Major corporations are developing green power, but smaller businesses do not have the same ability. The proposed AEP Ohio projects make available competitively-priced solar electricity to all customers, ensuring equity among all classes. OPAE Ex. 1 at 10-11.

Absent Commission approval of the development of these AEP Ohio renewable projects, it is unlikely that in-state renewable energy projects of this scale will occur. NRDC Ex. 1 at 5. The role of a long-term contract signed with a

credit-worthy entity is critical to secure financing for solar projects and always has been necessary for renewable projects. By committing to the long-term REPAs, AEP Ohio, a financially-strong contract party, gives customers the ability to access solar power. Smaller developers of solar projects will be able to secure financing for their own renewable projects and begin construction and operation. A long-term contract such as a REPA can be the key to a project being built. NRDC Ex. 1 at 19.

IV. Conclusion

Based on consideration of the AEP Ohio projects and the law, as well as electric utility industry trends and forecasts, the Commission should find that there is a need that justifies ratepayer investment to support the AEP Ohio projects.

The Commission is not constrained by any statutory definition of the word "need" in its determination whether a resource is needed, because that definition does not exist in statute. The Commission is not constrained by PJM's capacity market reserve margins in its determination whether need exists for new resources in Ohio. If the PJM capacity market construct does not show a need for new renewable resources, this is a flaw in PJM's capacity market, not a basis to find there is no need for additional renewable resources in Ohio.

Nor is the Commission constrained by Ohio's competitive retail market construct in its determination of need for new renewable resources. The Commission is fully within the law to find a need, especially in the case here where CRES providers cannot and will not provide the renewable resources that are desperately needed. The AEP Ohio projects meet the need for utility-scale

solar that is far outside the reach of any CRES to provide. The efforts of CRES to portray their small, individualized installations and short-term offers as sufficient to meet the need for renewable resources in Ohio must be rejected.

Environmental issues alone demonstrate a need for additional renewable resources. Wind and utility-scale solar have come down in cost to the point where they can displace fossil fuel resources without having a significant impact on bills that residential customers pay. Tr. V at 1232. The development of renewable generation is a cost-effective way of resolving the problem of excess carbon emissions. Now that wind and utility-scale solar are cost-competitive with other generation, it is time to expand the use of these renewable technologies to reduce the amount of greenhouse gas emissions. Renewable energy is the future, and Ohio customers should not be left behind.

There is a strong desire on the part of AEP Ohio customers for in-state renewable power. In-state resources provide local economic development to the communities where they are located as well as the surrounding region and Ohio as a whole. The projects are smart investments that will help give certainty to renewable energy developers that Ohio is moving into the 21st century. The projects will enable Ohio to take advantage of the cleanest, cheapest, and most sustainable energy investments ever proposed in Ohio.

Respectfully submitted,

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Summary: Reply Brief electronically filed by Colleen L Mooney on behalf of Ohio Partners for Affordable Energy