

**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 of Ohio)	
Power Company for Approval to Enter into)	
Renewable Energy Purchase Agreements)	Case No. 18-1392-EL-RDR
for Inclusion in the Renewable Generation)	
Rider.)	
)	
In the Matter of the Application of Ohio)	
Power Company for Approval to Amend)	Case No. 18-1393-EL-ATA
its Tariffs.)	

**DIRECT TESTIMONY OF MATTHEW WHITE ON BEHALF OF INTERSTATE GAS
SUPPLY, INC. AND IGS SOLAR, LLC**

1 **I. INTRODUCTION AND PURPOSE OF TESTIMONY**

2 **Q. Please introduce yourself.**

3 A. My name is Matthew White. I am employed by Interstate Gas Supply, Inc. ("IGS
4 Energy") as General Counsel. My business address is 6100 Emerald Parkway,
5 Dublin, Ohio 43016.

6 **Q. Please describe your educational background and work history.**

7 A. I started my career in energy in 2007 working at the law firm of Chester, Wilcox &
8 Saxbe as an energy and utilities lawyer. At Chester Wilcox I participated in
9 numerous regulatory proceedings relating to utility matters, including natural gas
10 and electric rate cases and electric power siting cases. During that time I was
11 closely involved in cases at the Commission implementing Ohio Senate Bill
12 221("SB 221") which overhauled Ohio's electric regulation and implemented
13 Ohio's renewable energy and energy efficiency standards. I began working at IGS
14 in 2011 in IGS' rotation program where I spent 16 months working in various
15 departments learning IGS' entire business including the electric and gas supply
16 and risk departments. In 2012 I began as an attorney in IGS' regulatory affairs
17 department. I am now General Counsel of IGS Energy and its affiliated companies.
18 I oversee all of IGS' legal and regulatory activities throughout the country. My team
19 is responsible for supporting the legal, regulatory, compliance and legislative
20 needs of all of IGS' businesses. As part of my role I work closely with IGS Solar
21 to support the legal needs of that business. Prior to working in the energy industry
22 I earned J.D. and M.B.A. degrees from the College of William & Mary and a B.A.
23 from Ohio University.

24 **Q. Have you submitted testimony at any regulatory bodies before?**

25 A. Yes. I have submitted written testimony in front of numerous state regulatory
26 bodies including the Public Utilities Commission of Ohio, the Public Utilities
27 Commission of Pennsylvania, the Maryland Public Service Commission, the Illinois
28 Commerce Commission, the Kentucky Public Service Commission, and the
29 Michigan Public Service Commission. I have also testified in front of the state
30 legislatures of Ohio, Michigan and Pennsylvania.

31 **Q. On whose behalf are you submitting testimony?**

32 A. I am submitting testimony on behalf of IGS Energy and IGS Solar (collectively
33 referred to as "IGS").

34 **Q. Can you please describe IGS Energy's business?**

35 A. IGS Energy has been in business for approximately 30 years first as a retail
36 supplier of natural gas, and subsequently, retail electricity supplier. Over the years
37 IGS Energy and its affiliates have expanded their operations to offer a diverse
38 range of products and services to customers including solar, combined heat and
39 power, compressed natural gas refueling, home warranty, energy efficiency and
40 smart appliances, to name a few. IGS is headquartered in Dublin Ohio and
41 employs over 800 individuals nationally, with nearly 700 located in Ohio. IGS
42 Energy serves over 1 million residential, commercial and industrial customers in
43 13 restructured states and over 30 utility jurisdictions.

44 **Q. Can you please describe IGS Solar's business?**

45 A. IGS Solar is an affiliated company of IGS Energy. IGS Solar has been existence
46 for approximately 4 years. IGS owns and operates solar assets in over 20 states

47 throughout the country. IGS Solar's portfolio consists of primarily residential and
48 commercial customer-sited solar projects. A large majority of IGS Solar assets are
49 in restructured electric generation states. IGS continues to aggressively expand
50 its solar development throughout the country.

51 **Q. Can you please give an overview of AEP's Application in this proceeding?**

52 A. Yes. AEP has requested that the Commission determine that there is a "need" to
53 contract for the construction of additional solar and wind resources. AEP proposes
54 to enter into a fixed-rate purchase power agreement with such resources, resell
55 the power into the wholesale market, and recover any revenue deficit through a
56 non-bypassable charge. AEP's request is based upon a dubious survey that it
57 alleges demonstrates that AEP customers have a desire for the construction of
58 additional Ohio-based solar and wind resources. Despite the fact that AEP has
59 not calculated the amount of additional resources that customers allegedly desire,
60 AEP alleges the Commission should determine that there is a need to construct
61 900 MWs of renewable generation (400 MWs of solar and 500 MWs of wind).¹

62 **Q. What is the purpose of your testimony?**

63 A. In my testimony I provide an overview of the statutory construct created upon the
64 enactment of Ohio SB 221 and the changes to Ohio's renewable portfolio
65 standard ("RPS") in the ensuing decade since SB 221's enactment. I explain that
66 it is contrary to the edicts set-forth in S.B. 221, and ensuing statutory changes, to
67 allow AEP to contract for the construction of 400 MW of solar and to recover
68 those costs from all customers. I explain that if it was Ohio's legislative directive

¹ Ex. MW-1 (containing AEP's Response to Direct-INT-1-008).

to increase solar development beyond the current RPS requirements in Ohio, then there are much more effective means to incent solar development than AEP's proposal. Nonetheless any directive to allow for cost recovery of solar, as proposed by AEP, must come from the Ohio legislature, but cannot be done under the current statutory framework in Ohio. Further I explain that, from a policy prospective, it is unwise to allow AEP to develop solar in Ohio at ratepayer's expense, and it will actually stifle the development of solar in Ohio over the long run. Finally, I discuss how other states that have competitive electric markets have effectively incentivized the development of solar through competitively neutral means rather than subsidizing a select company to build solar as proposed by AEP.

Q. Has IGS offered any other witnesses in this proceeding?

A. Yes. My testimony provides an overview of Ohio's renewable energy regulatory landscape and policy rational for rejecting AEP's Application. IGS has also submitted testimony of several other witnesses in this proceeding including:

- Chris Rengstorf—Witness Rengstorf discusses the status of the solar market in Ohio and provides his industry perspective regarding the negative impact that AEP's proposal would have on future market-based development of distributed energy resources.
- Katie Rever—Witness Rever identifies alternative policies that have been deployed throughout other restructured states to develop renewable resources, as well the additional benefits associated with behind the meter generation. Moreover, she identifies enhancements to net metering policy

and rate design that would reduce barriers to the deployment of distributed energy resources.

- Paul Leanza—Witness Leanza identifies critical flaws in AEP’s long-term forecast. Based upon more realistic market conditions, Mr. Leanza identifies that AEP’s proposal as described by witness Torpey is not in fact economical and is likely to cost customers a great deal of money.

- Joseph Haugen—Witness Haugen identifies that AEP’s proposal is clearly not needed to meet a shortage of capacity or energy due to the vast surplus of generation that currently exists in PJM Interconnection, LLC for the foreseeable future. Moreover, Mr. Haugen provides insight into current proposals before the Federal Energy Regulatory Commission that would modify rules related to the capacity market. Based upon those proposals, Mr. Haugen identifies that the resources proposed by AEP would not likely clear in the capacity market or the proposals would result in an over-procurement of capacity; therefore, AEP’s projection of the economics of its proposal are not reliable.

II. SENATE BILL 221

Q. Can you please provide a brief background of SB 221 as it relates to establishing the renewable energy policy of the state?

A. Yes. SB 221 was a bill enacted by the Ohio Legislature in 2008 that altered Ohio’s electric market several ways. While there were numerous aspects of the bill, the relevant portions of SB 221 for my testimony include:

- 114 • SB 221 established an RPS for the state of Ohio. The RPS required that
115 load serving entities in Ohio procure a certain percentage of electricity from
116 renewable energy resources. The RPS requirement began in 2009 and the
117 percentage requirement was designed to escalate each year through 2026.
- 118 • The bill also contained a solar specific RPS (“SRPS”) which required load
119 serving entities to procure a percentage of their load from solar resources,
120 escalating each year through 2026.
- 121 • SB 221 required that at least half of the RPS and SRPS requirements be
122 procured through in-state resources.
- 123 • SB 221 made the electric utility responsible for meeting the RPS and SRPS
124 for standard service offer (“SSO”) customers. Competitive retail electric
125 suppliers (“CRESS”) were made responsible for meeting the RPS and
126 SRPS requirements for their (“shopping”) customers;
- 127 • SB 221 prohibited a utility from meeting its RPS or SRPS requirements for
128 SSO customer by seeking non-bypassable cost recovery from all
129 customers.

130 **Q. Was the RPS and SRPS established by SB 221 modified in anyway?**

131 A. Yes. In 2014 the Ohio Legislature enacted SB 310. SB 310, among other things,
132 placed a two-year freeze on the escalation of Ohio’s RPS and SRPS requirements.
133 The bill also eliminated the in-state requirement for the RPS and SRPS such that
134 after SB 310 was enacted load serving entities no longer were required to procure
135 half of their renewable and solar electricity requirements from Ohio resources.

136 **Q. What has happened since the enactment of SB 310?**

137 A. In 2016 the two-year freeze of the RPS and SRPS expired. Since 2016 the RPS
138 and SRPS requirements have escalated as contemplated in SB 221. Since 2016
139 there have been several bills proposed in the Ohio legislature that would freeze,
140 eliminate, or weaken the RPS and SRPS requirements; however, those bills have
141 failed to receive the necessary support in the Ohio legislature or have been vetoed
142 by Ohio's Governor.

143 **Q. Is there currently an in-state RPS or SRPS requirement?**

144 A. No. Under the current RPS law, which was most recently amended by SB 310,
145 there is no requirement to procure renewable energy, or solar energy from in-state
146 resources.

147 **Q. Is it in the purview of the state legislature to set the policy with respect to**
148 **renewable energy within the State of Ohio?**

149 A. Yes. The Ohio legislature has established a policy that determines the amount of
150 renewable and solar energy that is required to meet customer's electric needs.
151 Certainly, some may not agree with the policy -some want to increase the RPS
152 and some want to eliminate it all together; however, we live in a democracy, and
153 the State of Ohio has settled on a statutory construct to incent renewable energy
154 generation. The State, through the RPS and SRPS, has set percentage
155 requirements that specifies the exact amount of renewable energy generation and
156 solar generation that the state needs for each year through 2026.

157 **Q. Is Ohio having issues with meeting the RPS and SRPS requirements set forth**
158 **in statute?**

159 A. Absolutely not. To my knowledge, since the enactment of SB 310 load serving
160 entities have had little difficulty meeting the RPS or SRPS requirements. Further,
161 Ohio law allows load serving entities to apply at the PUCO for relief of the RPS
162 and SRPS requirements if compliance with the statute exceeds 3% of the total
163 electric costs. To my knowledge, since the enactment of SB 310, no load serving
164 entity has sought to reduce its RPS or SRPS costs under the cost cap portion of
165 the law. Furthermore, the current market price of renewable energy credits
166 (“RECs”) and solar renewable energy credits (“SRECs”) allows load serving entities
167 to meet their RPS and SRPS well below the 3% statutory cost cap. There is no
168 reason to believe that this will change in the foreseeable future.

169 **Q. Is an RPS the most effective means to incent the development of renewable**
170 **energy in a competitive electric state such as Ohio?**

171 A. Yes. Ohio has restructured its electric generation markets, meaning electric utilities
172 are no longer vertically integrated. With a very limited exception, electric utilities in
173 Ohio no longer own electric generation². Further, the electric utilities are no longer
174 the load serving entity for the majority of load in Ohio. An RPS is a market-based
175 solution that creates a market for RECs and SRECs that allow the multitude of load
176 serving entities to meet the RPS requirements most efficiently. Evidence that the
177 RPS is working is that cost of RPS compliance has come down significantly since
178 implementation of RPS requirements, while the percentage of renewable energy
179 being built and supplied in Ohio continues to rise.

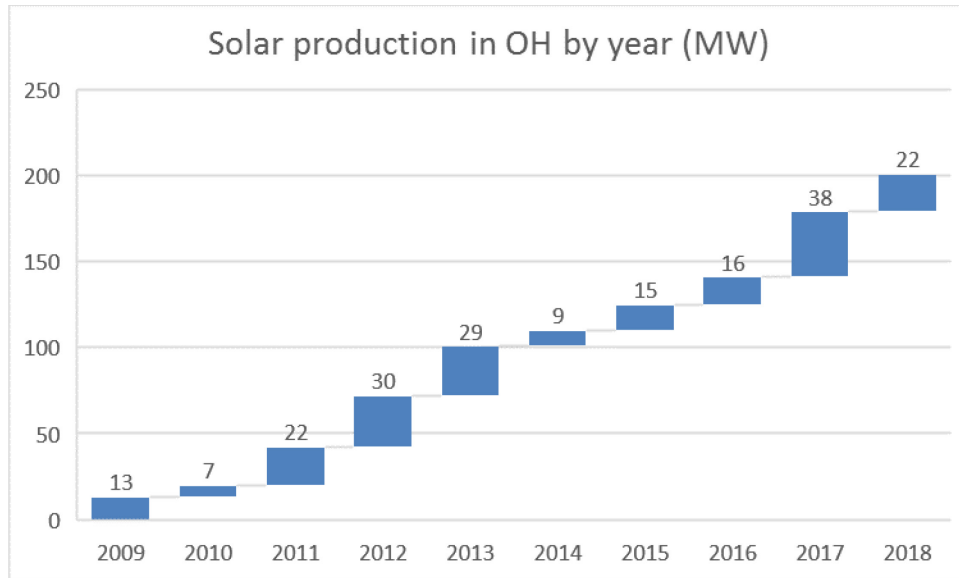
² All investor owned electric utilities in Ohio have divested their electric generation portfolios, except for the limited exception that three utilities own a percentage of two coal generating facilities managed by the Ohio Valley Electric Cooperative (“OVEC”).

180 **Q. How do you respond to claims that not enough solar energy is being**
181 **developed in Ohio?**

182 A. My response to that claim is two fold: First, Ohio *is* building solar generation. The
183 amount of solar being developed in Ohio has increased substantially over the
184 years. Companies like IGS continue to develop solar in Ohio and have plans to
185 increase solar development in Ohio in the future. Second, the Ohio legislature has
186 already established a policy for renewable generation. That policy has explicitly
187 declined to provide a specific incentive to build Ohio based solar or wind beyond
188 what is already being built. If it is the will of the citizens of the State of Ohio to build
189 more solar or wind, the State legislature could simply increase the SRPS
190 requirement or add an in-state procurement requirement to its SRPS. The fact that
191 the Ohio legislature has eliminated the in-state SRPS requirements indicates the
192 legislature does not believe there is a need to build additional resources beyond
193 what the market is already building with the current available state and federal
194 incentives

195 **Q. Can you please give more detail regarding the increase development of solar**
196 **energy in Ohio?**

197 A. Yes. In Table 1 below, it shows that over 200 MWs of solar resources have been
198 constructed in Ohio since the enactment of SB 221.



This table shows that solar construction has steadily increased since 2009. There are also several hundred additional MW of solar in the process of approval at the Ohio Power Siting Board. Moreover, over 605 megawatts of solar have been certified as renewable energy facilities that are deliverable into Ohio.

Q. Can you please expound further on why the Ohio legislature has already determined there is not an additional need to build in-state solar and wind resources?

A. Yes. Previously Ohio had an in-state solar and wind requirement, and with the enactment of SB 310, the State of Ohio repealed the in-state requirement. With this repeal, the state legislature has made its intent clear – that it does not wish to *require* additional construction of renewable energy generation in Ohio, beyond what is already being developed in the market. If the state of Ohio felt that there was need for additional incentives for in-state renewable energy generation, the State could simply re-instate the in-state requirement which would then provide additional incentive to build solar in Ohio.

215 **Q. Do other states have in-state solar requirements?**

216 A. Yes. A great example is Pennsylvania. Last year the Pennsylvania legislature
217 enacted an in-state specific SRPS meaning that a specific percentage of the
218 Pennsylvania SRPS requirements now must be met by Pennsylvania solar
219 resources. With the enactment of that law, it was clear that the State of
220 Pennsylvania desired to incent development of solar resources in Pennsylvania.
221 And the law has worked. Over the past year the value of Pennsylvania in-state
222 SRECs have risen, attracting more solar development in Pennsylvania. Another
223 example is New Jersey. New Jersey has a very aggressive in-state solar RPS
224 requirement. And the policy in New Jersey is working. The value of SRECs are
225 much higher in New Jersey and quite a bit of solar is being developed in New
226 Jersey right now via competitive market forces. Simply put, if a state wishes to
227 increase solar deployment, the easiest and most effective means to do so its
228 increase the RPS percentages or implement an in-state solar requirement.

229 **Q. Are you taking a position on whether Ohio should enact an in-state solar**
230 **requirement?**

231 A. No. The purpose of my testimony is not to opine on whether the Ohio legislature
232 should adopt an in-state solar requirement. My point merely is that if Ohio
233 determined that it wanted, or needed, to incent additional solar energy
234 development in Ohio, it can easily do so by enacting an in-state solar requirement.
235 And in-fact the Ohio legislature has already considered this issue. Previously Ohio
236 had an in-state solar requirement, but the legislature repealed that requirement
237 with the enactment of SB 310. While there may be legitimate policy reasons to

want to incent solar build specifically in the state (like New Jersey and Pennsylvania have done) Ohio has chosen not to do so.

Q. Are there any federal restrictions on in-state renewable energy requirements?

A. No. Federal courts have held that states have the right to implement in-state renewable energy requirements if they so choose. Therefore, there is no reason under federal law why Ohio could not enact an in-state solar requirement if it wanted to.

Q. Should the Commission circumvent the intent of the legislature by approving AEP to build the solar energy projects specified in its application?

A. No. The Ohio legislature has already established the percentage of renewable and solar energy that it wishes to be supplied in the State of Ohio and those obligations are being met with the State and Federal incentives currently available. The State legislature has also already declined to provide additional incentives for in-state solar development with the repeal of the in-state solar requirement. AEP should not now be allowed to circumvent the intent of the Ohio legislature by flooding the market with 400 MW of solar paid for by Ohio ratepayers.

III. The Need Standard

Q. In your opinion has AEP demonstrated a “need” to develop 400 MW of solar generation in Ohio?

A. No. In my spare time I volunteer to teach for Junior Achievement which is an organization that teaches personal finance and economics to grade school children. One of the core concepts we teach in those classes is that there is a big

261 difference between a “want” and a “need.” A want is something you may desire to
262 have, but it is not actually needed. While AEP may want to have all customers
263 cover its costs to build solar projects, by any standard, AEP has not established a
264 need to require all customers to pay for 400 MW of solar generation.

265 **Q. Is AEP’s proposed solar projects needed to meet the SRPS requirements**
266 **established by the legislator?**

267 A. Clearly no. As I noted already, the Ohio legislator has done away with the in-state
268 solar requirement so there is no longer a need to build solar to meet those
269 requirements. Further, currently the Ohio RPS and SRPS requirements are being
270 met by the entities with those obligations at costs well below the RPS cost cap
271 established by the Ohio legislature.

272 **Q. Is there are need to build solar in Ohio for reliability purposes?**

273 A. No. Outside of needing solar energy to meet a state statutory requirement, the only
274 other reason AEP would “need” to build solar is for reliability reasons. Again,
275 clearly AEP does not need to construct 400 MWs of solar to meet the long-term
276 generation needs of customers. IGS Witness Haugen will expound further on this
277 topic; however. as a competitive generation state the reliability needs for electric
278 generation have been turned over to competitive markets and there never has
279 been more electric generation capacity available to Ohio customers.

280 **Q. Do customers allegedly wanting AEP to build solar generation equate to**
281 **having a need to build solar generation?**

282 A. No. Throughout its application AEP continually seems to conflate the concepts of
283 want and need to support its proposals. One of the primary tools AEP uses to

support its need claim is a customer survey supported by AEP Witness Horner that purportedly shows that customers support more renewable development in Ohio. Even taking everything in the survey at face value (notwithstanding the dubious methodology by which the survey was conducted) submitting a customer survey does not established the need required to support AEP's Application.

Q. If customers want renewable energy can they get renewable energy in Ohio?

A. Yes. There are customers that do want their electricity to be supplied by renewable sources. However, if customers want renewable electricity they have a means to receive solar power and other renewables under the current market construct. First, since Ohio has a competitive retail electric market, AEP customers could sign-up for electricity being served by a CRES provider from renewable electric resources. In-fact IGS makes available a competitive renewable electric product that is sourced from all-Ohio electric generation resources. Furthermore, Ohio customers are also able to install solar on their premises and directly receive solar from that source. There are companies in Ohio, including IGS, that are willing to build, own and operate solar at the customer's premise at no up-front cost to the customer so that a customer can meet all, or a portion of, its electric needs through solar power. More and more customers in Ohio are choosing to receive solar energy and more and more companies are willing to provide solar services to customers. It simply is inaccurate to say customers cannot receive solar electricity or other renewable energy in Ohio.

Q. If AEP's Application is approved, will customers be receiving renewable energy?

307 A. No. Under AEP's proposal, AEP would *not* be retiring SRECs or RECs on
308 customer's behalf but rather would sell the RECs generated by the generation
309 facilities into the wholesale REC markets. By law, a customer is not being supplied
310 by renewable generation unless the REC or SREC from the facility is retired by the
311 customer, or an entity acting on the customer's behalf. If the RECs are sold to
312 another entity the renewable attribute of the electricity produced from the facility is
313 transferred to the buyer of the REC. Therefore, if AEP's application were approved
314 AEP's customers would not actually be supplied electricity by the renewable
315 generation facilities, defeating the purpose that AEP application proports to
316 achieve.

317 **Q. Do all Ohio customers want electricity from renewable resources?**

318 A. While some customers may want renewable electricity, not all Ohio customers
319 want to receive that electricity if it requires paying an increased cost. The customer
320 survey replied upon by AEP even contains many comments made by customers
321 indicating that they do not wish to pay more so that AEP can build renewable
322 facilities. I have attached those comments to my testimony. Although not all
323 customers provided an individual comment, there are over 400 comments in
324 opposition to AEP's proposal. Furthermore, the citizens of Ohio have elected a
325 legislature that has declined to implement a policy that would require that solar be
326 built in Ohio. While our democracy is not perfect, in my view the state legislature
327 certainly provides a better reflection of the will of the people than an unscientific
328 customer survey conducted by AEP. Absent the renewable mandates established

by the General Assembly, customers have been granted the choice to select the competitive electric products that they desire and need.

IV. POLICY CONSIDERATIONS

Q. If Ohio wished to incent more solar, is AEP's proposal the best means to do so?

A. Absolutely not. Notwithstanding the legality of AEP's proposal, from a policy perspective, if there are far better means to incent solar development in Ohio rather than approving the application proposed by AEP. As I have already noted, Ohio is a competitive electric generation state; however, AEP's proposal is a throwback to regulated vertically integrated monopoly construct which the State of Ohio turned away from years ago. There are ways to incent solar that use market concepts that are a better fit for competitive generation states such as Ohio. As I will discuss further in my testimony, other competitive generation states have adopted these policies which have worked to develop solar. Some of these policies are within the purview of the Commission and some would require a legislative change. Regardless, the Commission should not now try to fit a square peg into a round whole by forcing 400 MW of utility owned solar on Ohio customers regardless of whether there is any actual need to do so.

Q. What is the best way for Ohio to incent additional build solar?

A. By far the best means to incent solar development, particularly in states that are competitive electric markets, is to increase the incentives available for building solar electricity on a competitively neutral basis. Evidence from other states makes clear that if states make incentives available on a competitively neutral basis, solar

352 projects will be built in those states. Massachusetts, New Jersey and New York
353 are competitive generation states that have more lucrative incentives to build solar,
354 and significantly more solar is being built in New Jersey, New York and
355 Massachusetts than in Ohio. Pennsylvania just adopted an in-state solar
356 requirement for is SRPS and more solar is beginning to be built in Pennsylvania.
357 Maryland has a more aggressive SRPS than Ohio and more solar is being built in
358 Maryland.³ Illinois just enacted legislation to provide additional competitively
359 neutral state incentives to build solar. I expect once those incentives become
360 available, much more solar will be deployed in Illinois as well.

361 **Q. Does the solar deployment in the states you mention have anything to do**
362 **with utility deployment of solar assets?**

363 A. No. The driver of solar development in the states I have mentioned is because
364 private developers building solar- not utilities. There are two primary reasons why
365 private developers are deploying projects in states like Maryland, Massachusetts,
366 New York, New Jersey, and Pennsylvania, more so than in Ohio. First, all of the
367 states I mention have higher wholesale and retail electric prices than currently in
368 Ohio; therefore, the economics of installing solar in the states I have mentioned is
369 better because alternative wholesale or retail prices are higher in those states.
370 Because the cost of wholesale and retail power from the grid is relatively low in
371 Ohio, solar tends to be comparatively less competitive in Ohio versus grid and
372 wholesale alternatives. Second, as I mentioned above, the states that have the

³ According to the solar energy industry association the following number of MW has been installed per state; New York: 1569.75 MW; Pennsylvania: 399.56 MW; Massachusetts: 2319.23 MW; Maryland: 1006.95 MW; New Jersey: 2646.93 MW. See <https://www.seia.org/states-map>

most solar deployment have strong solar incentives that are available to everyone that wishes to build solar. All the states I mentioned above have a much more aggressive SRPS, have in-state solar requirements, or otherwise provide incentives to build solar in-state beyond what is available in Ohio. However, almost none of the solar being developed in these states is because of utility built solar recovered by all ratepayers.

Q. Can you give examples of competitively neutral incentives that can drive solar deployment in state?

A. Yes. New Jersey has a very aggressive in-state solar requirement. The state is targeting 5% plus of in-state solar. Because of the aggressive in-state solar requirement the SREC value in New Jersey is much higher. These SRECs are available to all developers that wish to install solar. And the policy is working. New Jersey has a smaller population than Ohio but has over 10 times more solar deployed. Massachusetts also offers competitive neutral incentives to install solar. Massachusetts places a floor on in-state SREC prices ensuring developers get a minimum SREC price. Massachusetts has deployed over 10 times as much solar than in Ohio in a smaller populous state. New York also has a declining block feed-in tariff that allows all developers that wish to install solar incentives based on the location the solar is being installed. Again, New York has significantly more solar being installed than in Ohio. All of these states are examples of effective means to promote solar, where incentives are available to everyone, and not just the utility.

Q. Would allowing AEP to build solar in Ohio actually harm the market for private development of renewable resources in Ohio?

A. Of course it would. As I mentioned earlier, Ohio actually does make incentives available to developers of solar in Ohio. Ohio has adopted an RPS and SRPS requirement. Therefore, solar facilities in Ohio are generating SRECs that can be sold to load serving entities in Ohio to meet the RPS/SRPS requirements. While Ohio does not have an in-state requirement, under Ohio law, all the electricity used to meet the RPS/SRPS must be *deliverable* into the state of Ohio. Therefore, load serving entities in Ohio cannot buy RECs and SRECs in states like California to meet their compliance requirement. They must buy RECs/SRECs generated within the PJM and MISO footprint. Because many states in PJM and MISO have an in-state solar requirement, all the SRECs generated in those states are being retired to meet the SRPS in those states, not in Ohio. Therefore, the SREC/REC price in Ohio is highly contingent on the amount of renewable energy being built in Ohio. If AEP is allowed to build 400 MW of solar in Ohio, irrespective of cost, and irrespective of whether Ohio needs the solar to meet its SRPS requirement, the SREC market in Ohio will tank. The SREC value in Ohio, while not as lucrative as in some states, is a legitimate economic value that provides incentive to private developers to build solar in Ohio. Flooding the Ohio market with SRECs, as AEP is proposing to do, will almost certainly lower the SREC value for Ohio developers, lowering the incentive for those developers to build solar in Ohio. Because AEP's assets would be generating SRECs for a long period of time, the negative effects of AEPs proposal would have on the solar market would be felt for decades. Ironically, by approving AEP to build more solar, there would be less solar built by all other parties that are willing to do so at their own expense.

419 **Q. Is there any policy changes the Commission can make if it wishes to facilitate**
420 **the development of solar and wind in Ohio?**

421 A. Yes. While many of the state incentives I discussed above must be adopted by the
422 state legislature, there are some policies changes that the Commission can make
423 that will go a long way to removing the barriers to solar in Ohio. The number one
424 thing the Commission can do that will increase solar deployment in Ohio is to fix
425 net metering. Currently the net metering rules in Ohio only allow solar generating
426 customers to net their generation against their production on a monthly basis. As
427 explained by IGS witness Rever, simply allowing customers to net production
428 against consumption on an annual basis will go a long way to providing solar
429 customers the value of electricity for delivering electricity back onto the grid.
430 Moreover, *nearly every state in the PJM footprint allows for annual netting of net*
431 *metering customers* and certainly any state that has any substantive level solar
432 deployment allows for annual netting. Ohio is an outlier in this regard. IGS has
433 many potential customers that would likely deploy solar at their premises if annual
434 netting were allowed, but as explained by Witness Rever the monthly netting rules
435 have made it less economical for these customers to receive solar.

436 **Q. Besides annual netting for net metered customers, is there any other policies**
437 **the Commission can enact to promote solar?**

438 A. Yes. As explained by IGS witness Rever, another policy change the Commission
439 could make is to adjust commercial rate design to allow customers to realize a
440 reduction in the demand component of their distribution charge so that these
441 customers can get the benefit of the demand they are taking off the grid. Also,

allowing residential customers the ability to receive a reduced capacity tag when the solar assets reduce peak demand would help to develop the residential solar market in Ohio. Also, avoiding fixed charges that don't let customers realize the value of taking production off the grid, would help remove barriers and solar development. In short, there are several policy changes the Commission could adopt to promote solar that are much less costly to customers, and don't involve giving AEP as massive subsidy to develop solar.

Q. How do you respond to the claims that AEP's proposal will be an economic benefit to customers?

A. Many other witnesses in this proceeding point out the dubious assumptions and economic projections AEP has made in its application including Witness Leanza and Haugen of IGS. I will merely point out that if building 900MWs of utility scale solar and wind in Ohio, as AEP proposes, is a wise economic decision for customers, the project would have already been built and financed by private companies, at their own risk. There are tens of thousands of MWs of solar and wind being built throughout the country without ratepayer guarantees. In-fact solar development throughout the country, and in Ohio, has never been so robust. If AEP felt it was a wise economic decision to build these projects it could do so, putting its own shareholders money at risk. The fact that AEP is unwilling to put its own shareholder dollars at risk is telling of what AEP really thinks about the economics of the projects it is proposing. To be clear, I do believe that it can make sense to build renewable generation in Ohio depending on the customer's wants and needs. IGS is already building solar at its own risk in Ohio along with several

other solar companies. However, it does not make sense for the Commission to arbitrarily flood the Ohio market with 900 MWs of renewable generation and forcing all AEP customers to take on the risk of these projects.

V. CONCLUSION

Q. Will you please summarize your testimony?

A. Yes. If we have learned anything from history in Ohio's Commission proceedings, it is that adopting utility schemes to subsidize generation assets is not a wise step forward for Ohio customers and Ohio electric markets. The Application proposed by AEP is not an appropriate or lawful way to promote the growth of solar electricity in Ohio's competitive market construct. Approving AEP's proposal would not only be contrary to Ohio's legislative directive, it is a bad policy decision that would stifle the development of a robust sustainable competitive market for solar in Ohio. If Ohio wishes to develop solar, it could, and should, adopt policies that make competitively neutral incentives available to everyone that wishes to build renewable generation. There are plenty of examples where competitively neutral incentives for solar have worked to incent the development of solar in other states. Further, the Commission could, and should, adopt policies that would remove the existing barriers for everyone to build solar. These policies changes would go much further to encourage the development of renewable generation than what AEP is proposing. Approval of AEP's application would just hand the solar development market over to a select few, at the expense of all customers and other entities that wish to build solar in Ohio. Therefore, I do not recommend its approval.

Q. Does that conclude your testimony?

488 A. Yes. But I reserve the right to supplement my testimony.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing *Direct Testimony of Matthew White on behalf of Interstate Gas Supply, Inc.'s and IGS Solar, LLC*, was served this January 2, 2019 via electronic mail upon the following:

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/s/ Joseph Olikier

Joseph Olikier

**OHIO POWER COMPANY'S RESPONSE TO
DIRECT ENERGY, LP
DISCOVERY REQUEST
PUCO CASE NO. 18-501-EL-FOR, 18-1392-EL-RDR, AND 18-1393-EL-ATA
FIRST SET**

INTERROGATORY

Direct-INT-01-008 To the extent AEP Ohio contends there is an undersupply of renewable energy available to Ohio consumers, quantify the level of undersupply.

RESPONSE

As indicated in the survey presented in our filing, customers desire that the company increase its level of renewable resources and it would appear that the Company's supply of renewable energy is undersupplied to meet its customer's needs. The Company has not calculated the level of undersupply.

Prepared by: William A. Allen

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in

Case No(s). 18-0501-EL-FOR, 18-1392-EL-RDR, 18-1393-EL-ATA

Summary: Testimony of Matthew White electronically filed by Mr. Joseph E. Olier on behalf of IGS Energy and IGS Solar, LLC