

COMMONWEALTH OF PENNSYLVANIA



OFFICE OF CONSUMER ADVOCATE

555 Walnut Street, 5th Floor, Forum Place
Harrisburg, Pennsylvania 17101-1923
(717) 783-5048
800-684-6560

 @pa_oqa

 /pennoca

FAX (717) 783-7152
consumer@paoca.org

September 25, 2020

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

Re: Amended Application of Transource Pennsylvania, LLC for approval of the Siting and Construction of the 230 kV Transmission Line Associated with the Independence Energy Connection - East and West Projects in portions of York and Franklin Counties, Pennsylvania.
Docket Nos. A-2017-2640195 and A-2017-2640200

Amended Petition of Transource Pennsylvania, LLC for a finding that a building to shelter control equipment at the Rice Substation in Franklin County, Pennsylvania is reasonably necessary for the convenience or welfare of the public.
Docket No. P-2018-3001878

Amended Petition of Transource Pennsylvania, LLC for a finding that a building to shelter control equipment at the Furnace Run Substation in York County, Pennsylvania is reasonably necessary for the convenience or welfare of the public.
Docket No. P-2018-3001883

Amended Application of Transource Pennsylvania, LLC for approval to acquire a certain portion of the lands of various landowners in York and Franklin Counties, Pennsylvania for the siting and construction of the 230 kV Transmission Line associated with the Independence Energy Connection – East and West Projects as necessary or proper for the service, accommodation, convenience or safety of the public.
Docket No. A-2018-3001881, *et al.*

Dear Secretary Chiavetta:

Attached for electronic filing please find the Office of Consumer Advocate's Reply Brief in the above-referenced proceedings.

Rosemary Chiavetta, Secretary
September 25, 2020
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Copies have been served on the parties as indicated on the enclosed Certificate of Service.

Respectfully submitted,

/s/ Phillip D. Demanchick
Phillip D. Demanchick
Assistant Consumer Advocate
PA Attorney I.D. # 324761
E-Mail: PDemanchick@paoca.org

Enclosures:

cc: The Honorable Elizabeth Barnes (**email only**)
Office of Special Assistants (**email only**: ra-OSA@pa.gov)
Certificate of Service

*296732

CERTIFICATE OF SERVICE

Amended Application of Transource :
Pennsylvania, LLC for Approval of the :
Siting and Construction of the 230 kV : Docket Nos. A-2017-2640195
Transmission Line Associated with the : A-2017-2640200
Independence Energy Connection – East and :
West Projects in portions of York and :
Franklin Counties, Pennsylvania :

Amended Petition of Transource :
Pennsylvania, LLC for a finding that a :
building to shelter control equipment at the : Docket No. P-2018-3001878
Rice Substation in Franklin County, :
Pennsylvania is reasonably necessary for the :
convenience or welfare of the public :

Amended Petition of Transource, :
Pennsylvania, LLC for a finding that a :
building to shelter control equipment at the : Docket No. P-2018-3001883
Furnace Run Substation in York County, :
Pennsylvania is reasonably necessary for the :
convenience or welfare of the public :

Amended Application of Transource :
Pennsylvania, LLC for approval to acquire a :
certain portion of the lands of various :
landowners in York and Franklin Counties, :
Pennsylvania for the siting and construction : Docket Nos. A-2018-3001881
of the 230 kV Transmission Line associated : et al.
with the Independence Energy Connection – :
East and West Projects as necessary or :
proper for the service, accommodation, :
convenience or safety of the public :

I hereby certify that I have this day served a true copy of the following document, the Office of Consumer Advocate’s Reply Brief, upon parties of record in this proceeding in accordance with the requirements of 52 Pa. Code Section 1.54 (relating to service by a participant), in the manner and upon the persons listed below:

Dated this 25th day of September 2020.

SERVICE BY E-MAIL ONLY

Sharon E. Webb, Esquire
Office of Small Business Advocate
555 Walnut Street
1st Floor, Forum Place
Harrisburg, PA 17101-1923

Thomas J. Sniscak, Esquire
Whitney E. Snyder, Esquire
Hawke, McKeon & Sniscak, LLP
100 North Tenth Street
Harrisburg, PA 17101

Anthony D. Kanagy, Esquire
Lindsay Berkstresser, Esquire
David B. MacGregor, Esquire
Post & Schell, P.C.
17 North Second Street, 12th Floor
Harrisburg, PA 17101-1601

Teresa K. Harrold, Esquire
Tori L. Giesler, Esquire
FirstEnergy
2800 Pottsville Pike
P.O. Box 16001
Reading, PA 19612

Linus E. Fenicle, Esquire
Reager & Adler, P.C.
2331 Market Street
Camp Hill, PA 17011

Karen O. Moury, Esquire
Eckert, Seamans, Cherin & Mellott, LLC
213 Market Street, 8th Floor
Harrisburg, PA 17101

Jordan B. Yeager, Esquire
Mark L. Freed, Esquire
Joanna A. Waldron, Esquire
Curtain & Heefner, LLP
2005 South Easton Road, Suite 100
Doylestown, PA 18901

Kimberly A. Klock, Esquire
Michael J. Shafer, Esquire
PPL Electric Utilities Corporation
2 North Ninth Street
Allentown, PA 18101

Amanda Riggs Connor, Esquire
Antonio Smyth, Esquire
Hector Garcia, Esquire
American Electric Power Service
1 Riverside Plaza, 29th Floor
Columbus, OH 43215

Jack R. Garfinkle, Esquire
Jennedy S. Johnson, Esquire
PECO Energy Company
2301 Market Street
Philadelphia, PA 19103

J. Ross McGinnis, Esquire
41 West Main Street
Fawn Grove, PA 17321

Barron Shaw
Jana Shaw
445 Salt Lake Road
Fawn Grove, PA 17321

Scott T. Wyland, Esquire
G. Bryan Salzman, Esquire
Isaac P. Wakefield, Esquire
Salzman Hughes, P.C.
112 Market Street, 8th Floor
Harrisburg, PA 17101

SERVICE BY FIRST CLASS MAIL, POSTAGE PREPAID

(Please note we are only using e-service at this time due to the COVID-19 emergency. Hard copies can be provided later upon request when normal operations resume)

Bryon Jess Boyd
831 New Park Road
New Park, PA 17352

Fred Byers
1863 Coldsmith Road
Shippensburg, PA 17257

Aaron Kauffman
Melinda Kauffman
4220 Old Scotland Road
Chambersburg, PA 17202

Leonard Kauffman
Mary Kauffman
4297 Olde Scotland Road
Chambersburg, PA 17202

Lois White
1406 Walker Road
Chambersburg, PA 17202

Allan Stine
Heather Stine
867 Cider Press Road
Chambersburg, PA 17202

Danielle Bernecker
1827 Wood Duck Drive E
Chambersburg, PA 17202

James McGinnis, Jr.
290 Woolen Mill Road
New Park, PA 17352

Michael Cordell
4219 Altenwald Road
Waynesboro, PA 17268

Lantz Sourbier
Laura Sourvier
64 Edgewood Circle
Chambersburg, PA 17202

Ashley Hospelhorn
8010 Hidden Valley Lane
Waynesboro, PA 17268

Dolores Krick
Muddy Creek Meadows Riding Stable
699 Frosty Hill Road
Airville, PA 17302

Colt Martin
Kristyn Martin
8020 Hidden Valley Road
Waynesboro, PA 17268

Allen Rice
Lori Rice
1430 Henry Lane
Chambersburg, PA 17202

Willa Weller Kaal
67 Summer Breeze Lane
Chambersburg, PA 17202

Karen Benedict
Rodney Myers
5413 Manheim Road
Waynesboro, PA 17268

Derek Dettinger
24 Chanceford Road
Brogue, PA 17309

Hugh McPherson
2885 New Park Road
New Park, PA 17352

Darwyn Benedict
410 North Grant Street
Waynesboro, PA 17268

Jan Horst
Georgina Horst
826 New Franklin Road
Chambersburg, PA 17202

Ashley Hospelhorn
116 West Third Street
Waynesboro, PA 17268

/s/ Phillip D. Demanchick

Phillip D. Demanchick
Assistant Consumer Advocate
PA Attorney I.D. # 324761
E-Mail: PDemanchick@paoca.org

David T. Evrard
Assistant Consumer Advocate
PA Attorney I.D. # 33870
E-Mail: DEvrard@paoca.org

Darryl A. Lawrence
Senior Assistant Consumer Advocate
PA Attorney I.D. # 93682
E-Mail: DLawrence@paoca.org

Counsel for:
Office of Consumer Advocate
555 Walnut Street
5th Floor, Forum Place
Harrisburg, PA 17101-1923
Phone: (717) 783-5048
Fax: (717) 783-7152
Dated: September 25, 2020
*296733

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Amended Application of Transource Pennsylvania, :
LLC for approval of the Siting and Construction of :
the 230 kV Transmission Line Associated with the : Docket No. A-2017-2640195
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Amended Petition of Transource Pennsylvania, :
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construction of the 230 kV Transmission Line : Docket Nos. A-2018-3001881, *et al.*
associated with the Independence Energy Connection :
– East and West Projects as necessary or proper for :
the service, accommodation, convenience or safety of :
the public. :

REPLY BRIEF
OF THE
OFFICE OF CONSUMER ADVOCATE

Phillip D. Demanchick
David Evrard
Assistant Consumer Advocates

Darryl Lawrence
Senior Assistant Consumer Advocate

Office of Consumer Advocate
555 Walnut Street
5th Floor, Forum Place
Harrisburg, PA 17101-1923
Phone: (717) 783-5048
Fax: (717) 783-7152

Counsel for:
Tanya J. McCloskey
Acting Consumer Advocate

Dated: September 25, 2020

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I. INTRODUCTION

The Office of Consumer Advocate (OCA) hereby submits its Reply Brief in response to the Main Brief of Transource Pennsylvania, LLC (Transource or Company) and PPL Electric Utilities Corporation (PPL) (collectively, the Applicants).¹ For the reasons set forth below and in its Main Brief, the OCA submits that the Pennsylvania Public Utility Commission (Commission) cannot approve the Pennsylvania portion of the Independence Energy Connection Project (IEC Project or Project) on the basis of the evidentiary record.

II. SUMMARY OF THE REPLY ARGUMENT

As expressed in the OCA's Main Brief, the IEC Project is an uneconomic market efficiency project designed to specifically address congestion on the AP South Reactive Interface, a set of four 500 kilovolt (kV) transmission lines that originate in West Virginia and terminate in Maryland and Virginia. This congestion, however, has diminished precipitously since 2014, leaving this Project as a solution in search of a problem. Moreover, if approved, PJM Interconnection LLC (PJM) forecasts that the Project would provide net economic benefits of only \$32.5 million over a period of 15 years across the entire PJM region and is currently estimated to cost anywhere from \$476 to \$496 million to construct. Accordingly, the benefits forecasted to occur are insufficient to approve a Project that is guaranteed to cost almost \$500 million, is forecasted to increase wholesale power prices by \$400 million in Pennsylvania alone, and will impact the aesthetic, historic, and scenic environment of Pennsylvania and the homes of many Pennsylvanian landowners.

¹ The OCA notes, however, that the arguments and evidence set forth in the Applicants' Reply Brief was supported by Transource and made prior to PPL becoming a joint applicant. Thus, consistent with the OCA's Main Brief, the OCA refers to Transource throughout this Reply Brief and attributes many of the legal arguments to the Company.

In its Main Brief, Transource attempts to narrow the limit and scope of the Commission's authority in this matter. The Company asserts that the Federal Energy Regulatory Commission (FERC) has exclusive jurisdiction over electric wholesale sales and the interstate transmission of electricity. Therefore, Transource argues the Commission is foreclosed from determining the appropriateness of PJM's approval of the IEC Project because PJM was acting pursuant to its FERC-approved tariff to address economic congestion on the interstate transmission system. Contrary to the argument of the Company, however, the Commission has a constitutional, statutory, and regulatory obligation to determine whether the IEC Project is necessary or proper for the service, accommodation, convenience or safety of the public. See Pa. Const. Art. 1, § 27, 15 Pa. C.S. § 1511, 66 Pa. C.S. § 1501, 52 Pa. Code § 57.76(a). While it may consider evidence presented by PJM, the Commission is certainly not bound by PJM's determination, nor do PJM tariffs pre-empt Pennsylvania law in this regard.

In addition, the Company's arguments in support of the 'need' for the IEC Project should be summarily rejected. The Company argues, *inter alia*, that this Project is needed to resolve congestion on related constraints in addition to the congestion on the AP South Reactive Interface. Transource also argues that it is inappropriate to consider increased wholesale power prices when determining whether to approve the IEC Project as it perpetuates discrimination in rates. Lastly, Transource asserts that Pennsylvania will indirectly benefit from the IEC Project through economic activity in the state and by providing Pennsylvania natural gas generators with greater access to wholesale power markets.

Transource's last minute attempt to bootstrap the 'need' for the IEC Project on the basis of these related constraints is borne out of their inability to refute the precipitous decline in congestion on the AP South Reactive Interface. The OCA submits, however, that the Commission should

reject the Company's argument because it is unsupported by the record evidence. The evidence overwhelmingly indicates that the IEC Project, along with the other 40 proposals considered by PJM, were unique solutions, optimized to address what PJM forecasted to be persistent, high levels of congestion on the AP South Reactive Interface – persistent congestion that has not materialized. Out of these proposals, PJM selected the IEC Project as the most cost-effective solution to address this congestion. Thus, Transource's evidence demonstrates that PJM's forecasts were incorrect and the solutions considered by PJM were designed to address this erroneous view of future congestion.

The Commission should also reject the Company's argument that the Commission cannot consider increased wholesale power prices to Pennsylvania and other states resulting from construction of the IEC Project. Consistent with its constitutional, statutory, and regulatory obligations, the Commission must consider the impacts a high-voltage transmission line has upon Pennsylvania, including both economic impacts and environmental impacts. Pa. Const. Art. 1, § 27, 15 Pa. C.S. § 1511, 66 Pa. C.S. § 1501. Thus, the OCA's position is consistent with the Commission's duties, as it recommends that this Commission consider the economic impacts to Pennsylvania and other affected states, rather than just those that benefit.

The OCA submits that the Commission should also reject Transource's argument that the IEC Project should be approved on the basis that it provides additional benefits to Pennsylvania, including providing Pennsylvania generators with greater access to electric power markets, additional jobs, increased tax revenues, and increased economic activity. Whether or not Pennsylvania recognizes indirect temporary economic benefits does not tend to show that the IEC Project is needed to alleviate congestion on the AP South Reactive Interface. Furthermore, the Company presents no clear and substantial evidence to support its claim that the IEC Project will

provide Pennsylvania natural gas generators with additional access to PJM markets. As the OCA has repeatedly demonstrated, congestion on the AP South Reactive Interface has substantially evaporated since 2014, indicating that economic inefficiencies on these facilities has diminished. Rather, due to the dynamic nature of congestion and the difficulty in accurately assessing the nature, scope, and extent of future congestion, it is unclear how the IEC Project will impact Pennsylvania generation

The Company also asserts that it has sufficiently considered the potential for non-transmission alternatives to address congestion on the AP South Reactive Interface and that such solutions are not a reasonable alternative to construction of the IEC Project. More specifically, Transource asserts that congestion on the AP South and related constraints has remained persistently high since the selection of the IEC Project, suggesting that these alternatives have not adequately responded to the issue. Transource also asserts that PJM's simulations incorporate non-transmission alternatives within the model used to simulate the benefits of the IEC Project through PJM's load forecast and other modeling practices. The Company likewise criticizes the OCA's position because the OCA's witness failed to put forth any analysis or model demonstrating how energy efficiency, state policy programs, or renewable resources can adequately address congestion on the AP South Reactive Interface and related constraints.

The Company's arguments are not supported by the record. PJM failed to identify and consider non-transmission alternatives in several important ways: (1) PJM did not consider any specific non-transmission proposals as part of the 2014/2015 Long-Term Proposal Window; (2) PJM did not consider aggressive state policies and laws in the constrained region to establish accelerated carbon reduction goals through the use of renewable generation or the implementation of demand response programs, and (3) PJM excluded potential future generation with an executed

facilities study agreement from the ProMod model when calculating the benefits of the IEC Project. Moreover, it is not the OCA's burden to put forth any analysis or model to demonstrate the impact of such resources and programs, but there is evidence in the record to suggest that where load is reduced through demand response programs, or additional low-cost generation is sited in the constrained region, it can substantially reduce congestion in the constrained region. Accordingly, in light of the precipitous decline in congestion on the AP South Reactive Interface and aggressive public policies of the states in the constrained region, it is likely that these measures can sufficiently alleviate any remaining congestion without constructing the IEC Project.

Lastly, the Company's attempts to justify this Project on the basis of reliability benefits should be rejected. The IEC Project is a market efficiency project designed and selected by PJM to alleviate forecasted economic congestion on the AP South Reactive Interface. This Project was not proposed to address reliability issues and Transource has never classified the IEC Project as a reliability project. In so doing, the Company and PJM inappropriately shield themselves from undergoing more of the rigorous tests required for reliability transmission solutions, as well as from consideration of more cost-effective, environmentally-friendly solutions. Moreover, Transource's evidence that alternative solutions would be more costly or take too long to construct should be rejected. Transource provides no evidence that PJM considered alternative solutions to these potential future reliability violations. Accordingly, it is not known how costly these alternative solutions are or how long they will take to implement. Rather, if the IEC Project is not approved by this Commission, PJM has the means and capability to determine to what extent these potential future reliability violations still exist, consider targeted and optimized solutions to these issues, and select the most efficient, cost-effective design. Thus, the reliability benefits presented by the Company cannot support a finding of 'need' in this proceeding.

III. BURDEN OF PROOF

The OCA submits that Transource mischaracterizes the burden of proof it has in this proceeding. The Company suggests that the preponderance of the evidence standard “is satisfied by presenting evidence more convincing, by even the smallest amount, than that presented by another party.” Transource M.B. at 16-17.² Furthermore, the Company asserts that once the proponent sets forth a prima facie case a presumption is created against an opponent resulting in an obligatory decision for the proponent, unless additional evidence is produced by the opponent. Transource M.B. at 17.

The OCA submits that preponderance of the evidence is not met if the proponent simply presents evidence that is more convincing by even the smallest degree. Rather, the proponent’s evidence must fairly outweigh the probative value of any proof offered against its claim. In Selling Hosiery, Inc. v. Marguiles, the Supreme Court of Pennsylvania discussed the preponderance of the evidence standard and stated as follows:

In charging a jury in a civil case it is the established practice for the trial judge to say that not only has the plaintiff the burden of proof but also that this proof must be by the fair preponderance of the evidence, yet this wordage may possibly be somewhat prolix because when a litigant ‘has the burden of proof’ it means that he has made a claim which he cannot expect to have accepted until he offers proof sufficient to support it; and the least degree of proof any claimant can offer in order to obtain persuasion is proof which *fairly out-weighs* the probative value of any proof offered against the claim.

To illustrate what is meant by the phrase ‘proof by the fair preponderance of the evidence’ a trial judge sometimes says to the jury: ‘If we visualize evidence as something weighed in an ordinary balance scales and if the evidence plaintiff offers in support of his claim is so much more weighty in probative value than the

² In support of its position on the burden of proof, the Company also cites to Cmwlth. v. Williams, 732 A.2d 1167 (Pa. 1999) (Williams) and Brown v. Cmwlth., 940 A.2d 610, 614, n.14 (Pa. Commw. Ct. 2008) (Brown). Transource M.B. at 17. These cases state that the party with the burden must prove its claim by a “greater weight of the evidence,” Williams, 732 A.2d at 1187, and that such proof must enable the fact-finder to “find that the existence of a contested fact is more probable than its nonexistence,” Brown, 940 A.2d at 614, n.14.

evidence offered in opposition to tip the scales on the side of the plaintiff, the latter has proved his claim by the fair weight of the evidence.

70 A.2d 854, 856 (Pa. 1950) (emphasis in original). As the Pennsylvania Supreme Court indicated, the Company meets its burden of proof in this proceeding if it presents evidence that fairly “preponderates in evidentiary weight against the opposing evidence.” *Id.* Moreover, the Company must prove its case using substantial evidence that is legally credible and cannot be mere ‘suspicion’ or a ‘scintilla’ of evidence. Lansberry v. Pa. PUC, 578 A.2d 600, 602 (Pa. Commw. Ct. 1990). This is particularly pertinent in light of the heavy burden imposed by the Supreme Court of Pennsylvania’s decision in Pennsylvania Environmental Defense Foundation v. Commonwealth of Pennsylvania, et al., 161 A.3d 911 (Pa. 2017) (PEDF). See OCA M.B. at 15-22.

Moreover, in its discussion of setting forth a prima facie case, Transource failed to distinguish between the burden of production and the burden of persuasion. The burden of production may shift between parties during the course of a trial, whereas once a party introduces sufficient evidence to reach a prima facie case the burden of production shifts to the opposing party to introduce evidence sufficient to balance the evidence produced by the party having the initial burden of production. Noland Wenger v. UGI Utilities, Inc. – Gas Division, Docket No. C-2008-2076768, 2009 Pa. PUC LEXIS 162 at *9 (Initial Decision entered Sept. 18, 2009). The burden of persuasion, however, “never leaves the party on whom it is originally cast...” *Id.*, at *10 (citing Riedel v. County of Allegheny, 633 A.2d 1325, 1328 n. 11 (Pa. Commw Ct. 1993)). Moreover, a party may successfully bear the burden of production, but not be entitled to a verdict in its favor because the party did not bear the burden of persuasion. *Id.* That is, “[e]ven un rebutted evidence may be disbelieved.” *Id.*, (citing Suber v. Pa. Comm’n on Crime and Delinquency, 885 A.2d 678

(Pa. Commw. Ct. 2005), denied 895 A.2d 1264 (Pa. 2006)). As further expressed by the Commission in Re West Penn Power Company:

[t]he burden of proof has not been met even if no contradictory testimony is presented. We, being the trier of fact and the agency possessing expertise in the matter of utility regulation, are not required to accept even uncontradicted testimony as true.

Application Docket No. 100200, *et al.*, 1980 Pa. PUC LEXIS 49 at *22 (Opinion and Order entered May 29, 1980).

Accordingly, Transource must present evidence that fairly outweighs the evidence presented by the opposing parties in order to meet its burden of proof. Moreover, such evidence must be substantial and legally credible tending to preponderate the Company's claims in this proceeding. As the OCA has demonstrated in its Main Brief and as expressed further below, the Company has not put forth sufficient evidence to satisfy its burden of proof in this proceeding.

IV. APPLICABLE LEGAL STANDARD

A. The Commission's Determination of Need is Based Upon a Broad Variety of Factors and the Commission Must Examine the Impacts to Pennsylvania.

As stated in the OCA's Main Brief, before it can approve the IEC Project, the Commission must find and determine that (1) there is a need for the Project, (2) that it will not create an unreasonable risk of danger to the health and safety of the public, (3) that it is in compliance with the applicable statutes and regulations providing for the protection of the natural resources of this Commonwealth, and (4) that it will have minimum adverse environmental impact, considering the electric power needs of the public, the state of available technology, and the available alternatives. 52 Pa. Code § 57.76(a).

In its discussion regarding 'need,' Transource states that "it is clear...that need is not limited to resolving reliability violations but also includes addressing congestion constraints and that need is not limited only to Pennsylvania, but includes the electric needs of the region as a

whole.” Transource M.B. at 23. In support of its claim, the Company draws comparisons between this proceeding and several past proceedings, including approval of the Trans-Allegheny Interstate Line (TrAIL). See Transource M.B. at 19-23.³ As further support for its position, the Company cites to several sections from the Electricity Generation Customer Choice and Competition Act, 66 Pa. C.S. Sections 2801, *et seq.* Id., at 20-22. In particular, Section 2805 of the Public Utility Code states in relevant part:

(a) Other states.--The commission shall take all necessary and appropriate steps to encourage interstate power pools to enhance competition and to complement industry restructuring on a regional basis. The Commonwealth, the commission and Pennsylvania electric utilities shall work with the Federal Government, other states in the region and interstate power pools to accomplish the goals of restructuring and to establish independent system operators or their functional equivalents to operate the transmission system and interstate power pools. The commission, Pennsylvania electric utilities and all electricity suppliers shall work with the Federal Government, other states in the region, the North American Electric Reliability Council and its regional coordinating councils or their successors, interstate power pools, and with the independent system operator or its functional equivalent to ensure the continued provision of adequate, safe and reliable electric service to the citizens and businesses of this Commonwealth.

66 Pa. C.S. § 2805(a).

While the OCA does not dispute that regional concerns are a factor that the Commission can consider, the Commission’s analysis does not begin and end there. As stated in the OCA’s Main Brief, the scope of inquiry for determining ‘need’ is broad and includes consideration of many factors. See OCA M.B. at 34; see also TrAILCo, 2008 Pa. PUC LEXIS 60 at *128-129 (Rec. Dec. entered Aug. 15, 2008) (TrAILCo Recommended Decision). More specifically, the

³ See also Energy Conservation Council of Pa. v. Pa. PUC, 995 A.2d 465, 484-86 (Pa. Commw. Ct. 2010) (TrAIL Appeal), Stone v. Pa. PUC, 162 A.2d 18 (Pa. Super. 1960), In Re: Application of Trans-Allegheny Interstate Line Company (TrAILCo) For approval: 1) for a certificate of public convenience to offer, render, furnish or supply transmission service in the Commonwealth of Pennsylvania; 2) authorization and to locate, construct, operate and maintain certain high-voltage electric substation facilities; 3) authority to exercise the power of eminent domain for the construction and installation of aerial electric transmission facilities along the proposed transmission line routes in Pennsylvania; 4) approval of an exemption from municipal zoning regulation with respect to the construction of buildings; and 5) approval of certain related affiliated interest arrangements, Docket No. A-110172, 2008 Pa. PUC LEXIS 35 (Opinion and Order entered Dec. 12, 2008) (TrAILCo Order).

“inquiry to determine whether a public need for a transmission project exists depends on the specific facts presented regarding each project and upon the future impacts or consequences within a broad context.” TrAILCo Recommended Decision at *127, affirmed TrAILCo Order at *48 (“[W]e find that the scope of [the ALJs] analysis was entirely appropriate and consistent with the applicable statutory and regulatory authority.”).

As part of this inquiry, the Commission must consider the impacts to Pennsylvania. As the Commission indicated in a recent Order addressing the Supreme Court of Pennsylvania’s decision in PEDF:

The Commission, consistent with our role as a fiduciary responsible for the preservation of the Commonwealth’s natural resources, and consistent with PEDF, acts with prudence, loyalty and impartiality when adhering to these regulations. In this manner, we fulfill our responsibility to protect the public’s natural resources from depletion or degradation, while also allowing legitimate development that improves the lot of Pennsylvania’s citizenry, as the Pennsylvania Supreme Court recognized in *Robinson Township v. Com. of Pa.*, 623 Pa. 564, 658, 83 A.3d 901, 958 (2013).⁴

Thus, the Commission has an obligation to consider the impacts to Pennsylvania and its citizens, both economic and environmental. While the Commission may consider regional needs when assessing whether a proposed high-voltage transmission line is ‘necessary,’ it is not required to make a determination on this basis alone.⁵

⁴ Application of Pennsylvania Electric Company Seeking Approval to Locate, Construct, Operate and Maintain a High-Voltage Transmission Line Referred to as the Bedford North-Central City West 115 kV HV Transmission Line Project, Docket No. A-2016-2565296, et al., Opinion and Order at 14 (Opinion and Order entered Mar. 8, 2018) (access at <http://www.puc.pa.gov/pcdocs/1556807.docx>) (Bedford North-Central City West 115 kV).

⁵ See Application of PPL Electric Utilities Corporation, for Approval to Rebuild Approximately Six Miles of the Breinigsville-Alburtis 500 kV Transmission Line in Lower Macungie and Upper Macungie Townships, Lehigh County, Pennsylvania, et. al., Docket No. A-2019-3007945, Order at 16 (Order entered Aug. 14, 2019) (“The Commission may consider ‘regional reliability needs’ ...”) (access at <http://www.puc.pa.gov/pcdocs/1631551.doc>) (Breinigsville-Alburtis).

Furthermore, the OCA submits that whether or not regional congestion concerns meets the ‘need’ standard has not yet been answered by this Commission or appellate courts. In support of its position, Transource cites to the TrAILCo proceeding stating that, “the Commission determined that...the ‘Commission has an obligation to enhance regional reliability and mitigate transmission constraints in order to *reduce congestion for ratepayers in Pennsylvania and adjacent jurisdictions.*”” Transource M.B. at 21 (emphasis in original).⁶ There is an important distinction, however, between TrAILCo and the instant proceeding. While the proposed facilities in TrAILCo provided some congestion benefits to Pennsylvania, the 502 Pennsylvania Junction facilities were selected by PJM to address reliability violations on the Pruntytown-Mt. Storm 500 kV line and the Mt. Storm-Doubs 500 kV line, not purely congestion concerns as the Project here.⁷ TrAILCo

⁶ The Company also attempts to compare this proceeding to the Susquehanna-Roseland proceeding where the Commission recognized the benefits of regional transmission planning. Transource M.B. at 22-23; see also Approval of the Siting and Construction of the Pennsylvania Portion of The Proposed Susquehanna-Roseland 500 kV Transmission Line in Portions of Lackawanna, Luzerne, Monroe, Pike and Wayne Counties, Pennsylvania, et al., Docket No. A-2009-2082652, et al., 2010 Pa. PUC LEXIS 434 at *44 (Opinion and Order entered Feb. 12, 2010) (Susquehanna-Roseland).

First, the OCA has not disputed the benefits of regional transmission planning, but has taken issue with whether the benefits of this Project are sufficient to meet Pennsylvania standards. Moreover, there are several materially distinguishing factors between Susquehanna-Roseland and the instant proceeding. In Susquehanna-Roseland, the Commission approved a transmission project designed to resolve reliability violations, reduced congestion for Pennsylvania ratepayers, and incorporated the modernization of old transmission line avoiding significant expenditures to replace those facilities as a standalone project. Id., at *64-68. The IEC Project, however, was not designed to resolve reliability concerns, but only addresses economic congestion, will increase wholesale power prices to Pennsylvanians by approximately \$400 million over a period of 15 years on a net basis, and only provides net benefits of \$32.5 million to the PJM region over that same period of time. Accordingly, the OCA submits that while regional planning may be beneficial in certain circumstances, the facts of this proceeding do not present similar benefits.

⁷ The OCA also notes that the economic and environmental impacts surrounding the 502 Pennsylvania Junction Facilities substantially differ from the potential impacts at issue in this proceeding. Out of the 241 miles of proposed transmission line related to the 502 Pennsylvania Junction Facilities, only 1.2 miles were proposed to be located in Western Pennsylvania. TrAILCo Order at *68. In addition, as support for the proposal in that proceeding TrAILCo argued that “wholesale prices in the east are expected to go down while wholesale prices in the west will increase slightly “as a result of the initial resolution of congestion” but that any increases will be more noticeable in Ohio than Pennsylvania and will be entirely dependent on the types of generation that are built.” TrAILCo Order at *40-41.

In contrast, the IEC Project, as modified by the Settlement in this proceeding, will result in the construction of a brand new transmission line in Franklin County, Pennsylvania, approximately 14 miles of which will be located on presently unencumbered land in Franklin County, as well as two brand new substations in Franklin and York

Recommended Decision at *14-15. In the subsequent appeal, the Commonwealth Court of Pennsylvania declined to answer whether congestion benefits on their own are sufficient to meet the ‘need’ standard, noting that the Commission approved the 502 Pennsylvania Junction facilities to address reliability concerns. TrAIL Appeal, 995 A.2d at 486-87. Accordingly, neither the Commission, nor appellate courts, have addressed this issue.

Moreover, the Company’s reference to the Electricity Generation Customer Choice and Competition Act is misplaced. As indicated by Transource witness Cawley, the Electricity Generation Customer Choice and Competition Act was enacted by the General Assembly to restructure the electric utility industry. Tr. at 2429-30; see also 66 Pa. C.S. § 2804. As part of that Act, the General Assembly required the Commission to “work with the Federal Government, and other states in the region...and with the independent system operator...to ensure the continued provision of adequate, safe, and reliable electric service to the citizens and business of this Commonwealth.” 66 Pa. C.S. § 2805(a) (emphasis added). The statute, however, does not mention the term ‘congestion,’ and also declares that the primary goal of such regional coordination is to ensure adequate, safe, and reliable electric service to the citizens and businesses of Pennsylvania. Id. Indeed, the Commonwealth Court’s decision in the TrAIL Appeal regarding regional concerns and Section 2805 of the Public Utility Code rests solely on the need to ensure a reliable regional transmission system:

The PUC did not err or commit an abuse of discretion in finding a public need for the 502 Facilities based on regional reliability factors. The Code does not define need; however, Pennsylvania courts have recognized that there is a need for regional electric service reliability and a reliable regional transmission system. Moreover, the General Assembly has recognized the importance of

Counties. See OCA M.B. at 68. Moreover, PJM projects that construction of the IEC Project will only provide net economic benefits of \$32.5 million over a period of 15 years, with wholesale power prices increasing by approximately \$812.5 million over that same period of time. See OCA M.B. at 63-64. Pennsylvania alone will experience a net increase of approximately \$400 million in wholesale power prices from construction of the IEC Project, the highest of any state in the PJM region. OCA M.B. at 67.

ensuring the reliability of electric transmission systems, including regional transmission systems, and the provision of sufficient electrical power at an affordable rate.

Finally, Section 2805 recognizes the need for the PUC and Pennsylvania utilities to work with generators, transmission companies, and distribution companies in the surrounding region, as well as the Federal Government and its agents to ensure safe and reliable electric service. Accordingly, we conclude that ensuring the "reliability" of an electrical transmission system, like the PJM Region, is necessary and proper for the accommodation, convenience, and safety of its patrons, employees, and the public.

Trail Appeal, 995 A.2d at 485-86.

Thus, contrary to Transource's arguments, the Commission's inquiry into 'need' is broad and must give weight to the impacts incurred by Pennsylvania, both economic and environmental. However, finding 'need' on the basis of alleviating regional congestion that primarily benefits out-of-state entities is a matter of first impression before this Commission.

B. The Commission Must Satisfy its Obligations Under the Environmental Rights Amendment.

In its Main Brief, the OCA discussed at length the Commission's obligations under the Environmental Rights Amendment, as set forth in the Supreme Court of Pennsylvania's decision in PEDF. OCA M.B. at 15-22. To ensure that the Commission's constitutional obligations are met in this proceeding, the Company has a heavy burden to meet the constitutional requirements set forth in PEDF. When discussing PEDF in its Main Brief, the Company makes several claims that the OCA submits are inaccurate.

Citing to Del. Riverkeeper Network v. Sunoco Pipeline, L.P., 179 A.3d 670 (Pa. Commw. Ct. 2017) (Sunoco), the Company suggests that the Commission's obligations have not been altered by the Supreme Court's decision in PEDF. Transource M.B. at 30-31. In Sunoco, the plaintiffs were challenging whether townships are pre-empted from regulating public utilities

through zoning ordinances. 179 A.3d at 680. As support for its argument, plaintiffs asserted that Commission pre-emption would violate a township's obligation under the Environmental Rights Amendment as expressed in PEDF. Id., at 683-85. The Commonwealth Court rejected this argument stating that the plaintiffs have not explained how the Environmental Rights Amendment alters the Commission's jurisdiction over regulating public utilities. Id., at 696. The Commonwealth Court's decision, however, does not stand for the proposition that the Commission's obligations are completely unchanged, but merely that the Commission's exclusive authority to regulate the siting of utility infrastructure remains intact. The Commission, however, is bound by the constitutional obligations set forth in PEDF and must ensure that its meets those obligations. Frederick v. Allegheny Twp. Zoning Hearing Bd., 196 A.3d 677, 694 (Pa. Commw. Ct. 2018).

Moreover, Transource separately suggests that the Commission has already rejected arguments that an applicant has an 'intensified burden' under the Environmental Rights Amendment. Transource M.B. at 29-30.⁸ The OCA notes that this decision was rendered under the now overruled Payne standard and before the Supreme Court of Pennsylvania's decision in PEDF. See Northeast-Pocono, 2013 Pa. PUC LEXIS 620 at *91-92. Accordingly, that decision is not applicable to the instant proceeding.

The OCA continues to assert that the PEDF decision imposes a heavy burden on the Company to satisfy the Commission's constitutional obligations. OCA M.B. at 21-22. That is, the Government must refrain from permitting the degradation of the right to clean air, pure water,

⁸ Citing to Application of PPL Electric Utilities Corporation filed pursuant to 52 Pa. Code Chapter 57, Subchapter G, for approval of the siting and construction of transmission lines associated with the Northeast-Pocono Reliability Project in portions of Luzerne, Lackawanna, Monroe, and Wayne Counties, Pennsylvania, Docket No. A-2012-2340872, 2013 Pa. PUC LEXIS 620 (Recommended Decision entered October 8, 2013; Order entered January 9, 2014) (Northeast-Pocono).

and to the preservation of the natural, scenic, historic and esthetic values of the environment and Pennsylvania's public natural resources where such degradation is unreasonable, does not further a legitimate state interest, or does not benefit the citizens of this Commonwealth. OCA M.B. at 18.

V. REPLY ARGUMENT

A. INTRODUCTION

Transource sets forth several arguments in its Reply Brief that the OCA submits are inaccurate and contrary to Pennsylvania law, and should be rejected by this Commission. The OCA will deal with each in turn. To the extent the OCA does not address an argument of Transource in this Reply Brief, the OCA rests on the arguments set forth in its Main Brief. The OCA continues to assert that the Pennsylvania portion of the IEC Project should be denied by this Commission.

B. NEED FOR THE PROJECT

1. PJM's Planning Process Does Not Divest the Commission of Its Authority Over the Siting of this Transmission Line, including the Determination of Need.

In its Main Brief, the Company asserts that “[t]he Federal Power Act [FPA] authorizes FERC to regulate the transmission of electric energy in interstate commerce.” Transource M.B. at 36. Regarding congestion and planning requirements, Transource stated, “FERC Order No. 1000 emphasizes the need to address congestion as part of transmission planning requirements. FERC held in Order No. 1000 that the regional planning requirements, including transmission planning to address market efficiency considerations, were being adopted pursuant to FERC’s rate jurisdiction under Section 206 of the Federal Power Act.” *Id.*, at 38.

Describing the relationship between FERC and PJM, the Company asserts “FERC has approved PJM as an RTO and has designated it with responsibility for planning and operating the

transmission grid in the PJM footprint.” *Id.*, at 40. Pursuant to PJM’s authority as provided by FERC and Order No. 1000, Transource asserts that PJM’s methodology has the “force and effect of law.” *See Id.*, at 59.

The Company’s argument is not consistent with this Commission’s regulations or the Commonwealth’s laws. It is this Commission that is charged with protecting the interests of Pennsylvania ratepayers and the natural resources of the Commonwealth in transmission siting, not FERC or PJM. In the United States, decisions to construct and site electricity transmission lines belong exclusively to state regulatory agencies.⁹ Specifically in Pennsylvania, the Commission is required to make a determination that the service and facilities to be furnished by the corporation are “necessary or proper for the accommodation, convenience, and safety of its patrons, employees, and the public.” 66 Pa. C.S. § 1501. Referring specifically to high voltage lines, the Commission’s regulations require the Commission to make a finding of need. 52 Pa. Code § 57.76(a). The Commission is also required to consider “[t]he present and future necessity of the proposed HV line in furnishing service to the public.” 52 Pa. Code § 57.75(e). Thus, the Commission must make its own independent determination of necessity for the IEC Project.¹⁰

Moreover, while the FPA does grant FERC exclusive jurisdiction over the interstate transmission of electric energy and electric wholesale rates, the FPA limits FERC authority, including its designee, PJM, to “those matters which are not subject to regulation by the States.” 16 U.S.C. § 824(a). FERC likewise recognizes this limitation stating the following as part of Order No. 1000:

⁹ *Piedmont Envtl. Council v. FERC*, 558 F.3d 304, 310 (4th Cir. 2009) (“The states have traditionally assumed all jurisdiction to approve or deny permits for the siting and construction of electric transmission facilities.”) (*Piedmont*), *cert denied Edison Elec. Inst. v. Piedmont Envt’l. Council*, 558 U.S. 1147 (2010).

¹⁰ *See also TrAIL Appeal*, 995 A.2d at 481 (holding that the Commission is the ultimate fact finder).

We acknowledge that there is longstanding state authority over certain matters that are relevant to transmission planning and expansion, such as matters relevant to siting, permitting, and construction. However, nothing in this Final Rule involves an exercise of siting, permitting, and construction authority. The transmission planning and cost allocation requirements of this Final Rule, like those of Order No. 890, are associated with the processes used to identify and evaluate transmission system needs and potential solutions to those needs. In establishing these reforms, the Commission is simply requiring that certain processes be instituted. This in no way involves an exercise of authority over those specific substantive matters traditionally reserved to the states, including integrated resource planning, or authority over such transmission facilities. For this reason, we see no reason why this Final Rule should create conflicts between state and federal requirements.¹¹

Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, 76 Fed. Reg. ¶ 49,842, 49,861 (Aug. 11, 2011) (FERC Order No. 1000). Thus, FERC's authority does not pre-empt the Commission's determination in this proceeding.

As further indication of FERC's limited role in approving transmission facilities, the U.S. Congress granted FERC limited authority to "issue one or more permits for the construction or modification of electric transmission facilities in a national interest electric transmission corridor [NIETC] designated by the Secretary" under certain limited conditions.¹² 16 U.S.C. § 824p(b).

¹¹ As further summarized by the D.C. Circuit Court of Appeals:

In Order No. 1000, the Commission expressly "decline[d] to impose obligations to build or mandatory processes to obtain commitments to construct transmission facilities in the regional transmission plan." More generally, the Commission disavowed that it was purporting to "determine what needs to be built, where it needs to be built, and who needs to build it. As the Commission explained on rehearing, "Order No. 1000's transmission planning reforms are concerned with process" and "are not intended to dictate substantive outcomes." The substance of a regional transmission plan and any subsequent formation of agreements to construct or operate regional transmission facilities remain within the discretion of the decision-makers in each planning region.

S.C. Pub. Serv. Auth. V. FERC, 762 F.3d 41, 57-58 (D.C. Cir. 2014).

¹² One of those conditions is that the State commission or other entity traditionally responsible for the approval of high-voltage transmission facilities within an NIETC has withheld approval for more than 1 year. 16 U.S.C. § 824p(b)(1)(C)(i). In denying plaintiff's argument that this meant FERC could exercise jurisdiction over facilities within an NIETC if a commission rejected the application, the Fourth Circuit held that "reading of the entire provision reveals that Congress intended to act in a measured way and conferred authority on FERC only when a state commission is unable to act on a permit application in a national interest corridor, fails to act in a timely manner, or acts inappropriately by granting a permit with project-killing conditions." Piedmont, 558 F.3d at 315.

As the Applicant’s proposed Pennsylvania siting locations are not within an NIETC, FERC has no jurisdiction in the siting of the IEC Project and the jurisdiction remains the Commission’s alone.

Pursuant to the constitutional, statutory, and regulatory standards of Pennsylvania, the Commission has the exclusive jurisdiction over both whether the proposed transmission infrastructure is needed and where it should be built. It is fully within the discretion of the Commission under Pennsylvania law to determine whether a transmission facility has sufficiently demonstrated that the proposed facility is “necessary or proper for the accommodation, convenience and safety of...the public.” 66 Pa. C.S. § 1501.

2. The IEC Project Was Solicited, Designed, and Approved to Alleviate Simulated, Future Congestion on the AP South Reactive Interface.

In its Main Brief, the OCA discussed at length the precipitous decline of economic congestion on the AP South Reactive Interface, the congestion constraint the IEC Project was designed to specifically alleviate. OCA M.B. at 35-40. This precipitous decline in congestion is irrefutable and the Company cannot provide evidence to the contrary.

Rather, Transource argues that congestion cannot be viewed in a vacuum as it shifts among interfaces and that the IEC Project was selected because of how it impacts congestion on the transmission system as a whole. Transource M.B. at 68-69. As further support for its position, the Company argues that the IEC Project will now primarily address congestion on the AP South Reactive Interface and related constraints, including the Safe Harbor-Graceton, Conastone-Peach Bottom, and AEP-DOM constraints. Transource M.B. at 66-68; see also Tr. at 2923-24. Transource argues that on a combined basis, congestion on these four constraints has remained persistently high and that PJM’s simulations accurately predicted congestion that would occur in 2019. Transource M.B. at 67-68.

The Company's last-minute attempts to portray the IEC Project as a one-size-fits-all solution should be rejected. The evidence clearly indicates that the IEC Project was designed and tailored to specifically address what at that time was thought to be persistent congestion on the AP South Reactive Interface. As indicated in the OCA's Main Brief, PJM initiated a long-term proposal window in 2014 (2014/2015 Long-Term Proposal Window) seeking solutions to, among other things, persistent future congestion on the AP South Reactive Interface. OCA M.B. at 36-37. As stated by Transource witness, Kamran Ali:

The 2014/15 RTEP Long Term Proposal Window solicited proposals to address, among other things, a number of transmission constraints on the AP South Reactive Interface. The AP South Reactive Interface is a set of four 500 kV lines which originate in West Virginia and terminate in Maryland and Virginia. *The primary goal was to reduce congestion on the AP South Reactive Interface*, which is one of the most historically congested flowgates in PJM.

Transource St. 2 at 7 (emphasis added).¹³ Congestion on the AP South Reactive Interface cost approximately \$800 million between 2012 and 2016. Transource St. 3 at 25.

In response to the 2014/2015 Long-Term Proposal Window, Transource submitted the IEC Project to specifically address congestion on the AP South Reactive Interface and ensure that congestion did not occur elsewhere. As explicitly stated by Transource witness Ali:

The IEC-West Project was intended to directly address the congestion on the AP South Reactive Interface described above. However, it was determined that some of the same higher cost generators that respond to the AP South Reactive Interface also respond to other congested facilities that interconnect Pennsylvania and Maryland. Thus, the construction of the IEC-West Project alone would not fully address the congestion issue and, instead, merely shift the congestion to other parts of the system. To avoid additional, unacceptable congestion on other parts of the system serving Pennsylvania and Maryland, the IEC-East Project was developed to help offload those higher cost generating facilities. The combination of both the IEC-West Project and IEC-East Project are interdependent components needed to address the congestion identified in PJM's 2014/15 RTEP Long Term Proposal Window.

¹³ See also Transource St. 3 at 24-25.

Transource St. 2 at 11 (emphasis added); see also Tr. at 2132-33 (Transource witness Weber indicating that the problem statement to be solved during the 2014/2015 Long-Term Proposal Window was to relieve congestion on the AP South Reactive Interface and not cause congestion elsewhere), Tr. at 2381.

In its selection of the IEC Project, PJM indicated that the “Transource [P]roject was approved by the PJM Board in 2016 as the more efficient, cost-effective project *to address persistent congestion identified in forward-looking economic studies on the AP-South Interface.*” Transource St. 8-R, Exh. TH-5R at 4 (emphasis added).¹⁴ While the Company attempts to fault the OCA for viewing congestion in a vacuum, the entire design and selection process indicates the specific nature of the IEC Project. Accordingly, contrary to Transource’s claims, the IEC Project is a market efficiency project that was solicited to address high levels of forecasted congestion on the AP South Reactive Interface, designed to alleviate that congestion, and selected because of its ability to relieve that future simulated congestion.

Now, Transource is arguing that the IEC Project is needed and should be approved on the basis that it primarily alleviates related congestion constraints, instead of what it was originally designed to do. This is problematic because Transource has discussed at length the nature of congestion on the AP South Reactive Interface and how the IEC Project is a unique solution, tailored to this specific issue. See e.g. Tr. at 2387-2388. Indeed, during the initial selection process, 41 proposals were submitted to PJM to address what at the time was thought to be a very

¹⁴ In the simulation that PJM performed in 2015, the ProMod model simulated a congestion cost of \$110 million occurring on the AP South Reactive Interface in 2019. Tr. at 2936. According to the simulation, the AP South Reactive Interface had the highest congestion cost simulated in 2019 when compared to the Safe Harbor-Graceton, Conastone-Peach Bottom, and AEP-DOM constraints. Id. In reality, Congestion on the AP South Reactive Interface cost approximately \$14.5 million in 2019, substantially lower than predicted by PJM’s forward-looking models. Tr. at 2921. This indicates the erroneous assumptions that were used to calculate the benefit-cost ratio that PJM relied upon when selecting the IEC Project for approval. Moreover, it is disingenuous for Transource to assert that PJM correctly forecasted congestion in its model.

different set of circumstances than currently exist on the transmission system. See fn. 14, supra. In contrast, the Company has provided very little evidence on the nature of the related constraints, how the IEC Project has been optimized to address the related constraints, and whether this is the best alternative to address this congestion.¹⁵

It is also unclear whether actual congestion on the related facilities is sufficient to justify construction of the expensive IEC Project. Of the four facilities that Transource now alleges that the IEC Project is needed to alleviate, the AP South Reactive Interface, AEP-DOM, and Safe Harbor-Graceton constraints did not make the list of the top 25 most congested facilities in the PJM Region during the first three months of 2020. OCA Hearing Exh. 6 at 559. The Conastone-Peach Bottom constraint only incurred congestion costs of approximately \$5.3 million over that same period of time.¹⁶ Id. Moreover, there are two ongoing transmission projects that may alleviate these related constraints without the need for constructing the IEC Project: (1) the Hunterstown-Lincoln Re-build and (2) Project 5E. See OCA M.B. at 105-06. These two additional market efficiency projects appear to be designed to enhance several of the facilities associated with the Conastone-Peach Bottom congestion constraint. See e.g. Transource St. AA3, Exh. TJH-AA1 at 19. PJM, however, has not performed an analysis to determine if the Hunterstown-Lincoln Re-build and Project 5E would sufficiently alleviate these related constraints

¹⁵ For example, Transource does not reference the AEP-DOM, Safe Harbor-Graceton, or Conastone-Peach Bottom constraints in its case-in-chief. See e.g. Transource St. 1-6.

¹⁶ Most recently, in the latest PJM State of the Market Report providing data through the first six months of 2020, the AP South Reactive Interface and AEP-DOM have still not made the list of the top 25 most congested facilities in the PJM region. See Monitoring Analytics, LLC, 2020, *Q2 State of the Market Report for PJM: January through June* at 566, https://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2020/2020q2-som-pjm.pdf (last visited Sept. 24, 2020). Congestion on the Safe Harbor-Graceton and Conastone-Peach Bottom constraints has only cost approximately \$10.9 million through the first six months of 2020. Id.

without the need for the IEC Project.¹⁷ OCA Hearing Exh. 3, Transource Response to OCA XLIII-12; see also Tr. At 2930.

Lastly, this speaks to the problems inherent in attempting to address congestion on the bulk electric system with transmission-based solutions. As Transource witnesses have acknowledged, economic congestion shifts frequently on the bulk electric grid among several constraints. See Tr. at 2386; see also Transource St. 3AA-RJ at 8. This is evident in the PJM State of the Market Reports, which demonstrate high variability among the top 25 most congested constraints in the PJM system. For example, the top 25 most congested constraints in the PJM system in 2014 can be viewed in the chart on the following page:

¹⁷ In light of the continued decline in congestion on the AP South Reactive Interface and the potential for Project 5E and the Hunterstown-Lincoln Re-build to address what little congestion remains on the those facilities, an updated re-evaluation of the IEC Project may be necessary to ensure that the IEC Project continues to remain economically viable even under PJM's own methodology.

Yet, PJM recently filed a change to its Operating Agreement with FERC indicating that it may not be planning re-evaluate the IEC Project in light of these recent changes. In a recent filing with FERC, PJM sought approval to amend its re-evaluation language indicating that PJM can cease re-evaluating a market efficiency project if that project receives a grant of a certificate of public convenience and necessity (CPCN) or its equivalent by a state or relevant regulatory authority where the market efficiency project will be located. PJM Interconnection, L.L.C., Docket No. ER19-2301-000, Transmittal Letter at 4-5 (Jun. 28, 2019), accepted Letter Order at 1 (Aug. 22, 2020) (approving the change without a decision on the merits). Given that Maryland granted a CPCN to the IEC Project in July 2020, it is unclear whether PJM will continue to re-evaluate the economic viability of the IEC Project while Pennsylvania approval is pending.

Table 11-25 Top 25 constraints affecting PJM congestion costs (By facility): 2014

Congestion Costs (Millions)													Percent of Total PJM Congestion Costs
No.	Constraint	Type	Location	Day-Ahead				Balancing				Grand Total	
				Load Payments	Generation Credits	Explicit Costs	Total	Load Payments	Generation Credits	Explicit Costs	Total		
1	AP South	Interface	500	\$329.7	(\$201.4)	(\$11.2)	\$520.0	\$31.5	\$73.5	\$8.9	(\$33.1)	\$486.8	25.2%
2	West	Interface	500	(\$21.3)	(\$297.0)	(\$79.1)	\$196.5	\$17.7	\$49.7	\$17.0	(\$15.0)	\$181.6	9.4%
3	Bagley - Graceton	Line	BGE	\$98.5	(\$9.5)	(\$1.7)	\$106.3	\$5.7	(\$4.0)	\$4.5	\$14.2	\$120.5	6.2%
4	Bedington - Black Oak	Interface	500	\$42.8	(\$43.9)	(\$0.2)	\$86.5	\$3.9	\$3.4	(\$2.3)	(\$1.9)	\$84.6	4.4%
5	Breed - Wheatland	Flowgate	MISO	(\$17.7)	(\$100.2)	(\$9.3)	\$73.2	\$2.4	\$1.1	\$5.6	\$6.9	\$80.1	4.1%
6	Benton Harbor - Palisades	Flowgate	MISO	(\$12.5)	(\$79.3)	(\$8.0)	\$58.8	(\$0.2)	\$0.7	(\$1.0)	(\$1.8)	\$57.0	2.9%
7	Cloverdale	Transformer	AEP	\$23.3	(\$27.3)	\$0.2	\$50.7	\$0.0	\$0.0	\$0.0	\$0.0	\$50.7	2.6%
8	BCPEP	Interface	Pepco	\$15.6	(\$15.2)	(\$1.6)	\$29.3	(\$1.6)	(\$14.2)	\$1.5	\$14.1	\$43.4	2.2%
9	Unclassified	Unclassified	Unclassified	\$2.0	(\$11.8)	\$13.4	\$27.3	\$7.6	\$1.6	\$9.0	\$15.1	\$42.4	2.2%
10	Monticello - East Winamac	Flowgate	MISO	(\$3.8)	(\$46.7)	\$1.6	\$44.6	\$2.6	\$4.3	(\$10.8)	(\$12.5)	\$32.1	1.7%
11	Oak Grove - Galesburg	Flowgate	MISO	(\$28.4)	(\$62.2)	(\$2.3)	\$31.5	(\$0.4)	\$0.5	(\$0.3)	(\$1.3)	\$30.3	1.6%
12	Cherry Valley	Transformer	ComEd	\$21.9	(\$20.4)	\$5.2	\$47.5	(\$5.1)	\$1.1	(\$11.3)	(\$17.5)	\$30.0	1.6%
13	Cook - Palisades	Flowgate	MISO	(\$12.6)	(\$55.3)	(\$5.3)	\$37.4	(\$1.5)	\$1.6	(\$6.2)	(\$9.3)	\$28.1	1.5%
14	Readington - Roseland	Line	PSEG	(\$8.9)	(\$46.1)	(\$12.2)	\$25.1	\$0.9	\$5.4	\$5.8	\$1.3	\$26.4	1.4%
15	Cloverdale	Transformer	AEP	\$23.1	(\$4.8)	(\$2.3)	\$25.7	\$0.0	\$0.0	\$0.0	\$0.0	\$25.7	1.3%
16	Wolf Creek	Transformer	AEP	\$4.6	\$1.3	\$4.7	\$8.0	\$3.6	\$5.6	(\$29.3)	(\$31.3)	(\$23.3)	(1.2%)
17	Brambleton - Loudoun	Line	Dominion	(\$11.2)	(\$35.1)	(\$1.3)	\$22.6	\$0.6	\$0.0	\$0.1	\$0.6	\$23.2	1.2%
18	SENECA	Interface	PENELEC	\$5.6	\$9.9	(\$6.5)	(\$10.9)	(\$3.0)	\$1.2	(\$6.1)	(\$10.4)	(\$21.3)	(1.1%)
19	Wescosville	Transformer	PPL	\$17.6	(\$0.8)	\$2.7	\$21.1	(\$0.0)	\$0.0	\$0.0	(\$0.0)	\$21.1	1.1%
20	East	Interface	500	(\$9.8)	(\$34.2)	(\$3.4)	\$21.0	\$0.3	\$0.7	\$0.5	\$0.1	\$21.1	1.1%
21	Nelson - Cordova	Line	ComEd	(\$24.7)	(\$47.1)	\$4.2	\$26.6	(\$0.7)	\$1.1	(\$4.3)	(\$6.0)	\$20.5	1.1%
22	Bridgewater - Middlesex	Line	PSEG	\$0.2	(\$22.2)	(\$3.0)	\$19.4	(\$1.5)	\$0.1	\$1.4	(\$0.2)	\$19.2	1.0%
23	5004/5005 Interface	Interface	500	(\$0.7)	(\$23.6)	(\$3.3)	\$19.5	\$8.1	\$17.5	\$7.3	(\$2.1)	\$17.4	0.9%
24	Atlantic - Larrabee	Line	JCPL	\$2.0	(\$14.8)	(\$0.7)	\$16.1	\$0.0	\$1.3	\$1.2	(\$0.1)	\$16.0	0.8%
25	Amos	Transformer	AEP	\$1.6	(\$12.8)	(\$0.2)	\$14.2	\$1.2	(\$1.6)	(\$1.2)	\$1.6	\$15.8	0.8%

OCA Cross Exh. 7 at 2. Notably, the AEP-DOM, Safe Harbor-Graceton, and Conastone-Peach Bottom constraints do not even appear the year that PJM initiated the 2014/2015 Long-Term Proposal Window.¹⁸ Id.

In 2017, however, the top 25 most congested facilities look remarkably different than 2014, as seen in the following chart:

¹⁸ The AEP-DOM constraint appears on the 2015 PJM State of the Market Report. OCA Cross Exh. 7 at 1. The Conastone-Peach Bottom constraint is not present on the PJM State of the Market Reports until the 2016 report. OCA Cross Exh. 8 at 2. The Safe Harbor-Graceton constraint is not present on the PJM State of the Market Reports until the 2017 report. OCA Cross Exh. 8 at 1.

Table 11-25 Top 25 constraints affecting PJM congestion costs (By facility): 2017

No.	Constraint	Type	Location	Congestion Costs (Millions)										Percent of Total PJM Congestion Costs	
				Day-Ahead				Balancing							Grand Total
				Load Payments	Generation Credits	Explicit Costs	Total	Load Payments	Generation Credits	Explicit Costs	Total				
1	Braidwood - East Frankfort	Line	ComEd	(\$4.7)	(\$49.7)	\$0.3	\$45.3	\$0.7	\$1.9	(\$0.7)	(\$1.9)	\$43.4	6.2%		
2	Conastone - Peach Bottom	Line	500	\$38.7	\$1.6	\$0.1	\$37.2	\$2.0	\$1.3	\$1.5	\$2.2	\$39.5	5.7%		
3	Emilie - Falls	Line	PECO	\$12.0	(\$13.6)	(\$0.1)	\$25.6	(\$0.1)	\$1.2	\$0.8	(\$0.4)	\$25.1	3.6%		
4	Graceton - Safe Harbor	Line	BGE	\$30.2	\$7.1	(\$0.0)	\$23.1	\$1.7	\$2.3	\$1.4	\$0.8	\$23.9	3.4%		
5	5004/5005 Interface	Interface	500	(\$9.9)	(\$38.7)	(\$3.8)	\$25.0	\$4.3	\$11.4	\$4.6	(\$2.5)	\$22.5	3.2%		
6	AP South	Interface	500	\$15.3	(\$9.2)	(\$2.4)	\$22.1	(\$0.0)	\$1.3	\$0.9	(\$0.5)	\$21.6	3.1%		
7	Westwood	Flowgate	MISO	(\$22.1)	(\$41.3)	\$0.5	\$19.7	\$1.2	\$0.8	(\$0.5)	(\$0.1)	\$19.6	2.8%		
8	Cherry Valley	Transformer	ComEd	\$8.9	(\$10.1)	\$2.1	\$21.0	(\$0.6)	\$0.9	(\$0.9)	(\$2.3)	\$18.7	2.7%		
9	Carson - Rawlings	Line	Dominion	\$14.5	(\$4.3)	\$0.8	\$19.6	\$1.0	\$1.6	(\$0.8)	(\$1.4)	\$18.2	2.6%		
10	Conastone - Otter Creek	Line	PPL	\$23.0	\$8.5	(\$0.5)	\$13.9	\$1.5	\$1.8	\$1.5	\$1.2	\$15.1	2.2%		
11	Conastone - Northwest	Line	BGE	\$12.7	(\$1.1)	(\$0.4)	\$13.4	\$0.4	\$0.7	\$1.0	\$0.7	\$14.1	2.0%		
12	Three Mile Island	Transformer	500	\$7.4	(\$4.9)	(\$0.3)	\$11.9	(\$0.1)	(\$0.6)	\$0.9	\$1.4	\$13.3	1.9%		
13	Butler - Shanorma	Line	APS	(\$10.5)	(\$20.9)	\$1.0	\$11.4	\$0.0	\$0.0	\$0.0	\$0.0	\$11.4	1.6%		
14	Lakeview - Greenfield	Line	ATSI	(\$3.5)	(\$14.5)	\$0.2	\$11.2	\$0.1	\$0.7	\$0.3	(\$0.4)	\$10.8	1.5%		
15	Alpine - Belvidere	Flowgate	MISO	(\$2.3)	(\$14.0)	(\$0.9)	\$10.8	\$0.0	\$0.0	\$0.0	\$0.0	\$10.8	1.5%		
16	Bedington - Black Oak	Interface	500	\$5.5	(\$4.1)	(\$0.2)	\$9.3	\$0.1	\$0.3	\$0.4	\$0.2	\$9.5	1.4%		
17	Person - Sedge Hill	Line	Dominion	\$16.2	\$3.5	\$2.0	\$14.7	\$0.6	\$2.7	(\$3.2)	(\$5.3)	\$9.3	1.3%		
18	Lake George - Aetna	Flowgate	MISO	(\$1.1)	(\$9.0)	(\$1.5)	\$6.4	(\$2.2)	\$0.9	\$5.8	\$2.7	\$9.2	1.3%		
19	Batesville - Hubble	Flowgate	MISO	(\$5.5)	(\$19.4)	(\$4.5)	\$9.4	(\$0.2)	(\$1.2)	(\$1.6)	(\$0.6)	\$8.9	1.3%		
20	Byron - Cherry Valley	Flowgate	MISO	(\$0.9)	(\$9.3)	(\$0.4)	\$8.0	\$0.0	\$0.0	\$0.0	\$0.0	\$8.0	1.1%		
21	AEP - DOM	Interface	500	\$3.3	(\$4.3)	(\$0.1)	\$7.5	\$0.5	\$0.5	\$0.2	\$0.3	\$7.8	1.1%		
22	Brunner Island - Yorkanna	Line	Met-Ed	\$6.0	(\$1.6)	(\$0.3)	\$7.3	(\$0.0)	(\$0.1)	\$0.1	\$0.2	\$7.5	1.1%		
23	Brokaw - Leroy	Flowgate	MISO	\$0.8	(\$7.6)	(\$3.7)	\$4.8	\$0.2	\$0.3	\$2.6	\$2.5	\$7.3	1.0%		
24	Loretto - Vienna	Line	DPL	\$8.8	\$2.3	\$0.7	\$7.2	(\$0.4)	\$0.1	\$0.2	(\$0.3)	\$6.9	1.0%		
25	Pleasant View - Ashburn	Line	Dominion	\$5.8	(\$3.7)	(\$0.3)	\$9.1	(\$1.1)	\$1.0	(\$0.1)	(\$2.3)	\$6.8	1.0%		

OCA Cross Exh. 8 at 1. Out of the 25 constraints listed above, more than 20 of them did not appear in 2014. This trend has continued in the most recent PJM State of the Market Report for the first quarter of 2020. Many of the constraints listed in the top 25 through the first quarter of 2020 do not appear in the 2017 Report, including the AP South Reactive Interface and the AEP-DOM constraints. Compare OCA Hearing Exh. 6 at 559, OCA Cross Exh. 8 at 1. Accordingly, the Commission cannot reasonably conclude that Transource’s evidence is indicative that the IEC Project will address these related constraints in future years, nor that it is needed to address those constraints.

For these reasons, Transource’s attempts to present this Project as a one-size fits all solution should be rejected. The evidence overwhelmingly indicates that the IEC Project was solicited and designed to address simulated, persistent, future congestion on the AP South Reactive Interface and that the IEC Project was a unique solution tailored to this issue. The Company’s last minute attempt to bootstrap this Project on the basis that it alleviates constraints on other facilities does

not prove that this project is the most appropriate means to address congestion on those facilities, particularly one as expensive and impactful as the IEC Project. Rather, the Commission should determine that the IEC Project is no longer needed, as the purpose for which it was designed has evaporated since its selection by PJM in 2016.

3. Economic Congestion Is Not a Form of Rate Discrimination.

Transource asserts that economic congestion creates artificially low prices in the unconstrained region resulting in rates that are discriminatory and unfair for customers in the constrained region. Transource M.B. at 46-47. The Commission should reject this argument as economic congestion is not a form of rate discrimination that implicates the Commission's authority, but is an appropriate market-based response to the wholesale power market. Moreover, even if it were considered rate discrimination, any difference in rates as a result of economic congestion represents reasonable differences in the cost to serve customers in the constrained region as opposed to those in the unconstrained region.

Section 1304 of the Public Utility Code states in relevant part:

No public utility shall, as to rates, make or grant any unreasonable preference or advantage to any person, corporation, or municipal corporation, or subject any person, corporation, or municipal corporation to any unreasonable prejudice or disadvantage. No public utility shall establish or maintain any unreasonable difference as to rates, either as between localities or as between classes of service...This section does not prohibit the establishment of reasonable zone or group systems, or classifications of rates...

66 Pa. C.S. § 1304.¹⁹ Contrary to the Company's argument, economic congestion is not a form of rate discrimination implicated by Section 1304 of the Public Utility Code.

¹⁹ The Company does not rely on any statutory language or case law to support its proposition that economic congestion is a form of rate discrimination that must be remedied by the Commission. The Commission's exercise of power, however, must be conferred by clear and unmistakable legislative language. Process Gas Consumers Group v. Pa. PUC, 511 A.2d 1315, 1319 (Pa. 1986) ("The power and authority to be exercised by administrative commissions must be conferred by legislative language clear and unmistakable. A doubtful power does not exist... They should act within the strict and exact limits defined."). For this reason, the OCA turns to Section 1304 of the Public Utility Code when analyzing Transource's claims.

Economic congestion is a market-based response to the competitive wholesale power market. That is, congestion is dynamic and dependent upon a multitude of market factors, including the price of generation, the location of resources, and where the load is that needs to be served. See e.g. OCA St. 2 at 14.²⁰ Moreover, while economic congestion can be caused, in part, by operating limits on transmission facilities, it can also be ameliorated by the construction of low-cost generation resources or demand response programs in the constrained region. See OCA M.B. at 80, fn. 47; see also Tr. at 2266.²¹ In fact, economic congestion is supposed to serve as a price signal to customers in the constrained region to take economic actions.²² Accordingly, economic congestion is not a rate or preference set or established by a public utility or entity as set forth in Section 1304 of the Public Utility Code. Rather, it is the wholesale power market working as intended.

Moreover, Section 1304 of the Public Utility Code indicates that differences in rates are permissible when that difference is not unreasonable or undue. 66 Pa. C.S. § 1304, see also Painter v. Pa. PUC, 116 A.3d 749, 754-55 (Pa. Commw. Ct. 2015) (quoting Mill v. Pa. PUC, 447 A.2d, 1100, 1102 (Pa. Commw. Ct. 1982)) (“The clear implication from this language is that a person may be given a rate preference so long as it is not unreasonable, and we believe that it falls to the Commission to determine under what circumstances and in what amounts such a preference would be reasonable.”). In this instance, economic congestion is the result of a reasonable difference in

²⁰ For this reason, congestion can shift often and frequently, making it difficult to predict what transmission zones and load-serving entities will experience congestion at any given time. See pgs. 22-24, supra. In one year, under the right circumstances, congestion can affect the price of generation for customers in one transmission zone and completely change the following year.

²¹ The substantial decline in congestion on the AP South Reactive Interface over the past six years suggests that the market has adequately responded to the high amounts of congestion in previous years. See OCA M.B. at 37-40.

²² As the Independent Market Monitor concluded, however, PJM’s market efficiency process heavily favors transmission solutions preventing the possibility of new generation from responding to these market signals. See OCA M.B. at 80, fn. 47.

the cost to serve customers in the constrained region as opposed to customers in the unconstrained region.²³ It should also be noted that much of the congestion at issue has substantially evaporated since 2014. See OCA M.B. at 37-38.

Lastly, while the OCA understands these price differences do have real impacts to those affected, those concerns must be weighed against the detrimental impacts that this would have to those load-serving entities on the unconstrained side, as well as the environmental impacts of new transmission infrastructure. Pa. Const. Art. 1, § 27; see also 66 Pa. C.S. § 1501, 52 Pa. Code § 57.76(a). PJM's forward-looking model projects that if the IEC Project is constructed, the PJM region would only experience net benefits of \$32.5 million over a period of 15 years and Pennsylvania, in particular, would experience a net increase of \$400 million in wholesale power prices over that same period of time. OCA Hearing Exh. 3, Transource Response to OCA XLIII-4. This result would be produced by constructing a transmission project that is guaranteed to cost at least \$476 million and guaranteed to impact the natural, historic, scenic and aesthetic lands of Franklin and York Counties, Pennsylvania and the land of certain Pennsylvania landowners. Accordingly, while there may be some forecasted price differences in PJM's forward-looking models, the benefits are insufficient in light of the anticipated harm caused by the IEC Project.

4. Additional Pennsylvania Benefits Resulting from the IEC Project Do Not Demonstrate that there is a Need for the IEC Project.

As further support for the need of the IEC Project, Transource argues that the IEC Project will provide additional benefits to Pennsylvania, including providing Pennsylvania generators with greater access to electric power markets, mitigation of extreme weather/load events, increased

²³ See Lloyd v. Pa. PUC, 904 A.2d 1010, 1016 (Pa. Commw. Ct. 2006) (quoting Philadelphia Suburban Water Co. v. Pa. PUC, 808 A.2d 1044, 1060 (Pa. Commw. Ct. 2002)) (“[I]n order for a rate differential to survive a challenge brought under Section 1304 of the Public Utility Code...the utility must show that the differential can be justified by the difference in costs required to deliver service to each class. The rate cannot be illegally high for one class and illegally low for another...Overall the rate differentials must advance efficient and satisfactory service to the greatest number at the lowest overall charge.”)

import/export capability between capacity zones, enhanced competition in PJM, additional jobs, increased tax revenues; and increased economic activity. Transource M.B. at 54-55. More generally, the Company asserts that the Commission should approve the IEC Project because Pennsylvania routinely benefits from PJM's regional transmission planning and should provide the same benefit for other states. Transource M.B. 56-57. The OCA submits that the Commission should reject these arguments as they are not dispositive of the need for the IEC Project. Moreover, as the OCA has demonstrated in its Main Brief, the IEC Project is not just detrimental to Pennsylvania, it does not provide sufficient benefits to the PJM region as a whole.

While the Commission's scope of inquiry to determine need in this proceeding is broad, the Commission's inquiry should be focused on whether this Project shall be necessary or proper for the accommodation, convenience, and safety of its patrons, employees, and the public. Pa. Power & Light Co. v. Pa. Pub. Util. Comm'n, 696 A.2d 248, 250 (Pa. Commw. Ct. 1997). Whether or not Pennsylvania recognizes indirect economic benefits does not tend to show that the IEC Project is needed to alleviate congestion on the AP South Reactive Interface. Moreover, any benefits concerning additional employment, increased tax revenues, and economic activity are temporary in nature. Yet, once this Project is constructed, there will be long-lasting, permanent consequences to the landscape of Pennsylvania, increased wholesale power prices in Pennsylvania, and costs borne by the transmission zones that are purported to benefit. See OCA M.B. at 98-99.

The OCA also questions the extent to which Pennsylvania natural gas generators will benefit from construction of the IEC Project as Transource claims. Transource presents no clear and substantial evidence to support its claim, other than by suggestion. Transource M.B. at 54. Yet, as the OCA has repeatedly demonstrated, congestion on the AP South Reactive Interface has substantially evaporated since 2014, indicating that economic inefficiencies on these facilities has

diminished. See OCA M.B. at 35-40. Rather, due to the dynamic nature of congestion and the difficulty in accurately assessing the nature, scope, and extent of future congestion, it is unclear how the IEC Project will impact Pennsylvania generation. See OCA M.B. at 59-62.

Lastly, the OCA understands that Pennsylvania does benefit from its participation in PJM and through regional transmission planning. Under the circumstances demonstrated by the Company, however, the IEC Project does not provide sufficient benefits to the PJM region as a whole and should not be approved. If approved, PJM projects that this Project will decrease wholesale power prices by approximately \$845 million primarily for transmission zones south of the AP South Reactive Interface, while at the same time increasing wholesale power prices by \$812 million for transmission zones primarily to the north and east of the AP South constraint. Overall, PJM forecasts a net benefit of \$32.5 million to the PJM region over a period of 15 years with a total revenue requirement of at least \$509 million over that same period of time. All of this to address a congestion constraint that has diminished to non-existent levels since this Project was selected. As stated by OCA witness Rubin during cross-examination by Transource counsel:

Under any logical view of what's happening. If you build this project, you can save utilities in Maryland, Virginia, and the District of Columbia almost a billion dollars over 15 years; and, if you don't build that project, that same power is going to be used in Pennsylvania, Ohio, Illinois, and New Jersey at a cost of about \$970 million.

So, yes, there is some congestion. There is a technical problem to be solved, and the value of that congestion as laid out in the most recent estimate we have is less than a million dollars a year over the next 15 years. So this project makes no sense. I don't care how you run the numbers or how you talk about it. Those are the latest numbers we have, and you can exclude them if you want to but that's reality.

Tr. at 2504. Accordingly, the Commission should not approve the IEC Project on the basis that Pennsylvania may receive indirect economic benefits from the IEC Project or that Pennsylvania generally benefits from its participation in PJM.

5. PJM's Benefit-Cost Methodology Is Insufficient to Meet the Requirements of Pennsylvania Law.

a. *Pennsylvania Is Not Bound By PJM's Procedures and Processes.*

In the OCA's Main Brief, it addressed at length the methodology performed by PJM to develop the benefit-cost ratio of the IEC Project.²⁴ The OCA noted the serious and substantive deficiencies of that methodology such that it was insufficient under the constitutional, statutory, and regulatory standards of Pennsylvania law. OCA M.B. at 43-62. This includes PJM's failure to consider increased wholesale power prices when calculating the benefit-cost ratio, frequent changes to how the benefit-cost ratio is calculated and how the benefits are simulated, and the uncertain nature of which transmission zones benefit and the extent to which those transmission zones benefit. Id.

In response, the Company asserts that the OCA's attempts "to require a different methodology should be denied." Transource M.B. at 59. The Company reasons that PJM's benefit-cost ratio methodology is required by PJM's Operating Agreement, which has been approved by FERC and has the force and effect of law. Id., (citing New York State Elec. & Gas Corp. v. New York Indep. Sys. Operator, 2001 U.S. Dist. LEXIS 27071 at *20 (N.D.N.Y. Jan. 19, 2001), Lowden v. Simonds-Shields Lonsdale Grain Co., 306 U.S. 516, 520 (1939)).

The Commission should reject Transource's argument that PJM's Operating Agreement pre-empts the Commission's ability to determine what meets the constitutional, statutory, and regulatory standards of Pennsylvania, including whether PJM's benefit-cost ratio methodology is sufficient. As stated in Section V.B.1 of this Reply Brief, the Commission has exclusive jurisdiction to determine whether a high-voltage transmission line is necessary or proper for the

²⁴ Pursuant to its Operating Agreement, a market efficiency project must have a benefit-cost ratio of 1.25:1 to be considered economically viable and recommended for approval to the PJM Board of Directors. OCA M.B. at 41; see also Transource St. 7-R, Exh. SRH-3R at 11.

accommodation, convenience, and safety of its patrons, employees, and the public. Pa. Power & Light Co. v. Pa. Pub. Util. Comm'n, 696 A.2d at 250; see also 15 Pa. C.S. § 1511. Pursuant to the FPA, FERC has the authority to set the procedures and processes that PJM must follow as a Regional Transmission Operator, but it does not extend or infringe upon Pennsylvania's authority to regulate the construction and siting of high-voltage transmission lines. See OCA R.B., Section V.B.1. Accordingly, because FERC does not have that authority, neither does PJM.²⁵ This was explicitly acknowledged by the Commission in Breinigsville-Alburtis, stating as follows:

We note that the Commission's full siting regulations contain different standards and criteria for transmission line project review than those set forth in PJM's tariff and operating agreements. The relevant Commission regulations precede the opening of wholesale electric markets, and the FERC's requirements for transmission planning, coordination, and cost allocation. Additionally, Commission and PJM review of these types of projects are independent of one another.

Breinigsville-Alburtis, Order at 19.

Moreover, PJM's procedures and processes concerning the evaluation of market efficiency projects can often times receive summary approval from FERC without any decision on the merits. For example, in the OCA's Main Brief it discussed PJM's proposal in 2014 to remove production cost savings from consideration of the benefits of a lower voltage market efficiency project, such as the IEC Project. See OCA M.B. at 52-54. As stated by OCA witness Rubin in his surrebuttal testimony, FERC merely allowed PJM to implement this proposal, but did not approve the change on the merits of the proposal:

²⁵ See Chrysler Corp. v. Brown, 441 U.S. 281, 302 (1979) ("That an agency regulation is 'substantive,' however, does not by itself give it the 'force and effect of law.' The legislative power of the United States is vested in the Congress, and the exercise of quasi-legislative authority by governmental departments and agencies must be rooted in a grant of such power by the Congress and subject to limitations which that body imposes.") (emphasis added).

Q. As you understand it, does FERC’s letter approve the benefit-cost methodology that was used by PJM to evaluate the Independence Energy Project (“Project”)?

A. No, as I understand it, FERC’s letter specifically does not approve the reasonableness of the procedure used by PJM. Rather, FERC’s letter specifically states the following:

This acceptance for filing shall not be construed as constituting approval of the referenced filing or of any rate, charge, classification, or any rule, regulation, or practice affecting such rate or service contained in your filing; nor shall such acceptance be deemed as recognition of any claimed contractual right or obligation associated therewith; and such acceptance is without prejudice to any findings or orders which have been or may hereafter be made by the Commission in any proceeding now pending or hereafter instituted by or against PJM.

Schedule SJR-1SR, p. 2. I am advised by counsel that this language means that FERC has not determined that PJM’s benefit-cost methodology is consistent with the public interest, or that the methodology is a component of a legally determined “just and reasonable” rate under the Federal Power Act.

OCA St. 1-SR at 7. Accordingly, some of the pertinent policies and procedures that PJM follows have not been approved by FERC based upon the merits of the proposal.

Lastly, PJM’s market efficiency process is narrowly focused on whether the proposed project meets the requirements set forth in PJM’s Operating Agreement and manuals. PJM does not consider, nor is it required to consider, the public policy and environmental concerns that are required by this Commission under the Pennsylvania Constitution and the statutory and regulatory laws of this Commonwealth. OCA St. 2 at 9-10; see also Tr. at 2287. As further summarized by OCA witness Rubin in his direct testimony:

Q. As a matter of regulatory policy (and not as a matter of law), in your opinion does PJM’s selection of the IEC Project as one that should be pursued carry with it any implications for this Commission’s review of the IEC Project?

- A. In my opinion, as a matter of public policy, PJM's selection of the IEC Project should not supersede in any way this Commission's duty under Pennsylvania law and regulations to determine whether construction and operation of the IEC Project is necessary or proper for the service, accommodation, convenience or safety of the public. Indeed, in my opinion this Commission has the obligation to fully comply with the law and its regulations and independently determine whether the IEC Project is in the best interests of the Commonwealth in general and utility consumers in particular.

In discovery, OCA asked the representative of PJM (Transource witness McGlynn) whether PJM considered any of the factors this Commission is required to consider in approving the development and siting of two substations and more than 30 miles of new high-voltage transmission lines. His responses demonstrate that PJM does not consider any of the factors this Commission must consider before approving substation siting, new transmission lines, or the specific locations of the line. I have attached as Schedule SJR-8, copies of interrogatory answers where Mr. McGlynn acknowledges that PJM does not consider the issues associated with siting substations or transmission lines that this Commission is required to consider.

Moreover, PJM's review process does not consider Pennsylvania law that requires projects to demonstrate that they have minimized environmental impacts (particularly on public lands and waterways) or adequately protected agricultural land.

Mr. McGlynn went to great lengths to explain the limit of PJM's selection of the IEC Project, stating: "PJM does not opine or determine the specific location or route of projects. The siting of the project components described in the Application is the responsibility of Transource PA." Response to OCA II-03, included in Schedule SJR-8.

- Q. In your opinion, again as a matter of regulatory policy and not as a question of law, should PJM's selection of the IEC Project affect this Commission's determination of need for the IEC Project?**

- A. In my opinion, as a matter of sound public policy, the Commission should make an independent determination of the need for the IEC Project, considering the likely costs (including environmental and land-use impacts) and benefits, as set forth in Pennsylvania law and regulations.

OCA St. 1 at 43-44 (footnotes omitted).

For these reasons, Transource's attempt to limit this Commission's authority on the basis of previous determinations made by PJM should be rejected. The Commission has a duty to review

the evidence in its entirety, assess whether that evidence is sufficient under Pennsylvania law, and render a decision to that effect.

b. The Commission Must Consider Increased Wholesale Power Prices Resulting from Construction of the IEC Project.

The Company asserts that the Commission should not consider increased wholesale power prices that result from construction of the IEC Project. Transource M.B. at 60. Transource argues that because congestion represents a form of rate discrimination, consideration of these costs perpetuates rate discrimination. Transource M.B. at 61. This argument should be rejected because these are real costs to customers that must be considered by this Commission. OCA M.B. at 44-48.

As the OCA stated above, economic congestion is not a form of rate discrimination, rather, it is a market-based response to a variety of factors. See OCA R.B., Section V.B.3. Moreover, the purpose of a benefit-cost analysis, it to attempt to capture the likely consequences of an activity and to express those consequences in the same units so that they can be compared. OCA M.B. at 43-44; see also OCA St. 1 at 23. That is, all costs directly related to the construction of the IEC Project should be taken into consideration, regardless of whether that impact is beneficial or detrimental. Contrary to the Company's claims, PJM previously considered increased wholesale power prices resulting from higher-voltage regional market efficiency projects.²⁶ See OCA M.B. at 50-51.

While the OCA does not argue that customers are entitled to lower prices in the unconstrained areas of the PJM region, increased wholesale power prices in these areas resulting

²⁶ PJM did not remove consideration of these costs on the basis that it constitutes discrimination in rates. See OCA Cross Exh. 4 at 8. Rather, PJM's reasoning for removal of these costs in the calculation to determine the benefits of a regional market efficiency project was to align the benefits of the project with the transmission zones that would be responsible for the cost of the project and to increase the number of projects that can qualify as a market efficiency project. Id.

from construction of the IEC Project should be taken into consideration by this Commission. As stated by OCA witness Rubin in his direct testimony:

Q. On page 6, Mr. Cawley criticizes you, saying “no customer or group of customers is entitled to lower cost generation created by congestion constraints.” Do you agree?

A. Yes, I agree with him that customers are not “entitled” to the benefits of market inefficiencies. Contrary to the implications of Mr. Cawley’s statements, however, I am not suggesting that customers in formerly unconstrained zones should be compensated in any way for the loss of these inefficiency benefits. If I felt that customers were “entitled” to those benefits, I would necessarily be asking that customers be compensated when those benefits are lost. But that is not the case. I am stating only that the loss of the benefit must be recognized for what it is -- a very real cost that would be a direct result of constructing the Project. As I have explained, the change in power prices on both sides of the constraint must be evaluated in determining whether a project creates an overall benefit or detriment for the PJM system as a whole. If it is cost-effective for the system as a whole to eliminate the congestion, then the benefiting zones should pay for the project and there should not be any compensation to the non-benefiting zones. This is precisely because customers are not “entitled” to the benefits of market inefficiencies.

But following Mr. Cawley’s suggestion and completely ignoring the loss of lower-cost power to many Pennsylvania consumers would lead to an absurd result that does not represent the real world, as I discussed above. Simply stated, spending almost \$500 million to eliminate a \$17 million inefficiency makes no sense, but that is exactly what Transource is proposing and Mr. Cawley appears to be supporting. The only way to reach such a result is to ignore what happens on both sides of the congestion point.

OCA St. 1-SR at 13 (emphasis in original). Monitoring Analytics, LLC, or the Independent Market Monitor, similarly agrees that all costs are relevant to an evaluation of the actual costs and benefits of the Project and that there is no reason to ignore any of the costs. OCA M.B. at 45; see also OCA Cross Exh. No. 12 at 7-8.

Lastly, failure to take into consideration these increased wholesale power prices to Pennsylvania and other states violates Pennsylvania law, requiring the Commission to consider the impact to the public, not just those that benefit. See 66 Pa. C.S. § 1501; 15 Pa. C.S. § 1511.

Ignoring the more than \$400 million in increased wholesale power prices attributed to Pennsylvania as a result of the IEC Project does not satisfy that obligation. Accordingly, increased wholesale power prices are real costs to customers that the Commission cannot ignore when making its determination.

c. *The Cost Allocation Factors Have Remained the Same, Even Though the Zones that Benefit Have Changed.*

Transource argues that PJM's benefit-cost methodology aligns the payment of costs with zones that benefit. Transource M.B. at 60. Accordingly, the Company argues that Pennsylvania zones that do not benefit do not pay for the cost of the Project. *Id.* While this is accurate to some extent, this should not be viewed as a reason to accept PJM's benefit-cost methodology.

When PJM selected the IEC Project in December 2016, it made a filing with FERC seeking approval to allocate how the costs of the Project are recovered. Transource St. 7-R, Exh. SRH-3R at 8-9. Pursuant to PJM's Operating Agreement, costs of the IEC Project are allocated in a proportionate manner based upon the extent to which each PJM Transmission Zone benefits from construction of the IEC Project. *Id.*; see also Transource St. 8-R, Exh. TH-3R at 31. At the time the filing was approved, the allocation factors were based upon PJM's simulations performed prior to August 2016. Transource St. 8-R, Exh. TH-3R at 31. As stated in the OCA's Main Brief, however, PJM has stated that it does not anticipate updating the allocation factors approved by FERC in 2016 if the IEC Project is approved by the Commission. OCA Hearing Exh. 3, Transource Response to OCA XLIII-19.

Since then, the number of transmission zones that benefit from the IEC Project and the extent to which they are projected to benefit have changed throughout the course of this proceeding. See OCA M.B. at 59-62. As a result, some transmission zones that were once expected to benefit and have some responsibility for paying the costs of the Project, no longer

benefit. OCA M.B. at 65-66. For example, the COMED Transmission Zone, located in a portion of Illinois has been allocated approximately 2.16 percent of the project cost. Transource St. 8-R, Exh. TH-3R at 31; see also OCA Cross Exh. 10. Relying on the September 2018 evaluation of the IEC Project, OCA witness Rubin calculated that load-serving entities in the COMED Transmission Zone could expect to pay approximately \$10.76 million over a period of 15 years.²⁷ OCA St. 1, Sch. SJR-5. In the most recent simulation performed by PJM in December 2019, however, the COMED Transmission Zone is projected to experience approximately \$16.3 million in increased wholesale power prices over a period of 15 years resulting from the IEC Project. OCA Hearing Exh. 3, Transource Response to OCA XLIII-4. Not only will load-serving entities in the COMED Transmission Zone see increased wholesale power prices, they will also have to pay for a portion of the IEC Project.

Additionally, the APS Transmission Zone, which is composed of a portion of Western Pennsylvania, West Virginia, Maryland, and Virginia, is required to pay 8.73 percent of the IEC Project Cost. Transource St. 8-R, Exh. TH-3R at 31; see also OCA Cross Exh. 10. Yet, PJM's latest re-evaluation indicates that the APS Transmission Zone will see reduced wholesale power prices of approximately \$60 million over the first 15 years of the Project's service life, or 7.13 percent of the total purported Project benefits.²⁸ OCA Hearing Exh. 3, Transource Response to OCA XLIII-4.²⁹ Accordingly, load-serving entities in the APS Transmission Zone are expected

²⁷ The information presented in Schedule SJR-5 relied upon the September 2018 evaluation, which estimated a PVRR of approximately \$498 million. OCA St. 1, Sch. SJR-5. Most recently, the Company estimates that the PVRR of the IEC Project, inclusive of the amended East Portion, is anywhere from approximately \$509 to \$528 million. Transource St. AA3, Exh. TJH-AA3 at 3-4. The OCA further notes that the IEC Project could exceed this amount as it is not subject to a price cap. See OCA M.B. at 66, fn. 39.

²⁸ $\$60.3 \text{ Million} \div 844.8 \text{ Million} = 7.13\%$. OCA Hearing Exh. 3, Transource Response to OCA XLIII-4.

²⁹ In the OCA's Main Brief, the OCA demonstrated that load-serving entities in Western Pennsylvania would experience approximately \$27 million in reduced wholesale power prices from its share of the benefits to the APS Transmission Zone, according to PJM's latest re-evaluation of the IEC Project. OCA M.B. at 67, fn. 41. Yet, load-

to pay a greater percentage of the cost to construct the IEC Project than it would share in the benefits of the IEC Project.

Accordingly, while Transource may be recovering costs from transmission zones that benefit, the dynamic nature of simulating the benefits of a market efficiency project has left the allocation factors outdated and not reflective of current simulation results. Moreover, because those responsible for construction of facilities related to the IEC Project would collect a revenue requirement for 50 to 60 years, or for the useful life of the IEC Project, the Company, in addition to the other entities responsible for construction of the IEC Project, will continue to collect costs related to the IEC Project while it impacts the bulk electric grid in a manner that may not reflect how costs are recovered. Tr. at 2118.

6. Conclusion.

The OCA submits that the Commission cannot approve the IEC Project for the reasons set forth in its Main Brief. The facts are undisputed and irrefutable. The ‘need’ for the IEC Project has evaporated since PJM selected the IEC Project in 2016, with congestion on the AP South Reactive Interface substantially declining since 2014. Thus, the purpose for which the IEC Project was designed no longer exists. Arguments that it now serves to alleviate congestion on other congested constraints is contrary to the evidence in this proceeding and unsupported.

serving entities in the APS Transmission Zone would be responsible for paying approximately 8.73 percent of the cost of the IEC Project. The OCA inadvertently labeled this amount as \$31.97 million and attributed the entire cost to load-serving entities in Western Pennsylvania. OCA M.B. at 65. This is incorrect. Rather, load-serving entities in the APS Transmission Zone would be responsible for paying approximately \$43.48 million for the cost of the IEC Project, as of the September 2018 PJM re-evaluation. OCA St.1, Sch. SJR-5. Moreover, load-serving entities in Western Pennsylvania would be responsible for paying 44.75 percent of the costs to the APS Transmission zone in the same manner that it shares in the benefits of the IEC Project, or approximately \$19.46 million as of PJM’s September 2018 re-evaluation. OCA St. 1, Sch. SJR-7. This offsets more than half of the benefit provided to load-serving entities in Western Pennsylvania.

Moreover, PJM's forward-looking models, which have inaccurately forecasted congestion over these past several years, indicates that if the IEC project is constructed it would provide net benefits to the PJM region of \$32.5 million over a period of 15 years, increase wholesale power prices in Pennsylvania by \$400 million on a net basis, and impact the historic, scenic, and aesthetic landscape of Pennsylvania and the land of certain Pennsylvania landowners.

The Company then asserts that this Commission is required to accept PJM's determination without an independent review and assessment of the evidence and ignore the detrimental economic impacts associated with the IEC Project. Doing so, however, would violate this Commission's constitutional and statutory obligations. Pursuant to its regulations, the Commission must consider all costs and all impacts to Pennsylvania, both economic and environmental.

A full review and analysis of the evidence presented by Transource demonstrates that this Project is not needed and that it is not necessary or proper for the accommodation, convenience, and safety of the public. Accordingly, the Commission should deny the Applications in this proceeding.

C. RISKS TO HEALTH AND SAFETY OF THE PUBLIC

The OCA is not addressing this issue. The OCA's lack of discussion should not be interpreted as acceptance of Transource's position.

D. ENVIRONMENTAL IMPACTS

As the OCA noted in its Main Brief, when determining whether the IEC Project will have minimum adverse environmental impact, the Commission must be guided by the Environmental Rights Amendment as codified at Article I, Section 27 of the Pennsylvania Constitution. The Company asserts that this obligation is satisfied where "the route selection process was reasonable and that the utility properly considered the factors relevant to siting a transmission line."

Transource M.B. at 78-79. Moreover, Transource states that it is only required to demonstrate reasonable efforts to minimize adverse environmental impacts of the proposed route when compared to the available alternative routes, but Transource is not required to choose a route that has no adverse impacts. Id., at 79.

In response, the OCA reiterates the important gatekeeping role the Commission is entrusted with through Pennsylvania law as stated in PEDF. The OCA respectfully submits it is the Commission's duty to carefully weigh whether this project unreasonably infringes upon the inviolate environmental rights of Pennsylvanians: the right to clean air, pure water, and the preservation of the natural, scenic, historic and esthetic values of the environment and Pennsylvania's public natural resources. Contrary to the position of the Company, pursuant to PEDF, this is not a business as usual approach. Rather, the Company now faces a more stringent requirement to demonstrate that environmental impacts to Pennsylvania do not unreasonably degrade the environmental rights of Pennsylvanians, that the Project serves a legitimate state purpose, and that it will benefit the Pennsylvania citizenry.

The OCA noted at length in its Main Brief the many environmental concerns shared by the community, the citizens of Franklin and York Counties, and the affected landowners associated with the IEC Project. OCA M.B. at 71-76. The OCA also notes that Stop Transource Franklin County raised significant environmental impact issues on land use, wildlife habitats, terrain, hydrology, and landscape within their Main Brief beyond the issues identified by the Company.

E. AVAILABILITY OF REASONABLE ALTERNATIVES

1. PJM Did Not Properly Consider Non-Transmission Alternatives When Selecting the IEC Project.

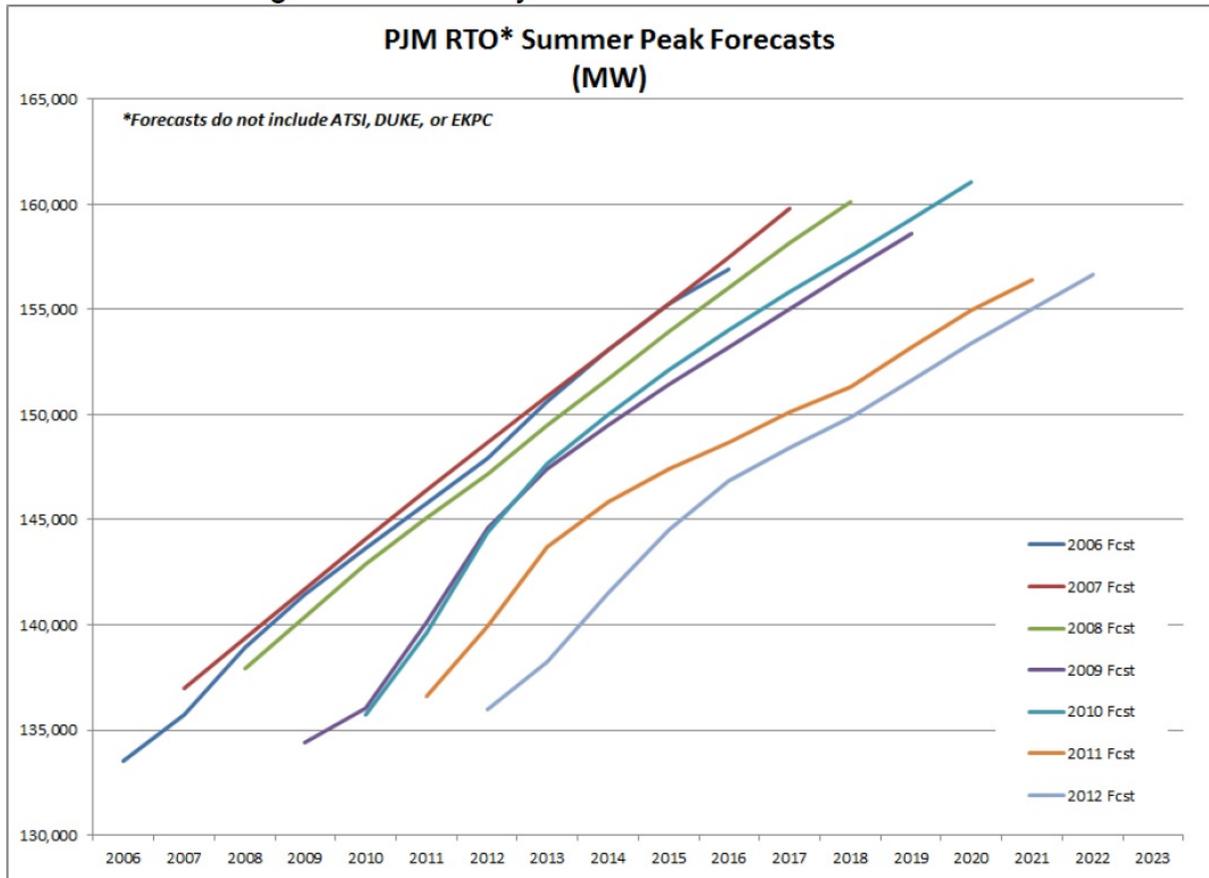
The Company claims in its Main Brief that PJM properly considered non-transmission alternatives in its selection of the IEC Project. Transource M.B. at 62. Transource asserts that PJM includes energy efficiency, equipment saturation, and efficiency trends in its forecast model through the use of three variables – heating, cooling, and other. Id. Moreover, Transource also asserts that the ProMod model also includes renewable resources, including distributed solar generation, regardless of whether it is part of a state renewable energy forecast or not. Id., at 63.

While PJM’s forecasts may attempt to reflect non-transmission alternatives to some extent, the OCA continues to assert that it did not properly consider alternative measures to address congestion on the AP South Reactive Interface. The evidence in this proceeding points to several deficiencies in PJM’s process when selecting the IEC Project. First, as indicated in the OCA’s Main Brief, PJM’s market efficiency process effectively allows PJM to only consider transmission-based solutions. See OCA M.B. at 79-81. Thus, it did not directly consider non-transmission solutions to resolve congestion on the AP South Reactive Interface as none were proposed. Secondly, PJM admits that it did not reflect or take into account state public policy programs in the constrained region when selecting the IEC Project. See OCA M.B. at 88. In so doing, PJM failed to consider state policies in Virginia, the District of Columbia, and Maryland that incent development of low-cost renewable generation and demand response policies that may further alleviate any remaining congestion in the constrained region. See OCA M.B. at 88-93. As OCA witness Crandall testified, the combination of energy efficiency and aggressive deployment of renewable resources will substantially impact energy usage and energy flows in the constrained region. Id. Lastly, contrary to the Company’s claims, PJM failed to reflect potential generation

resources with an executed facilities study agreement (FSA) in its most recent simulations used to forecast future congestion on the AP South Reactive Interface. See OCA M.B. at 54-58. As a result, PJM failed to account for numerous generation resources in the constrained region, which can have a substantial impact on simulated congestion in future years. See OCA M.B. at 56. Accordingly, there are substantial and impactful ways in which PJM did not properly consider non-transmission alternatives.

Moreover, the OCA notes that PJM's load forecast, which the Company states incorporates numerous variables that attempt to capture energy efficiency, demand respond, and renewable generation resources, has continually overstated future peak load in PJM. For example, the following chart in PJM's 2016 Load Forecasting Model Whitepaper indicates numerous downward adjustments by PJM to future projected peak load:

Figure II-1 : History of PJM Peak Load Forecasts



Transource St. 7-R, Exh. SRH-5R at 8. As seen above, between 2006 and 2012, there were substantial revisions to future peak load on the PJM system. This suggests that PJM’s forecasts are often subject to revisions and can fail to properly forecast future grid conditions. This is no more apparent than when comparing PJM’s forward-looking models used to simulate congestion on the AP South Reactive Interface to actual congestion experienced on that interface since 2014. See fn. 14, supra. Accordingly, the evidence indicates that PJM’s load forecast and forward-looking models have failed to properly account for non-transmission alternatives and future energy trends on its system.

2. Transource Ignores the Record Evidence that the IEC Project was Designed and Selected to Address Persistent Congestion on the AP South Reactive Interface and the Precipitous Decline of that Congestion is Irrefutable.

The Company asserts that significant congestion has existed on the AP South Reactive Interface and related constraints for the past six years and that non-transmission alternatives have not resolved these congestion issues. Transource M.B. at 64. The Company also asserts that the OCA takes a narrow view of congestion by ignoring congestion on related constraints. Transource M.B. at 64-65. Rather, when viewing AP South and related constraints together, the Company argues PJM correctly predicted congestion that would occur in 2019. Transource M.B. at 67-68. These arguments should be rejected.

The OCA has already discussed at length how the IEC Project was specifically designed and selected to address congestion on the AP South Reactive Interface and the precipitous decline in that congestion constraint since 2014. See Section V.B.2, supra. While this may be the result of many factors, it is undisputed that system conditions have not occurred as originally forecasted by PJM. Accordingly, the Company's last minute attempt to prop up the 'need' for the IEC Project on the basis that it addresses related congestion constraints is insufficient.

Furthermore, contrary to the Company's claim, PJM did not accurately forecast future congestion. In 2015, PJM's simulations forecasted that the AP South Reactive Interface would experience congestion costing approximately \$110 million in 2019. Tr. at 2936. As stated in the 2019 PJM State of the Market Report, however, actual congestion on the AP South Reactive Interface totaled approximately \$14.5 million. Tr. at 2921. Accordingly, it is disingenuous for Transource to assert that PJM correctly forecasted congestion in its model.³⁰ Moreover, as asserted

³⁰ The OCA also asserts that the Company's claim that PJM correctly forecasted congestion in its forward-looking models does not rely on substantial evidence. The Company relies upon one simulation run in 2015 evaluating a single forecasted data point in 2019, which, when broken down by congestion constraint, is inaccurate as set forth in the accompanying text. PJM has run many simulations and sensitivity analysis since 2015 and has not put forth

elsewhere in this Reply Brief, 41 proposals were designed, submitted, and evaluated on their ability to reduce congestion on the AP South Reactive Interface. See OCA R.B., Section V.B.2. Accordingly, the evidence does not demonstrate that the IEC Project is the best alternative to address those related constraints, nor that it is necessary to address those constraints.

3. It is Appropriate to Consider State Requirements for Demand Response Programs and Renewable Energy Resources.

Transource asserts that OCA witness Crandall's consideration of state policy requirements in Virginia, Maryland, and the District of Columbia is flawed in several respects. Transource M.B. at 65. Transource asserts that the OCA has not presented any analysis or study demonstrating that the construction of these resources will reduce congestion on the AP South Reactive Interface and related constraints. Id. The Company also asserts that Mr. Crandall's forecasts are completely speculative in that he fails to predict what level of renewable resources will be constructed. Id. Lastly, Transource asserts that the Commission has previously denied attempts to include unproven renewable resources in the RTEP modeling, citing to Susquehanna-Roseland. Transource M.B. at 66.

First, it is not the OCA's burden to provide an analysis demonstrating what impacts non-transmission alternatives can have upon congestion. Rather, the OCA and its witness are demonstrating fundamental ways in which PJM failed to account for non-transmission alternatives. See pgs. 41-43, supra. Thus, the Company has not reasonably demonstrated that non-transmission alternatives are insufficient.

Moreover, there is evidence in this proceeding that demonstrates that reductions to PJM load and the construction of additional renewable generation resources can have substantial

any of this information in support of its claim. What is clear, however, is that contrary to PJM's forward-looking models, actual congestion on the AP South Reactive Interface has fallen to extremely low levels since 2014 and there is no indication that it will increase in the future.

impacts on the forecasted benefits of the IEC Project. For example, during PJM's most recent simulation in December 2019, PJM conducted a market efficiency sensitivity analysis assuming a 1 percent load decrease compared to forecasted levels. In that simulation, the benefit-cost ratio of the IEC Project, calculated pursuant to PJM's methodology, fell from 1.66 to 1.52. Transource St. AA3 at 3-4. In addition, as the OCA noted in its Main Brief, when potential future generation with an executed-FSA was excluded from PJM's model, the purported benefits of the IEC Project increased by approximately \$275 million. OCA M.B. at 56.

Lastly, the OCA submits that the Commission's decision in Susquehanna-Roseland is not dispositive of whether the Commission may consider other state policy initiatives. A request to construct a transmission project depends on the specific facts presented regarding each project and upon the future impacts or consequences within a broad context. TrAILCo Recommended Decision at *127, affirmed TrAILCo Order at *48. Indeed, the Commission found it appropriate for the Presiding Officers in the TrAILCo proceeding to consider alternative energy and demand side management initiatives. TrAILCo Recommended Decision at *129, affirmed TrAILCo Order at *48.

Accordingly, it was entirely appropriate for OCA witness Crandall to consider state policy initiatives in Virginia, Maryland, and the District of Columbia to adopt aggressive renewable energy guidelines and demand response programs. These resources and programs can have measurable impacts on PJM load and power flows over constrained regions. The Commission should likewise consider this information when making its determination.

4. Reductions in Energy and Peak Load Can Have Measureable Impacts on the Need for the IEC Project.

Transource asserts that reductions to overall energy and peak loads, as referenced by OCA witnesses, focus on short-term forecasts that are inconsistent with PJM's long-term planning

process and should not be considered. Transource M.B. at 69. Rather, the Company states that PJM's market efficiency analysis simulates all 8,760 hours in a year over a 15-year period to determine the benefits of the IEC Project and that the IEC Project has passed multiple simulations under a variety of sensitivity analysis. Transource M.B. at 69-70.

Contrary to Transource's arguments, reductions to peak load and overall energy usage have noted impacts on the forecasted benefits of the IEC Project. See pg. 45-46, supra. Thus, actual noted reductions to energy usage and peak loads over the past few years are directly relevant to the Commission's determination of 'need.' Moreover, as stated in the OCA's Main Brief, the evidence suggests that these trends are likely to continue in future years. OCA M.B. at 38-39.

F. ECONOMIC IMPACTS

The OCA addressed this issue in Section VI.F of its Main Brief and responded to the Company's additional arguments in more detail in Section V.B.4 of its Reply Brief. The OCA continues to assert that Transource's evidence of indirect economic benefits to Pennsylvania as a result of the construction of the IEC Project (1) are not updated to reflect the settlement configuration of the IEC Project, (2) do not tend to prove the necessity of the IEC Project, and (3) are insufficient in light of the permanent environmental harm that will occur if the IEC Project is constructed. See OCA M.B. at 99.

G. EMINENT DOMAIN

The OCA is not addressing this issue. The OCA's lack of discussion should not be interpreted as acceptance of Transource's position.

H. ZONING EXPEMPTIONS

The OCA is not addressing this issue. The OCA's lack of discussion should not be interpreted as acceptance of Transource's position.

VI. OTHER RELEVANT ISSUES

As additional justification for the IEC Project, Transource is contending that if the IEC Project is not constructed, it will result in several potential reliability violations occurring in 2023 at the earliest. Transource M.B. at 50-51. Accordingly, the Company asserts that the IEC Project provides reliability benefits.

As the OCA argued in its Main Brief, the Company's argument should be rejected by this Commission. OCA M.B. at 100-109. The IEC Project was not designed or intended to address reliability violations, nor were these purported reliability benefits raised in Transource's case-in-chief. OCA M.B. at 102-03. Furthermore, Transource witnesses have not classified this Project as a reliability project, indicating that the primary purpose of the IEC Project has not changed since its initial proposal. See Tr. at 2926; see also Transource St. 7-RJ-SUPP at 3. Accordingly, while Transource attempts to use these reliability benefits as additional justification for the IEC Project, it continues to shield itself from having to undergo more of the rigorous studies required for reliability projects by maintaining this is only a market efficiency project. See OCA M.B. at 103-04. For this reason, the Company's evidence of reliability benefits (1) rests on a subset of studies normally used to understand the full scope of potential future reliability violations, (2) has not been updated since 2018 to ensure that these potential future reliability violations are still present on the system, and (3) provides no evidence that the IEC Project is the most reasonable alternative to resolve these purported future reliability violations. See OCA M.B. at 103-108.

The OCA presents its response to the Company's reliability claims in more detail in its Main Brief. OCA M.B. at 100-109. However, to the extent Transource raises additional arguments, the OCA will address each in turn below.

Transource first asserts that if the Commission does not approve the IEC Project, as amended by the Settlement in this proceeding, PJM is required to develop solutions to all identified

reliability criteria violations to avoid ‘reliability consequences.’ Transource M.B. at 53. Citing to Transource witness Herling, the Company asserts that solutions for violations on 500 kV facilities are not typically small in scope or cost. Id. The OCA agrees that PJM has a process in place to deal with any remaining unresolved potential future reliability violations if the Commission does not approve the IEC Project. See OCA M.B. at 103-104. The Company’s contention that an alternative solution to these potential future reliability violations may be costly, however, is not supported by substantial evidence in the record. PJM has not reviewed a single alternative proposal or solution addressing these potential reliability violations. Thus, it is not known how much an alternative solution may cost. Moreover, there is evidence from OCA witness Lanzalotta and Mid-Atlantic Interstate Transmission, LLC (MAIT) that these problems can often be resolved by rebuilding the existing facilities that are identified as overloading in future years. OCA M.B. at 104-05. In fact, the Hunterstown-Lincoln 115 kV Transmission Line, which Transource asserts will experience potential future reliability violations in 2023, is being re-built at a higher capacity with very minimal permanent environmental impact at a cost of approximately \$7.21 million.³¹ Transource St. AA-2, Exh. SRH-AA2 at 15, 18. Accordingly, the Commission should reject the Company’s argument that alternative solutions may be costly.

The Company next argues that if an alternative solution is needed in the absence of the IEC Project it could not be constructed in time to resolve the potential future reliability violations in 2023. Transource M.B. at 53. That is, any alternative solution would have to be identified through PJM’s regional transmission expansion plan (RTEP) and approved by the state commission and

³¹ Moreover, just like with the Hunterstown-Lincoln 115 kV Rebuild and as testified Mr. Lanzalotta, even if the IEC Project were put in place, it is likely that the facilities that were identified as overloading during the 2018 Generation Deliverability test would have to be replaced soon anyway due to the age of the facilities. OCA St. 2-SSR at 12.

any approved project would not likely be placed into service until 2025 or 2026. Transource M.B. at 53.

The OCA submits that the Commission should reject Transource's argument. As noted above, PJM has not attempted to identify any alternative solutions to these potential future reliability violations. Having not reviewed any alternative proposals, the Company does not know how long it would take to place an alternative solution into service. Moreover, the OCA questions the Company's claim that an alternative proposal could not be placed into service prior to 2025 or 2026. For comparison, Transource witness Weber indicated that Transource could construct the original configuration of the IEC Project, including two new substations and two brand new 230 kV Transmission lines, within 12 months. Transource St. 1 at 14-15.

The OCA also continues to question the nature, scope, and extent of any potential future reliability violations that exist in the absence of the IEC Project. See OCA M.B. at 103-108. As only one generation deliverability test, a subset of PJM's reliability tests, was last performed in 2018, prior to the approval of the Hunterstown-Lincoln 115 kV Rebuild and Project 5E, the purported potential future reliability violations may no longer exist, or may be smaller in scope, such that any remaining issues could be resolved in a more targeted, optimized manner.

Lastly, the Company alleges that if the IEC Project is not approved or constructed in time to address the potential future reliability violations, PJM will have to implement operational protocols, such as load shedding, to avoid overloading the identified facilities. Transource M.B. at 54. The Commission should not find these arguments persuasive. The Company mischaracterizes the quoted text of witness Stephen Herling. Mr. Herling indicated that load shedding could be a possibility, not that it was guaranteed to occur. Tr. 2970. Moreover, as

indicated above, there are appropriate procedures that PJM can take to determine if these potential future reliability violations still exist and identify alternative solutions, if necessary.

VII. CONCLUSION

Transource failed to demonstrate that the proposed IEC Project is necessary or proper for the accommodation, convenience and safety of the public. This is a market efficiency project designed to alleviate congestion on the AP South Reactive Interface, an economic constraint where very little congestion currently exists. Under the Company's best estimates, the thirteen states that comprise PJM will experience a net reduction in wholesale power prices of only approximately \$32.5 million over a period of 15 years at the cost of approximately \$500 million over that same period of time. In Pennsylvania alone, ratepayers are estimated to experience a net increase of approximately \$400 million in wholesale power prices. To achieve these inadequate results, the Company is asking that Pennsylvania and its landowners burden their lands with permanent additional transmission infrastructure.

For all of the reasons above, the Office of Consumer Advocate respectfully requests that the Commission deny the Applications to construct the IEC Project.

Respectfully Submitted,

/s/Phillip D. Demanchick

Phillip D. Demanchick
Assistant Consumer Advocate
PA Attorney I.D. # 324761
E-Mail: PDemanchick@paoca.org

David T. Evrard
Assistant Consumer Advocate
PA Attorney I.D. # 33870
E-Mail: DEvrard@paoca.org

Darryl A. Lawrence
Senior Assistant Consumer Advocate
PA Attorney I.D. # 93682
E-Mail: DLawrence@paoca.org

Office of Consumer Advocate
555 Walnut Street
5th Floor, Forum Place
Harrisburg, PA 17101-1923
Phone: (717) 783-5048
Fax: (717) 783-7152

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Counsel for:
Tanya J. McCloskey
Acting Consumer Advocate