



PJM Interconnection, L.L.C.
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December 1, 2020

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Re: PJM Interconnection, L.L.C., Docket No. ER19-2105-000 and -00_
(2021 Informational Filing)

Dear Secretary Bose:

In accordance with the PJM Open Access Transmission Tariff (“Tariff”),¹ Schedule 7, section 11(E), as accepted by the Federal Energy Regulatory Commission (“Commission”) in its November 5, 2019 Order Accepting and Suspending Proposed Tariff Revisions and Establishing Hearing and Settlement Judge Procedures,² PJM Interconnection, L.L.C. (“PJM”) submits, as part of the annual updating process for the Border Yearly Charge (“BYC”), the attached 2021 BYC Workbook that contains the inputs and calculations used to determine the Border Yearly Charge and the BYC variance report as posted on the PJM website. The BYC Workbook is included herewith as Appendix A. PJM is submitting this filing for informational purposes.

¹ All capitalized terms that are not otherwise defined herein shall have the same meaning as they are defined in the Tariff, Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. or the Reliability Assurance Agreement among Load Serving Entities in the PJM Region.

² *PJM Interconnection, L.L.C.*, 169 FERC ¶ 61,095 at Ordering Paragraph A (Nov. 5, 2019) (“November 5 Order”) (accepting the Tariff revisions and suspending to become effective January 1, 2020, subject to refund).

I. DESCRIPTION OF INFORMATIONAL FILING

On June 11, 2019, the PJM Transmission Owners submitted, among other things, proposed revisions to the PJM Tariff to Schedule 7, Schedule 8 and Attachment H-A to replace the existing stated rates for both Point-to-Point Transmission Service to the border of PJM and Network Integration Transmission Service (“NITS”) for Non-Zone Network Load with a methodology for updating such rates on an annual basis beginning the calendar year 2020.³

Relevant to this informational filing is the BYC. The methodology for determining and updating the BYC and associated rates on an annual basis is set forth in the Tariff, Schedule 7, section 11. The methodology also applies to the maximum BYC under Schedule 8 and the rate for Non-Zone Service. The rate for service under each is calculated pursuant to Schedule 7.

The information necessary to calculate the BYC is taken from Tariff, Attachment H or the formula rate protocols set out in the relevant sections of Attachment H. More specifically, revenue requirements for PJM transmission owners with stated rates were taken directly from the rates stated in Attachment H and in effect on January 1, if approved by the Commission prior to the October 31, 2020. For PJM transmission owners with formula rates, PJM used the revenue requirement from each transmission owner’s most recent formula rate annual update information filed with the Commission or posted on the PJM website no later than October 31, 2020, and effective January 1, 2021.

Consistent with Tariff, Schedule 7, section 11(C), PJM posted on its website all of the inputs and calculations used to determine the BYC no later than December 1, 2020. The posting includes a variance report documenting any changes to the inputs used to calculate the updated

³ *Appalachian Power Co.*, Revisions to Tariff, Schedule 7 and 8 and Attachment H-A (Border Rate), Docket No. ER19-2105-000 (June 11, 2019) (“June 11 Filing”). Appendix A conforms to Exhibit C included in the June 11 Filing.

BYC from the then effective BYC. The updated BYC will go into effect on January 1, 2021, subject to refund, consistent with the November 5 Order. In addition, consistent with Tariff, Schedule 7, section 11(E), PJM is submitting this second informational filing to the Commission. This filing includes all the information posted on PJM's website relative to the BYC annual update.⁴

II. COMMUNICATIONS

Correspondence and communications with respect to this filing should be sent to the following persons:

Craig Glazer
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III. CONTENTS OF THIS FILING

This following is a list of documents included with this filing:

1. This transmittal letter; and
2. Appendix A - 2021 BYC Workbook.

⁴ June 11 Filing at 17 (This Appendix A conforms to Exhibit C included in the June 11 Filing).

IV. CONCLUSION

PJM respectfully requests the Commission accept this informational filing as responsive to its reporting requirements in accordance with Tariff, Schedule 7, section 11(E) and the Commission's November 5 Order.

Respectfully submitted,



By: _____

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CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document on those parties on the official Service List compiled by the Secretary in these proceedings.

Dated at Audubon, Pennsylvania this 1st day of December, 2020.

/s/ Pauline Foley
Pauline Foley
Associate General Counsel
PJM Interconnection, L.L.C.
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APPENDIX A

**Schedule 7 Long-Term Firm & Short-Term Firm
Point-To-Point Transmission Service Rate
(October 31, 2020 Data)**

| Point of Delivery | Yearly Charge (\$/MW-Yr) |
|--------------------------|---------------------------------|
| Border of PJM | \$63,045 |

| PJM Transmission Owner | | PJM OATT | Formula Rate | Start Of | Transmission Revenue Requirements (\$/Year) | | Revenue Credits (\$/Year) | | | |
|------------------------|--|----------------------|-------------------------|-----------|---|-----------------|---------------------------|--------------|---------------|---|
| | | NITS Rate Attachment | Filing Type | Rate Year | Border Rate TS | NITS | Schedule 12 | P2P TS | Non-Zone Load | Other Agreements For Transmission Service |
| AE Coop | Allegheny Electric Cooperative, Inc. | H-8 | Stated | N/A | \$2,584,702 | \$2,584,702 | \$0 | \$0 | \$0 | \$0 |
| AEC | Atlantic City Electric Company | H-1 | Formula | 6/1/2020 | \$126,033,475 | \$125,075,638 | \$0 | \$957,837 | \$0 | \$0 |
| AEP | AEP East Operating Companies | H-14 | Formula | 1/1/2021 | \$1,030,680,027 | \$988,705,401 | \$41,974,626 | \$0 | \$0 | \$0 |
| AEP | AEP East Transmission Companies | H-20 | Formula | 1/1/2021 | \$1,224,226,245 | \$1,076,305,686 | \$147,920,559 | \$0 | \$0 | \$0 |
| AMPT | AMP Transmission, LLC (ATSI) | H-32 | Formula | 1/1/2021 | \$4,333,451 | \$4,305,451 | \$0 | \$28,000 | \$0 | \$0 |
| APS | Allegheny Power | H-11 | Stated | N/A | \$128,000,000 | \$128,000,000 | \$0 | \$0 | \$0 | \$0 |
| ATSI | American Transmission Systems, Inc. | H-21 | Formula | 1/1/2021 | \$867,120,884 | \$827,673,490 | \$33,575,680 | \$5,606,007 | \$0 | \$265,707 |
| BGE | Baltimore Gas and Electric Company | H-2 | Formula | 6/1/2020 | \$211,430,716 | \$209,965,347 | \$0 | \$1,465,369 | \$0 | \$0 |
| ComEd | Commonwealth Edison Company | H-13 | Formula | 6/1/2020 | \$718,149,481 | \$718,149,481 | \$0 | \$0 | \$0 | \$0 |
| Dayton | The Dayton Power and Light Company | H-15 | Formula | 1/1/2021 | \$64,822,880 | \$62,576,238 | \$1,980,600 | \$266,042 | \$0 | \$0 |
| DEOK | Duke Energy Ohio and Duke Energy Kentucky | H-22 | Formula | 6/1/2020 | \$160,111,434 | \$159,235,526 | \$0 | \$875,908 | \$0 | \$0 |
| DL | Duquesne Light Company | H-17 | Formula | 6/1/2020 | \$142,211,787 | \$141,278,388 | \$0 | \$933,398 | \$0 | \$0 |
| Dominion | Virginia Electric and Power Company | H-16 | Formula | 1/1/2021 | \$1,248,247,568 | \$1,246,270,639 | \$0 | \$0 | \$0 | \$1,976,929 |
| DPL | Delmarva Power & Light Company | H-3 | Formula | 6/1/2020 | \$132,316,175 | \$131,185,124 | \$0 | \$1,131,051 | \$0 | \$0 |
| EKPC | East Kentucky Power Cooperative | H-24 | Formula | 6/1/2020 | \$67,231,689 | \$67,129,699 | \$0 | \$0 | \$0 | \$101,990 |
| JCPL | Jersey Central Power & Light Company | H-4 | Formula | 1/1/2021 | \$188,422,254 | \$165,360,691 | \$21,979,249 | \$1,082,314 | \$0 | \$0 |
| MAIT | Mid-Atlantic Interstate Transmission, LLC | H-28 | Formula | 1/1/2021 | \$315,047,802 | \$295,135,116 | \$18,189,712 | \$1,722,973 | \$0 | \$0 |
| NAEA | Essential Power Rock Springs, LLC | H-23 | Stated | N/A | \$1,089,401 | \$1,089,401 | \$0 | \$0 | \$0 | \$0 |
| ODEC | Old Dominion Electric Cooperative | H-3 | Formula | 6/1/2020 | \$4,041,933 | \$4,041,933 | \$0 | \$0 | \$0 | \$0 |
| OVEC | Ohio Valley Electric Corporation | H-31 | Stated | N/A | \$11,256,927 | \$11,256,927 | \$0 | \$0 | \$0 | \$0 |
| PATH | Potomac-Appalachian Transmission Highline, LLC | H-19 | Formula | 1/1/2021 | \$13,696,374 | \$0 | \$13,696,374 | \$0 | \$0 | \$0 |
| PECO | PECO Energy Company | H-7 | Formula | 6/1/2020 | \$161,855,397 | \$135,037,645 | \$25,739,263 | \$1,078,490 | \$0 | \$0 |
| PEPCO | Potomac Electric Power Company | H-9 | Formula | 6/1/2020 | \$157,676,529 | \$156,396,464 | \$0 | \$1,280,065 | \$0 | \$0 |
| PPL | PPL Electric Utilities Corporation | H-8 | Formula | 6/1/2020 | \$678,394,360 | \$586,051,405 | \$89,102,497 | \$3,240,458 | \$0 | \$0 |
| PSEG | Public Service Electric and Gas Company | H-10 | Formula | 1/1/2021 | \$1,657,668,896 | \$1,645,668,896 | \$0 | \$12,000,000 | \$0 | \$0 |
| RE | Rockland Electric Company | H-12 | Stated | N/A | \$16,833,707 | \$16,833,707 | \$0 | \$0 | \$0 | \$0 |
| SMECO | Southern Maryland Electric Cooperative, Inc. | H-9C | Stated | N/A | \$17,086,212 | \$17,086,212 | \$0 | \$0 | \$0 | \$0 |
| SRE | Silver Run Electric, LLC | H-27 | Formula | 1/1/2021 | \$23,622,243 | \$0 | \$23,622,243 | \$0 | \$0 | \$0 |
| TrAILCo | Trans-Allegheny Interstate Line Company | H-18 | Formula | 6/1/2020 | \$255,421,279 | \$0 | \$253,750,978 | \$1,670,301 | \$0 | \$0 |
| Transource | Transource Maryland, LLC | H-30 | Formula | 1/1/2021 | \$1,912,885 | \$0 | \$1,912,885 | \$0 | \$0 | \$0 |
| Transource | Transource Pennsylvania, LLC | H-29 | Formula | 1/1/2021 | \$10,546,377 | \$0 | \$10,546,377 | \$0 | \$0 | \$0 |
| Transource | Transource West Virginia, LLC | H-26 | Formula | 1/1/2021 | \$11,055,915 | \$0 | \$11,055,915 | \$0 | \$0 | \$0 |
| UGI | UGI Utilities, Inc | H-8 | Formula | 6/1/2020 | \$7,759,086 | \$7,759,086 | \$0 | \$0 | \$0 | \$0 |
| TOTAL | | | | | \$9,660,888,089 | \$8,930,158,293 | \$695,046,958 | \$33,338,212 | \$0 | \$2,344,626 |

| Responsible Zone | | Current Effective NSPLs (MW) |
|-------------------|---|---------------------------------|
| AEC | Atlantic City Electric Company | 2634.5 |
| AEP | AEP East Zone | 21614.9 |
| APS | Allegheny Power | 8637.6 |
| ATSI | American Transmission Systems, Inc. | 12465.2 |
| BGE | Baltimore Gas & Electric Company | 6700.3 |
| ComEd | Commonwealth Edison Company | 20220.0 |
| Dayton | The Dayton Power & Light Company | 3308.8 |
| DEOK | Duke Energy Ohio, Inc. & Duke Energy Kentucky, Inc. | 4975.0 |
| DL | Duquesne Light Company | 2667.5 |
| Dominion | Virginia Electric & Power Company | 20060.6 |
| DPL | Delmarva Power & Light Company | 4085.6 |
| EKPC | East Kentucky Power Cooperative, Inc. | 2719.7 |
| JCPL | Jersey Central Power & Light Company | 5903.2 |
| ME | Metropolitan Edison Company | 2976.3 |
| OVEC | Ohio Valley Electric Cooperative | 108.0 |
| PECO | PECO Energy Company | 8147.9 |
| PENELEC | Pennsylvania Electric Company | 2911.3 |
| PEPCO | Potomac Electric Power Company | 5886.6 |
| PPL | PPL Electric Utilities Corporation | 7260.0 |
| PSEG | Public Service Electric & Gas Company | 9557.3 |
| RE | Rockland Electric Company | 397.5 |
| TOTAL Denominator | | 153,238 |

| PJM Transmission Owner | | Transmission Revenue Requirements (\$/Year)* | Revenue Credits (\$/Year)* | | | |
|------------------------|--|---|------------------------------------|---------------------------------------|--------------------------|---|
| | | NITS | Schedule 12 | P2P TS | Non-Zone Load | Other Agreements For Transmission Service |
| AE Coop | Allegheny Electric Cooperative, Inc. | https://agreements.pjm.com/oatt/18396 | N/A | N/A | N/A | N/A |
| AEC | Atlantic City Electric Company | ATT H-1A: Ln172 | N/A | 3 - Revenue Credits: Ln5 | 3 - Revenue Credits: Ln4 | N/A |
| AEP | AEP East Operating Companies | Zonal Rates: Ln12 Total | Zonal Rates: Ln5 Total | N/A | N/A | N/A |
| AEP | AEP East Transmission Companies | TransCo PJM Zonal Rates: Ln12 Total | TransCo PJM Zonal Rates: Ln5 Total | N/A | N/A | N/A |
| AMPT | AMP Transmission, LLC (ATSI) | Attachment H-32A: Ln17 | N/A | H-32A-WP02 - Revenue Credits: Ln12 | N/A | N/A |
| APS | Allegheny Power | https://agreements.pjm.com/oatt/18406 | N/A | N/A | N/A | N/A |
| ATSI | American Transmission Systems, Inc. | Attachment H-21-A ATSI: Ln7 | Appendix D-TEC: Pg2, Sum Col12 | Attachment H-21-A ATSI: Ln3 | N/A | Attachment H-21-A ATSI: Ln5a |
| BGE | Baltimore Gas and Electric Company | ATT H-2A: Ln171 | N/A | 3 - Revenue Credits: Ln5 | 3 - Revenue Credits: Ln4 | N/A |
| ComEd | Commonwealth Edison Company | Appendix A: Ln172 | N/A | 3 - Revenue Credits: Ln6 | 3 - Revenue Credits: Ln5 | N/A |
| Dayton | The Dayton Power and Light Company | ATT H-15A: Ln190 | ATT H-15A: Ln 188 | 3 - Revenue Credits: Ln20 | N/A | N/A |
| DEOK | Duke Energy Ohio and Duke Energy Kentucky | DEOK: Ln7 | N/A | DEOK: Ln3 | N/A | N/A |
| DL | Duquesne Light Company | Appendix A: Ln167 | N/A | 3 - Revenue Credits: Row 58 | N/A | N/A |
| Dominion | Virginia Electric and Power Company | Appendix A: Ln168 * 1000 | N/A | ATT3 - Revenue Credits: Ln5 * 1000 | N/A | ATT3 - Revenue Credits: Ln4 * 1000 |
| DPL | Delmarva Power & Light Company | ATT H-3D: Ln172 | N/A | 3 - Revenue Credits: Ln5 | 3 - Revenue Credits: Ln4 | N/A |
| EKPC | East Kentucky Power Cooperative | EKPC: Ln7 | N/A | N/A | N/A | EKPC: Ln4 |
| JCPL | Jersey Central Power & Light Company | ATT H-4A: Ln10 | Attachment 11 - TEC: Pg2, Sum Col | ATT H-4A: Ln 4 | N/A | N/A |
| MAIT | Mid-Atlantic Interstate Transmission, LLC | Attachment H-28A MAIT: Ln10 | Attachment 11 - TEC: Pg2, Sum Col | Attachment 21 - Revenue Credits: Ln3a | N/A | N/A |
| NAEA | Essential Power Rock Springs, LLC | https://agreements.pjm.com/oatt/23736 | N/A | N/A | N/A | N/A |
| ODEC | Old Dominion Electric Cooperative | ATT H-3F: Ln172 | N/A | 3 - Revenue Credits: Ln5 | 3 - Revenue Credits: Ln4 | N/A |
| OVEC | Ohio Valley Electric Corporation | https://agreements.pjm.com/oatt/31906 | N/A | N/A | N/A | N/A |
| PATH | Potomac-Appalachian Transmission Highline, LLC | N/A | Attachment H-19A: Ln6 Total | N/A | N/A | N/A |
| PECO | PECO Energy Company | Attachment H-7: Ln9 | Attachment H-7: Ln6 | 5A - Revenue Credits: Ln5 | N/A | N/A |
| PEPCO | Potomac Electric Power Company | ATT H-9A: Ln172 | N/A | 3 - Revenue Credits: Ln5 | 3 - Revenue Credits: Ln4 | N/A |
| PPL | PPL Electric Utilities Corporation | Appendix A: Ln148 | 3 - Revenue Credits: Ln3 | 3 - Revenue Credits: Ln6 | 3 - Revenue Credits: Ln5 | N/A |
| PSEG | Public Service Electric and Gas Company | Appendix A: Ln164 | N/A | 3 - Revenue Credits: Ln6 | 3 - Revenue Credits: Ln5 | N/A |
| RE | Rockland Electric Company | https://agreements.pjm.com/oatt/18408 | N/A | N/A | N/A | N/A |
| SMECO | Southern Maryland Electric Cooperative, Inc. | https://agreements.pjm.com/oatt/30388 | N/A | N/A | N/A | N/A |
| SRE | Silver Run Electric, LLC | N/A | Attachment H-27A: Ln9 | N/A | N/A | N/A |
| TrAILCo | Trans-Allegheny Interstate Line Company | N/A | Appendix A: Ln150 | 3 - Revenue Credits: Ln5 | 3 - Revenue Credits: Ln4 | N/A |
| Transource | Transource Maryland, LLC | N/A | Attachment H-30A: Ln10 | N/A | N/A | N/A |
| Transource | Transource Pennsylvania, LLC | N/A | Attachment H-29A: Ln10 | N/A | N/A | N/A |
| Transource | Transource West Virginia, LLC | N/A | Attachment H-26: Ln9 | N/A | N/A | N/A |
| UGI | UGI Utilities, Inc | Attachment H-8C: Ln171 | N/A | Attachment 3: Ln4 | N/A | N/A |

* All endnotes either refer to a hyperlink or to a location within the Transmission Owner's Formula Rate filing.

**Schedule 7 Long-Term Firm & Short-Term Firm
Point-To-Point Transmission Service Rate
Change**

| Point of Delivery | Yearly Charge (\$/MW-Yr) |
|--------------------------|---------------------------------|
| Border of PJM | \$7,430 |

| PJM Transmission Owner | | PJM OATT | Formula Rate | Start Of | Transmission Revenue Requirements (\$/Year) | | Revenue Credits (\$/Year) | | | |
|------------------------|--|----------------------|-------------------------|-----------|---|----------------------|---------------------------|--------------------|---------------|-----------------------------------|
| | | NITS Rate Attachment | Filing Type | Rate Year | Border Rate TS | NITS | Schedule 12 | P2P TS | Non-Zone Load | Other Agreements For Transmission |
| AE Coop | Allegheny Electric Cooperative, Inc. | H-8 | Stated | N/A | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| AEC | Atlantic City Electric Company | H-1 | Formula | 6/1/2020 | -\$20,335,110 | -\$20,480,283 | \$0 | \$145,173 | \$0 | \$0 |
| AEP | AEP East Operating Companies | H-14 | Formula | 1/1/2021 | \$121,124,737 | \$117,368,763 | \$3,755,973 | \$0 | \$0 | \$0 |
| AEP | AEP East Transmission Companies | H-20 | Formula | 1/1/2021 | \$151,755,664 | \$140,772,266 | \$10,983,398 | \$0 | \$0 | \$0 |
| AMPT | AMP Transmission, LLC (ATSI) | H-32 | Formula | 1/1/2021 | \$2,539,038 | \$2,520,738 | \$0 | \$18,300 | \$0 | \$0 |
| APS | Allegheny Power | H-11 | Stated | N/A | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| ATSI | American Transmission Systems, Inc. | H-21 | Formula | 1/1/2021 | \$105,289,627 | \$106,815,379 | -\$3,572,071 | \$2,048,139 | \$0 | -\$1,820 |
| BGE | Baltimore Gas and Electric Company | H-2 | Formula | 6/1/2020 | \$12,285,000 | \$12,095,110 | \$0 | \$189,890 | \$0 | \$0 |
| ComEd | Commonwealth Edison Company | H-13 | Formula | 6/1/2020 | \$13,431,828 | \$13,431,828 | \$0 | \$0 | \$0 | \$0 |
| Dayton | The Dayton Power and Light Company | H-15 | Formula | 1/1/2021 | \$26,937,544 | \$24,690,902 | \$1,980,600 | \$266,042 | \$0 | \$0 |
| DEOK | Duke Energy Ohio and Duke Energy Kentucky | H-22 | Formula | 6/1/2020 | \$25,110,889 | \$24,918,995 | \$0 | \$191,894 | \$0 | \$0 |
| DL | Duquesne Light Company | H-17 | Formula | 6/1/2020 | \$3,879,439 | \$3,764,009 | \$0 | \$115,431 | \$0 | \$0 |
| Dominion | Virginia Electric and Power Company | H-16 | Formula | 1/1/2021 | \$238,894,236 | \$238,357,121 | \$0 | \$0 | \$0 | \$537,115 |
| DPL | Delmarva Power & Light Company | H-3 | Formula | 6/1/2020 | -\$43,644,521 | -\$43,889,840 | \$0 | \$245,319 | \$0 | \$0 |
| EKPC | East Kentucky Power Cooperative | H-24 | Formula | 6/1/2020 | -\$25,128,253 | -\$25,094,976 | \$0 | \$0 | \$0 | -\$33,277 |
| JCPL | Jersey Central Power & Light Company | H-4 | Formula | 1/1/2021 | \$30,795,208 | \$30,360,691 | -\$647,797 | \$1,082,314 | \$0 | \$0 |
| MAIT | Mid-Atlantic Interstate Transmission, LLC | H-28 | Formula | 1/1/2021 | \$71,054,542 | \$72,853,734 | -\$2,878,008 | \$1,078,816 | \$0 | \$0 |
| NAEA | Essential Power Rock Springs, LLC | H-23 | Stated | N/A | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| ODEC | Old Dominion Electric Cooperative | H-3 | Formula | 6/1/2020 | -\$197,892 | -\$197,892 | \$0 | \$0 | \$0 | \$0 |
| OVEC | Ohio Valley Electric Corporation | H-31 | Stated | N/A | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| PATH | Potomac-Appalachian Transmission Highline, LLC | H-19 | Formula | 1/1/2021 | \$14,388,234 | \$0 | \$14,388,234 | \$0 | \$0 | \$0 |
| PECO | PECO Energy Company | H-7 | Formula | 6/1/2020 | -\$35,626,184 | -\$27,842,494 | -\$7,934,799 | \$151,109 | \$0 | \$0 |
| PEPCO | Potomac Electric Power Company | H-9 | Formula | 6/1/2020 | -\$43,456,074 | -\$43,717,928 | \$0 | \$261,854 | \$0 | \$0 |
| PPL | PPL Electric Utilities Corporation | H-8 | Formula | 6/1/2020 | \$71,853,047 | \$73,547,304 | -\$2,429,395 | \$735,138 | \$0 | \$0 |
| PSEG | Public Service Electric and Gas Company | H-10 | Formula | 1/1/2021 | \$121,171,088 | \$119,371,088 | \$0 | \$1,800,000 | \$0 | \$0 |
| RE | Rockland Electric Company | H-12 | Stated | N/A | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| RMU | Rochelle Municipal Utilities | Removed | N/A | N/A | -\$2,291,658 | -\$2,291,658 | \$0 | \$0 | \$0 | \$0 |
| SMECO | Southern Maryland Electric Cooperative, Inc. | H-9C | Stated | N/A | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| SRE | Silver Run Electric, LLC | H-27 | Formula | 1/1/2021 | \$23,622,243 | \$0 | \$23,622,243 | \$0 | \$0 | \$0 |
| TrAILCo | Trans-Allegheny Interstate Line Company | H-18 | Formula | 6/1/2020 | \$2,616,657 | \$0 | \$2,381,815 | \$234,842 | \$0 | \$0 |
| Transource | Transource Maryland, LLC | H-30 | Formula | 1/1/2021 | \$300,111 | \$0 | \$300,111 | \$0 | \$0 | \$0 |
| Transource | Transource Pennsylvania, LLC | H-29 | Formula | 1/1/2021 | \$5,336,778 | \$0 | \$5,336,778 | \$0 | \$0 | \$0 |
| Transource | Transource West Virginia, LLC | H-26 | Formula | 1/1/2021 | \$621,265 | \$0 | \$621,265 | \$0 | \$0 | \$0 |
| UGI | UGI Utilities, Inc | H-8 | Formula | 6/1/2020 | \$669,086 | \$708,646 | \$0 | -\$39,561 | \$0 | \$0 |
| TOTAL | | | | | \$872,996,567 | \$818,061,503 | \$45,908,346 | \$8,524,699 | \$0 | \$502,019 |

| Responsible Zone | | Current Effective NSPLs (MW) |
|-------------------|---|---------------------------------|
| AEC | Atlantic City Electric Company | -102.8 |
| AEP | AEP East Zone | -883.0 |
| APS | Allegheny Power | -958.5 |
| ATSI | American Transmission Systems, Inc. | -101.6 |
| BGE | Baltimore Gas & Electric Company | -5.4 |
| ComEd | Commonwealth Edison Company | -728.7 |
| Dayton | The Dayton Power & Light Company | 50.2 |
| DEOK | Duke Energy Ohio, Inc. & Duke Energy Kentucky, Inc. | -76.6 |
| DL | Duquesne Light Company | 5.6 |
| Dominion | Virginia Electric & Power Company | 130.1 |
| DPL | Delmarva Power & Light Company | -12.2 |
| EKPC | East Kentucky Power Cooperative, Inc. | -354.4 |
| JCPL | Jersey Central Power & Light Company | -153.9 |
| ME | Metropolitan Edison Company | -10.0 |
| OVEC | Ohio Valley Electric Cooperative | -16.0 |
| PECO | PECO Energy Company | -280.4 |
| PENELEC | Pennsylvania Electric Company | -103.7 |
| PEPCO | Potomac Electric Power Company | -304.1 |
| PPL | PPL Electric Utilities Corporation | -678.8 |
| PSEG | Public Service Electric & Gas Company | -195.2 |
| RE | Rockland Electric Company | 4.4 |
| TOTAL Denominator | | -4,775 |

| PJM Transmission Owner | | Transmission Revenue Requirements (\$/Year)* | Revenue Credits (\$/Year)* | | | |
|------------------------|--|--|-------------------------------|-----------------------------|---------------|---|
| | | NITS | Schedule 12 | P2P TS | Non-Zone Load | Other Agreements For Transmission Service |
| AE Coop | Allegheny Electric Cooperative, Inc. | | | | | |
| AEC | Atlantic City Electric Company | | | | | |
| AEP | AEP East Operating Companies | | | | | |
| AEP | AEP East Transmission Companies | | | | | |
| AMPT | AMP Transmission, LLC (ATSI) | | | | | |
| APS | Allegheny Power | | | | | |
| ATSI | American Transmission Systems, Inc. | | Appendix D-TEC: Pg2, Sum Col1 | Attachment H-21-A ATSI: Ln3 | | |
| BGE | Baltimore Gas and Electric Company | | | | | |
| ComEd | Commonwealth Edison Company | | | | | |
| Dayton | The Dayton Power and Light Company | ATT H-15A: Ln190 | ATT H-15A: Ln 188 | 3 - Revenue Credits: Ln20 | | |
| DEOK | Duke Energy Ohio and Duke Energy Kentucky | | | | | |
| DL | Duquesne Light Company | | | | | |
| Dominion | Virginia Electric and Power Company | | | | | |
| DPL | Delmarva Power & Light Company | | | | | |
| EKPC | East Kentucky Power Cooperative | | | | | |
| JCPL | Jersey Central Power & Light Company | ATT H-4A: Ln10 | Attachment 11 - TEC: Pg2, Sum | ATT H-4A: Ln 4 | | |
| MAIT | Mid-Atlantic Interstate Transmission, LLC | | Attachment 11 - TEC: Pg2, Sum | | | |
| NAEA | Essential Power Rock Springs, LLC | | | | | |
| ODEC | Old Dominion Electric Cooperative | | | | | |
| OVEC | Ohio Valley Electric Corporation | | | | | |
| PATH | Potomac-Appalachian Transmission Highline, LLC | | | | | |
| PECO | PECO Energy Company | | | | | |
| PEPCO | Potomac Electric Power Company | | | | | |
| PPL | PPL Electric Utilities Corporation | | | | | |
| PSEG | Public Service Electric and Gas Company | | | | | |
| RE | Rockland Electric Company | | | | | |
| RMU | Rochelle Municipal Utilities | Removed | Removed | Removed | Removed | Removed |
| SMECO | Southern Maryland Electric Cooperative, Inc. | | | | | |
| SRE | Silver Run Electric, LLC | | Attachment H-27A: Ln9 | | | |
| TrAILCo | Trans-Allegheny Interstate Line Company | | | | | |
| Transource | Transource Maryland, LLC | | | | | |
| Transource | Transource Pennsylvania, LLC | | | | | |
| Transource | Transource West Virginia, LLC | | | | | |
| UGI | UGI Utilities, Inc | | | | | |

* All endnotes either refer to a hyperlink or to a location within the Transmission Owner's Formula Rate filing.

**Schedule 7 Long-Term Firm & Short-Term Firm
Point-To-Point Transmission Service Rate
(October 31, 2019 Data)***

| Point of Delivery | Yearly Charge (\$/MW-Yr) |
|--------------------------|---------------------------------|
| Border of PJM | \$55,615 |

- * On 12/20/2019 the current effective NSPLs were modified from those posted in the 12/1/2019 BYC Workbook as follows.
- The ATSI zone NSPL was reduced by 5.2 MW from 12,572.0 MW to 12,566.8 MW
 - The AEP zone NSPL was reduced by 1.8 MW from 22,499.7 MW to 22,497.9 MW

| PJM Transmission Owner | | PJM OATT | Formula Rate | Start Of | Transmission Revenue Requirements (\$/Year) | | Revenue Credits (\$/Year) | | | |
|------------------------|--|----------------------|-------------------------|-----------|---|------------------------|---------------------------|---------------------|---------------|-----------------------------------|
| | | NITS Rate Attachment | Filing Type | Rate Year | Border Rate TS | NITS | Schedule 12 | P2P TS | Non-Zone Load | Other Agreements For Transmission |
| AE Coop | Allegheny Electric Cooperative, Inc. | H-8 | Stated | N/A | \$2,584,702 | \$2,584,702 | \$0 | \$0 | \$0 | \$0 |
| AEC | Atlantic City Electric Company | H-1 | Formula | 6/1/2019 | \$146,368,585 | \$145,555,921 | \$0 | \$812,664 | \$0 | \$0 |
| AEP | AEP East Operating Companies | H-14 | Formula | 1/1/2020 | \$909,555,290 | \$871,336,638 | \$38,218,653 | \$0 | \$0 | \$0 |
| AEP | AEP East Transmission Companies | H-20 | Formula | 1/1/2020 | \$1,072,470,581 | \$935,533,420 | \$136,937,161 | \$0 | \$0 | \$0 |
| AMPT | AMP Transmission, LLC | H-32 | Formula | 1/1/2020 | \$1,794,413 | \$1,784,713 | \$0 | \$9,700 | \$0 | \$0 |
| APS | Allegheny Power | H-11 | Stated | N/A | \$128,000,000 | \$128,000,000 | \$0 | \$0 | \$0 | \$0 |
| ATSI | American Transmission Systems, Inc. | H-21 | Formula | 1/1/2020 | \$761,831,257 | \$720,858,111 | \$37,147,752 | \$3,557,868 | \$0 | \$267,527 |
| BGE | Baltimore Gas and Electric Company | H-2 | Formula | 6/1/2019 | \$199,145,716 | \$197,870,237 | \$0 | \$1,275,479 | \$0 | \$0 |
| ComEd | Commonwealth Edison Company | H-13 | Formula | 6/1/2019 | \$704,717,653 | \$704,717,653 | \$0 | \$0 | \$0 | \$0 |
| Dayton | The Dayton Power and Light Company | H-15 | Stated | N/A | \$37,885,336 | \$37,885,336 | \$0 | \$0 | \$0 | \$0 |
| DEOK | Duke Energy Ohio and Duke Energy Kentucky | H-22 | Formula | 6/1/2019 | \$135,000,545 | \$134,316,531 | \$0 | \$684,014 | \$0 | \$0 |
| DL | Duquesne Light Company | H-17 | Formula | 6/1/2019 | \$138,332,347 | \$137,514,380 | \$0 | \$817,968 | \$0 | \$0 |
| Dominion | Virginia Electric and Power Company | H-16 | Formula | 1/1/2020 | \$1,009,353,332 | \$1,007,913,518 | \$0 | \$0 | \$0 | \$1,439,814 |
| DPL | Delmarva Power & Light Company | H-3 | Formula | 6/1/2019 | \$175,960,696 | \$175,074,964 | \$0 | \$885,732 | \$0 | \$0 |
| EKPC | East Kentucky Power Cooperative | H-24 | Formula | 6/1/2019 | \$92,359,942 | \$92,224,675 | \$0 | \$0 | \$0 | \$135,266 |
| JCPL | Jersey Central Power & Light Company | H-4 | Stated | N/A | \$157,627,046 | \$135,000,000 | \$22,627,046 | \$0 | \$0 | \$0 |
| MAIT | Mid-Atlantic Interstate Transmission, LLC | H-28 | Formula | 1/1/2020 | \$243,993,260 | \$222,281,382 | \$21,067,720 | \$644,157 | \$0 | \$0 |
| NAEA | Essential Power Rock Springs, LLC | H-23 | Stated | N/A | \$1,089,401 | \$1,089,401 | \$0 | \$0 | \$0 | \$0 |
| ODEC | Old Dominion Electric Cooperative | H-3 | Formula | 6/1/2019 | \$4,239,825 | \$4,239,825 | \$0 | \$0 | \$0 | \$0 |
| OVEC | Ohio Valley Electric Corporation | H-31 | Stated | N/A | \$11,256,927 | \$11,256,927 | \$0 | \$0 | \$0 | \$0 |
| PATH | Potomac-Appalachian Transmission Highline, LLC | H-19 | Formula | 1/1/2020 | -\$691,860 | \$0 | -\$691,860 | \$0 | \$0 | \$0 |
| PECO | PECO Energy Company | H-7 | Formula | 6/1/2019 | \$197,481,581 | \$162,880,139 | \$33,674,061 | \$927,381 | \$0 | \$0 |
| PEPCO | Potomac Electric Power Company | H-9 | Formula | 6/1/2019 | \$201,132,603 | \$200,114,392 | \$0 | \$1,018,211 | \$0 | \$0 |
| PPL | PPL Electric Utilities Corporation | H-8 | Formula | 6/1/2019 | \$606,541,313 | \$512,504,101 | \$91,531,892 | \$2,505,320 | \$0 | \$0 |
| PSEG | Public Service Electric and Gas Company | H-10 | Formula | 1/1/2020 | \$1,536,497,808 | \$1,526,297,808 | \$0 | \$10,200,000 | \$0 | \$0 |
| RE | Rockland Electric Company | H-12 | Stated | N/A | \$16,833,707 | \$16,833,707 | \$0 | \$0 | \$0 | \$0 |
| RMU | Rochelle Municipal Utilities | H-25 | Formula | 6/1/2019 | \$2,291,658 | \$2,291,658 | \$0 | \$0 | \$0 | \$0 |
| SMECO | Southern Maryland Electric Cooperative, Inc. | H-9C | Stated | N/A | \$17,086,212 | \$17,086,212 | \$0 | \$0 | \$0 | \$0 |
| SRE* | Silver Run Electric, LLC | N/A | N/A | N/A | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| TrAILCo | Trans-Allegheny Interstate Line Company | H-18 | Formula | 6/1/2019 | \$252,804,622 | \$0 | \$251,369,163 | \$1,435,459 | \$0 | \$0 |
| Transource | Transource Maryland, LLC | H-30 | Formula | 1/1/2020 | \$1,612,775 | \$0 | \$1,612,775 | \$0 | \$0 | \$0 |
| Transource | Transource Pennsylvania, LLC | H-29 | Formula | 1/1/2020 | \$5,209,599 | \$0 | \$5,209,599 | \$0 | \$0 | \$0 |
| Transource | Transource West Virginia, LLC | H-26 | Formula | 1/1/2020 | \$10,434,650 | \$0 | \$10,434,650 | \$0 | \$0 | \$0 |
| UGI | UGI Utilities, Inc | H-8 | Formula | 6/1/2019 | \$7,090,000 | \$7,050,440 | \$0 | \$39,561 | \$0 | \$0 |
| TOTAL | | | | | \$8,787,891,522 | \$8,112,096,790 | \$649,138,611 | \$24,813,513 | \$0 | \$1,842,608 |

* Revenues not included in calculation because not a signatory to CTOA on October 31, 2019

| Responsible Zone | | Current Effective NSPLs (MW) |
|--------------------------|---|---------------------------------|
| AEC | Atlantic City Electric Company | 2737.3 |
| AEP | AEP East Zone | 22497.9 |
| APS | Allegheny Power | 9596.1 |
| ATSI | American Transmission Systems, Inc. | 12566.8 |
| BGE | Baltimore Gas & Electric Company | 6705.7 |
| ComEd | Commonwealth Edison Company | 20948.7 |
| Dayton | The Dayton Power & Light Company | 3258.6 |
| DEOK | Duke Energy Ohio, Inc. & Duke Energy Kentucky, Inc. | 5051.6 |
| DL | Duquesne Light Company | 2661.9 |
| Dominion | Virginia Electric & Power Company | 19930.5 |
| DPL | Delmarva Power & Light Company | 4097.8 |
| EKPC | East Kentucky Power Cooperative, Inc. | 3074.1 |
| JCPL | Jersey Central Power & Light Company | 6057.1 |
| ME | Metropolitan Edison Company | 2986.3 |
| OVEC | Ohio Valley Electric Cooperative | 124.0 |
| PECO | PECO Energy Company | 8428.3 |
| PENELEC | Pennsylvania Electric Company | 3015.0 |
| PEPCO | Potomac Electric Power Company | 6190.7 |
| PPL | PPL Electric Utilities Corporation | 7938.8 |
| PSEG | Public Service Electric & Gas Company | 9752.5 |
| RE | Rockland Electric Company | 393.1 |
| TOTAL Denominator | | 158,013 |

| PJM Transmission Owner | | Transmission Revenue Requirements (\$/Year)* | Revenue Credits (\$/Year)* | | | |
|------------------------|--|---|---|--|-------------------------------|---|
| | | | Schedule 12 | P2P TS | Non-Zone Load | Other Agreements For Transmission Service |
| AE Coop | Allegheny Electric Cooperative, Inc. | https://agreements.pjm.com/oatt/18396 | N/A | N/A | N/A | N/A |
| AEC | Atlantic City Electric Company | ATT H-1A: Ln172 | N/A | 3 - Revenue Credits: Ln5 | 3 - Revenue Credits: Ln4 | N/A |
| AEP | AEP East Operating Companies | Zonal Rates: Ln12 Total | Zonal Rates: Ln5 Total | N/A | N/A | N/A |
| AEP | AEP East Transmission Companies | TransCo PJM Zonal Rates: Ln12 Total | TransCo PJM Zonal Rates: Ln5 Total | N/A | N/A | N/A |
| AMPT | AMP Transmission, LLC | Attachment H-32A: Ln17 | N/A | H-32A-WP02 - Revenue Credits: Ln12 | N/A | N/A |
| APS | Allegheny Power | https://agreements.pjm.com/oatt/18406 | N/A | N/A | N/A | N/A |
| ATSI | American Transmission Systems, Inc. | Attachment H-21-A ATSI: Ln7 | Attachment H-21-A ATSI: Ln5d | Attachment H-21-A ATSI: Ln3 + Appendix | N/A | Attachment H-21-A ATSI: Ln5a |
| BGE | Baltimore Gas and Electric Company | ATT H-2A: Ln171 | N/A | 3 - Revenue Credits: Ln5 | 3 - Revenue Credits: Ln4 | N/A |
| ComEd | Commonwealth Edison Company | Appendix A: Ln172 | N/A | 3 - Revenue Credits: Ln6 | 3 - Revenue Credits: Ln5 | N/A |
| Dayton | The Dayton Power and Light Company | https://www.pjm.com/-/media/markets-ops/settlements/dayton | N/A | N/A | N/A | N/A |
| DEOK | Duke Energy Ohio and Duke Energy Kentucky | DEOK: Ln7 | N/A | DEOK: Ln3 | N/A | N/A |
| DL | Duquesne Light Company | Appendix A: Ln167 | N/A | 3 - Revenue Credits: Row 58 | N/A | N/A |
| Dominion | Virginia Electric and Power Company | Appendix A: Ln168 * 1000 | N/A | ATT3 - Revenue Credits: Ln5 * 1000 | N/A | ATT3 - Revenue Credits: Ln4 * 1000 |
| DPL | Delmarva Power & Light Company | ATT H-3D: Ln172 | N/A | 3 - Revenue Credits: Ln5 | 3 - Revenue Credits: Ln4 | N/A |
| EKPC | East Kentucky Power Cooperative | EKPC: Ln7 | N/A | N/A | N/A | EKPC: Ln4 |
| JCPL | Jersey Central Power & Light Company | https://agreements.pjm.com/oatt/18390 | https://pjm.com/-/media/committees | N/A | N/A | N/A |
| MAIT | Mid-Atlantic Interstate Transmission, LLC | Attachment H-28A MAIT: Ln10 | Attachment H-28A MAIT: Ln7 + Attachment | Attachment 21 - Revenue Credits: Ln3a | N/A | N/A |
| NAEA | Essential Power Rock Springs, LLC | https://agreements.pjm.com/oatt/23736 | N/A | N/A | N/A | N/A |
| ODEC | Old Dominion Electric Cooperative | ATT H-3F: Ln172 | N/A | 3 - Revenue Credits: Ln5 | 3 - Revenue Credits: Ln4 | N/A |
| OVEC | Ohio Valley Electric Corporation | https://agreements.pjm.com/oatt/31906 | N/A | N/A | N/A | N/A |
| PATH | Potomac-Appalachian Transmission Highline, LLC | N/A | Attachment H-19A: Ln6 Total | N/A | N/A | N/A |
| PECO | PECO Energy Company | Attachment H-7: Ln9 | Attachment H-7: Ln6 | 5A - Revenue Credits: Ln5 | N/A | N/A |
| PEPCO | Potomac Electric Power Company | ATT H-9A: Ln172 | N/A | 3 - Revenue Credits: Ln5 | 3 - Revenue Credits: Ln4 | N/A |
| PPL | PPL Electric Utilities Corporation | Appendix A: Ln148 | 3 - Revenue Credits: Ln3 | 3 - Revenue Credits: Ln6 | 3 - Revenue Credits: Ln5 | N/A |
| PSEG | Public Service Electric and Gas Company | Appendix A: Ln164 | N/A | 3 - Revenue Credits: Ln6 | 3 - Revenue Credits: Ln5 | N/A |
| RE | Rockland Electric Company | https://agreements.pjm.com/oatt/18408 | N/A | N/A | N/A | N/A |
| RMU | Rochelle Municipal Utilities | Appendix A: Ln172 | N/A | Revenue Credits - Att. 3: Ln6 | Revenue Credits - Att. 3: Ln5 | N/A |
| SMECO | Southern Maryland Electric Cooperative, Inc. | https://agreements.pjm.com/oatt/30388 | N/A | N/A | N/A | N/A |
| SRE | Silver Run Electric, LLC | N/A | N/A | N/A | N/A | N/A |
| TRAILCo | Trans-Allegheny Interstate Line Company | N/A | Appendix A: Ln150 | 3 - Revenue Credits: Ln5 | 3 - Revenue Credits: Ln4 | N/A |
| Transource | Transource Maryland, LLC | N/A | Attachment H-30A: Ln10 | N/A | N/A | N/A |
| Transource | Transource Pennsylvania, LLC | N/A | Attachment H-29A: Ln10 | N/A | N/A | N/A |
| Transource | Transource West Virginia, LLC | N/A | Attachment H-26: Ln9 | N/A | N/A | N/A |
| UGI | UGI Utilities, Inc | Attachment H-8C: Ln171 | N/A | Attachment 3: Ln4 | N/A | N/A |

* All endnotes either refer to a hyperlink or to a location within the Transmission Owner's Formula Rate filing.