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May 23, 2022

Via eTariff

Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street, N.E., Room 1A Washington, D.C. 20426

Re: *PJM Interconnection, L.L.C.*, Docket No. ER22-___-000

AEP-Liberty Utilities Transaction-Related Filing

Dear Secretary Bose:

Pursuant to Section 205 of the Federal Power Act ("FPA") and 18 C.F.R. Section 35.13, of the Regulations of the Federal Energy Regulatory Commission ("FERC" or "Commission"), American Electric Power Service Corporation ("AEPSC"), on behalf of Appalachian Power Company ("APCo"), Indiana Michigan Power Company ("I&M"), and Ohio Power Company ("OPCo)" and together with APCo and I&M, ("AEP Interconnected Companies"), and Kentucky Power Company ("KPCo" or "Liberty KPCo") (collectively "Applicants") hereby submit for filing the following new PJM service agreement:

¹ This Application was approved by APCo and by Liberty Utilities Co. ("Liberty Utilities"), in its capacity as the prospective acquirer of KPCo pursuant to the Transaction, as further described herein. As described below, PJM submits this Application and the associated Tariff Records to facilitate the orderly transition of ownership of KPCo to Liberty Utilities and to assist in the establishment of new PJM service agreements under which, after the Transaction, "Liberty KPCo" will no longer be affiliated with the remaining AEP Interconnected Companies, including APCo.

² "Liberty KPCo" is used to refer to the post-Transaction Kentucky Power Company, although there are no plans to change the company name of Kentucky Power Company on the closing date.

³ Pursuant to Order No. 714, this filing is submitted by PJM Interconnection, L.L.C. ("PJM") on behalf of AEPSC as part of an XML filing package that conforms with the Commission's regulations. PJM has agreed to make all filings on behalf of the PJM Transmission Owners in order to retain administrative control over the PJM Tariff. Thus, AEPSC requested PJM submit this agreement in the eTariff system as part of PJM's electronic Service Agreements Tariff.

⁴ Consistent with Commission precedent, PJM is a signatory to the Service Agreement for the limited purpose of acknowledging that a representative of PJM had read the Service Agreement. See Am. Elec. Power Serv. Corp., 110 FERC ¶ 61,276, order on reh'g, 112 FERC ¶ 61,128 (2005).



• Service Agreement No. 6463, Interconnection Agreement Between American Electric Power Service Corporation, as Agent for Appalachian Power Company, Indiana Michigan Power Company, and Ohio Power Company, and Kentucky Power Company ("TO-TO IA").

This filing contains the following documents, in addition to the tariff records:

- This Transmittal Letter;
- A Clean Tariff Attachment;⁵ and
- PDF signature pages

I. BACKGROUND

On October 26, 2021, American Electric Power Company, Inc. ("AEP") announced that it entered into an agreement to sell its Kentucky operations, including KPCo and AEP Kentucky Transco, to Liberty Utilities, an indirect subsidiary of Algonquin Power & Utilities Corp. The parties are currently pursuing the necessary regulatory approvals for the Transaction. The Transaction is expected to close in the second quarter of 2022. Because the AEP Interconnected Companies historically have been affiliates of KPCo, they never have entered into one or more transmission owner to transmission owner interconnection agreements ("TO-TO IAs") with KPCo. TO-TO IAs are common between two or more unaffiliated neighboring utilities. The TO-TO IA will implement the needed service and was negotiated at arms-length between AEPSC and Liberty Utilities personnel. Liberty KPCO and APCo are also interconnected at the distribution level and separate agreements will address those interconnections.

II. DESCRIPTION OF TO-TO IA

The TO-TO IA between the AEP Interconnected Companies and Liberty KPCo is fairly typical of such agreements, addressing such substantive matters as interconnected operations (Article 1); Operations and Maintenance (Article 3), Metering and Data Acquisition (Article 4), Indemnity and Insurance (Article 5), Modifications of Facilities (Article 11), as well as basic contractual terms. The TO-TO IA has four Appendices. Appendix I contains a list of transmission points of interconnections. Appendix II discusses metering, data requirements, and obligations to the RTO (discussed further below), Appendix III contains the definitions used in the TO-TO IA. Finally, Appendix IV addresses specifics regarding metering at the Greentown 765 kV Substation, a location where the PJM and MISO Transmission Systems interconnect.

⁵ Because the service agreement is brand new, no Marked Tariff Attachment is included in the filing.

⁶ On December 22, 2021, the parties submitted an application in Docket No. EC22-26 seeking authorization under Section 203 of the FPA for the disposition of jurisdictional facilities associated with the Transaction. That application is currently pending before the Commission.



The one somewhat unique provision of the TO-TO IA here is that the AEP Interconnected Companies in PJM, through AEPSC, are responsible for collecting and providing transmission demand information for all network transmission customers in the *entire* AEP Zone, which will still include Liberty KPCo after the Transaction. Typically, *all* load of a wholesale utility in the AEP Zone, other than an AEP operating company is subject to an ILDSA and the ILDSA is used as the vehicle for discussing the obligations related to load reporting. Here, the ILDSA under which APCo provides local service only addresses service at the distribution delivery points between the companies, thus the TO-TO IA is the more appropriate document to address load reporting obligations given that the companies are connected at transmission voltages as well. Appendix II thus includes a Section III that is similar to provisions found in ILDSAs, to ensure that Liberty KPCo load information will be relayed to PJM.

Finally, as is required, PJM is a signatory, but not a Party to, the TO-TO IA.

III. PROPOSED EFFECTIVE DATE AND WAIVERS

AEPSC requests a proposed effective date for the TO-TO IA of the date on which the Transaction is consummated, which has yet to be determined and thus a 12/31/9998 effective date is being utilized for eTariff purposes. Because the agreement is a PJM service agreement, pursuant to *Prior Notice*, it does not need to be filed 60 days in advance of service, but merely within 30 days of service commencing. AEPSC respectfully requests that the Commission act by July 15, 2022.

To the extent not already provided above, the following information required by 18 C.F.R. §§ 35.13(b) and (c) is supplied. AEPSC also states that no expenses or costs in connection with this service agreement have been alleged or judged in any administrative or judicial proceeding to be illegal, duplicative, or unnecessary costs that are demonstrably the product of discriminatory employment practices. AEPSC seeks waiver of any other information required by FERC's regulations necessary to permit the filing to become effective as requested.

IV. SERVICE

Applicants have served copies of this filing via e-mail upon all parties as may be required by the Commission, including all other parties to the Service Agreement and the following relevant state commissions:

⁷ AEPSC proposes that it, through PJM, inform the Commission of the consummation date through the filing of a Notice in eTariff under Filing Type Code 150 in this docket soon after consummation, so that the Commission can change the 12/31/9998 date to the appropriate effective date for the tariff record included herein.

⁸ See Prior Notice and Filing Requirements under Part II of the Federal Power Act, 64 FERC \P 61,139 at 61,983-84 (1993).

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Public Service Commission of West

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201 Brooks Street Charleston, WV 25301 Phone: (304) 340-0300

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Tennessee Public Utility Commission

502 Deaderick Street, 4th Floor

Nashville, TN 37243 Phone: (615) 770-6851 Kelly.grams@tn.gov Indiana Utility Regulatory Commission 101 West Washington St, Suite 1500E

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Public Utilities Commission of Ohio

180 East Broad Street Columbus, OH 43215 Phone: (614) 466-3016

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Virginia State Corporation Commission

1300 East Main Street Richmond, VA 23219 Phone: (804) 371-9608 UtilityReg@scc.virginia.gov

V. COMMUNICATIONS

The Applicants request that any correspondence or communications with respect to this filing be directed to the following:

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VI. CONCLUSION

For the foregoing reasons, the filing parties respectfully request that the Commission accept the TO-TO IA included herein.

Respectfully submitted,

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INTERCONNECTION AGREEMENT

between

AMERICAN ELECTRIC POWER SERVICE CORPORATION

As agent for APPALACHIAN POWER COMPANY, INDIANA MICHIGAN POWER COMPANY, and OHIO POWER COMPANY

and

KENTUCKY POWER COMPANY

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APPENDICES

Appendix I	Interconnection Point List and One-Line Diagrams

Appendix II Metering, Data Requirements, and Obligations to the RTO

Appendix III Definitions

INTERCONNECTION AGREEMENT

THIS INTERCONNECTION AGREEMENT ("Agreement") is made and entered into as of the date this Agreement is accepted for filing (the "Execution Date"), between American Electric Power Service Corporation as agent for Appalachian Power Company ("APCO"), Indiana Michigan Power Company ("I&M"), and Ohio Power Company ("OPCO" and together with APCO and I&M, "AEP"), and Kentucky Power Company ("Kentucky Power" or "KPCO"). AEP and Kentucky Power may be referred to herein individually as a "Party" or collectively as the "Parties". For the avoidance of doubt, the terms "Party" and "Parties" as used herein shall not include PJM Interconnection, L.L.C. ("PJM") or any successor Regional Transmission Organization, or any other Regional Transmission Organization of which a Party is a member. PJM and any such other Regional Transmission Organization shall be referred to singularly as "RTO" or collectively as "RTOs."

RECITALS:

WHEREAS, the systems of the Parties are interconnected by transmission lines, with such points of interconnection herein called "Interconnection Points," and are operating in synchronism;

WHEREAS, Kentucky Power's and AEP's transmission facilities are under the functional control of PJM;

WHEREAS, effective as of the Execution Date, the ownership interests in Kentucky Power have been restructured such that Kentucky Power is no longer affiliated with AEP and its transmission lines are no longer under common ownership with AEP's transmission lines;

WHEREAS, for purposes of the PJM Tariff, the loads of AEP, Kentucky Power, and other Load Serving Entities are all located in the AEP Zone;

WHEREAS, the Parties, therefore, desire to establish terms and conditions governing their Interconnection Points and to define the continuing responsibilities and obligations of the parties with respect to those Interconnection Points, as set forth herein;

WHEREAS, the Parties, also desire to establish terms and conditions relating to their obligations to the RTO regarding load and data reporting;

WHEREAS, APCO and Kentucky Power each deliver power over their local facilities to certain loads of one another, both are party to Interconnection and Local Delivery Service Agreements ("ILDSAs") that allow each of them to provide local services to the other for these particular loads;

WHEREAS, the Federal Energy Regulatory Commission ("FERC") has required that PJM be included as signatory to this Agreement in order to acknowledge and ensure that PJM is kept fully apprised of the matters addressed herein and so that PJM may be kept aware of any reliability and planning issues that may arise.

NOW, THEREFORE, in exchange for good and valuable consideration of the premises and mutual covenants herein set forth, the receipt and adequacy of which is hereby acknowledged, the

Parties hereto agree as follows:

ARTICLE 1 INTERCONNECTED OPERATION

1.1 <u>Interconnected Operation</u>

The Parties' Transmission Systems are interconnected at each Interconnection Point specified and described in Appendix I of this Agreement. The Parties, by amendment to this Agreement pursuant to Section 10.3, may add, discontinue or modify one or more Interconnection Points.

1.2 <u>Continuity of Interconnected Operation</u>

During the term of this Agreement, each Party shall continue to maintain in service its respective Interconnection Facilities and essential terminal equipment necessary to operate and maintain in a safe and reliable manner each Interconnection Point described in Appendix I.

1.3 <u>Compliance</u>

Each Party shall comply with Good Utility Practice, Applicable Technical Standards, RTO Requirements and Applicable Laws and Regulations in performing its respective obligations and responsibilities under this Agreement.

ARTICLE 2 TERM AND TERMINATION OF AGREEMENT

2.1 Term

This Agreement shall be effective on the date specified by FERC, and shall remain in effect until this Agreement is terminated in accordance with Section 2.2.

2.2 <u>Termination</u>

This Agreement may be terminated by the following means:

2.2.1 By Mutual Consent

This Agreement shall be terminated as of the date on which the Parties mutually agree to terminate this Agreement.

2.2.2 By Either Party

Either Party may terminate this Agreement by providing to the other Party and RTOs at least thirty-six (36) months' advance written notice of the date on which such Party intends to terminate this Agreement, unless the Parties agree to a shorter notice period.

2.2.3 Upon Default

Either Party may terminate this Agreement upon the Default of the other Party, as defined in Section 9.1, by providing the defaulting Party and RTOs thirty (30) calendar days prior written notice of termination.

2.3 Effectiveness of Termination

The termination of this Agreement under Section 2.2 shall become effective on the date established by FERC in an order accepting a notice of cancellation filing under Section 205 of the Federal Power Act to terminate this Agreement.

ARTICLE 3 OPERATIONS AND MAINTENANCE

3.1 Operating Responsibilities

Each Party, if applicable, shall exercise reasonable care to design, construct, maintain, and operate its Transmission System, in accordance with Good Utility Practice and applicable RTO Requirements, and in such manner as to avoid the unauthorized use of the generation or transmission facilities of any other person, including such facilities of the other Party (hereinafter referred to as "Unauthorized Use"). Each Party may install and operate on its Transmission System such relays, disconnecting devices, and other equipment, as it may deem appropriate for the protection of its Transmission System or prevention of Unauthorized Use. Each Party shall maintain and operate its respective Transmission System so as to reasonably minimize, in accordance with Good Utility Practice, the likelihood of a disturbance originating on its Transmission System, which might cause impairment to the service of the other Party.

3.2 Interruption of Service

The interconnection of the Parties' Transmission Systems under this Agreement may be interrupted by operation of automatic equipment installed for power system protection or, upon reasonable notice, under the following circumstances: (i) after consultation with the other Party if practicable, when a Party deems it desirable for the installation, maintenance, inspection, repairs or replacements of equipment; (ii) to comply with a directive issued by RTO; or (iii) at any time that, in the sole judgment of the interrupting Party, such action is necessary to preserve the integrity of, or to prevent or limit any instability on, or to avoid or mitigate a burden on its system, or to avoid or mitigate the loss of life, injury, or property damage. If synchronous operation of the Parties' Transmission Systems through a particular line or lines becomes interrupted, the Parties shall cooperate to remove the cause of such interruption as soon as practicable and restore said lines to normal operating condition.

3.3 <u>Maintenance and Facility Maintenance</u>

Each Party shall maintain its facilities in a safe and reliable manner in accordance with: (i) the terms of this Agreement; (ii) Applicable Laws and Regulations; (iii) the RTO Requirements of the

RTO to which the facilities are subject; and (iv) Good Utility Practice. Operating arrangements for facility maintenance shall be coordinated between operating personnel of the Parties' respective control centers. Except as may be necessary and appropriate in an emergency, all operating arrangements shall be in accordance with applicable RTO Requirements.

3.4 Compliance with NERC Reliability Standards

The Parties shall confer as necessary to maintain an understanding of their respective NERC-registered roles as such roles pertain to the operation, maintenance, or Modification of an Interconnection Point identified in Appendix I of this Agreement or the coordination of any new Interconnection Point between the Parties. Unless otherwise agreed in writing between the Parties, each Party shall be responsible only for the NERC compliance requirements applicable to its respective Transmission System.

3.5 <u>Cooperation Associated with NERC Reliability Standards</u>

If one Party is subject to a data request, investigation, self-certification, audit or other action by FERC, NERC, RTOs or a NERC Regional Entity regarding applicable NERC Reliability Standards associated with the facilities it operates to effect the interconnection of the Parties' Transmission Systems at each Interconnection Point, then the other Party shall reasonably cooperate in a timely fashion and to the extent necessary to demonstrate compliance with any applicable NERC Reliability Standards associated with such facilities and to address any such data request, investigation, self-certification, audit or other action regarding applicable NERC Reliability Standards. When either Party is required to comply with NERC Reliability Standards with respect to such facilities, the other Party shall not unreasonably interfere with compliance activities.

3.6 Access

Each Party shall provide the other Party access to areas under its control as reasonably necessary to permit the other Party to perform its obligations under this Agreement, including operation and maintenance obligations. A Party that obtains such access shall comply with all safety rules applicable to the area to which access is obtained. Each Party agrees to inform the other Party of the safety rules applicable to each area.

3.7 Installation of New Equipment

To the extent new equipment is installed by one Party that may affect operations of the Transmission System of the other Party, the Parties shall reasonably cooperate to identify applicable connection requirements and standards, including Applicable Technical Standards and RTO Requirements, and installing Party shall take all reasonable precautions to ensure that its new equipment will not operate inconsistently with the equipment with which it is interconnecting.

ARTICLE 4 METERING AND DATA ACQUISITION SYSTEM EQUIPMENT

4.1 <u>Metering Equipment</u>

The net interchange of electrical energy between the Transmission Systems at the Interconnection Points shall be measured by the operational quality metering and, if required or otherwise agreed to by the Parties and applicable RTO or RTOs, revenue quality meters specified in Appendix II. The metering equipment shall satisfy applicable American National Standards Institute standards and applicable RTOs metering standards and RTO Requirements. Each Party shall own, operate and maintain such recording, telemetering, communication, and control facilities on their respective side of the Points of Interconnection (unless otherwise specified in Appendix II) as required for coordinated operation. Except for the charge referenced in Section 4.2, no specific charge will apply to either Party for the installation, replacement, operation, maintenance or testing of such equipment.

4.2 Maintenance, Testing, and Calibration of Metering Equipment

Procedures with respect to maintenance, testing, calibrating, and precision tolerance of all metering equipment shall be performed in accordance with Good Utility Practice. The expense of testing any meter shall be borne by the Party owning such meter, except for when a meter is tested at the request of the other Party and is found to register within the established tolerance. In such circumstances, the Party making the request shall bear the expense of the test.

4.3 Additional Metering Requirements

Any additional metering requirements shall be contained in Appendix II of this Agreement.

ARTICLE 5 CONFIDENTIALITY

5.1 Confidentiality

Confidential information, as defined in Appendix III, must be clearly designated or marked in writing as confidential on the face of the document or if the information is conveyed orally or by inspection and the Disclosing Party orally informs the Receiving Party that the information is confidential.

5.2 Time Period

During the term of this Agreement as defined in Section 2.1 and for a period of five (5) years after the expiration or termination of this Agreement, except as otherwise provided in Article 5, each Receiving Party shall hold in confidence, and shall not disclose to any person any Confidential Information provided to it by the Disclosing Party. If this Agreement expires or is terminated, then within five (5) years after the effective date of such expiration or termination the Disclosing Party may request that the Receiving Party either return the Confidential Information or destroy the Confidential Information; provided however, that if the Disclosing Party does not make either request to the Receiving Party, the Receiving Party shall destroy the Confidential Information.

5.3 Scope

Confidential Information shall not include information that the Receiving Party can demonstrate: (i) is generally available to the public other than that which is a result of a disclosure by the Receiving Party; (ii) was in the lawful possession of the Receiving Party on a non-confidential basis before receiving it from the Disclosing Party; (iii) was supplied to the Receiving Party without restriction by a third party, who, to the knowledge of the Receiving Party, after due inquiry, was under no obligation to the Disclosing Party to keep such information confidential; (iv) was independently developed by the Receiving Party without reference to Confidential Information of the Disclosing Party; or (v) is, or becomes, publicly known, through no wrongful act or omission of the Receiving Party or breach of this Agreement. Information designated as Confidential Information shall no longer be deemed confidential if the Disclosing Party notifies the Receiving Party that it no longer is confidential.

5.4 Release of Confidential Information

Subject to Sections 5.8 and 5.11, no Party shall disclose Confidential Information to any other person, except to its Representatives (limited by FERC's Standards of Conduct requirements) without the prior written consent of the Disclosing Party. A Receiving Party may disclose Confidential Information to its Representatives provided that such Representatives have first been advised of the confidentiality provisions of this Article. Notwithstanding the foregoing, a Party providing Confidential Information to a Representative shall remain primarily responsible for any release of Confidential Information by such Representative in contravention of this Article 5.

5.5 Rights

Each Disclosing Party retains all rights, title, and interest in the Confidential Information that it discloses to the Receiving Party. A Disclosing Party's disclosure to the Receiving Party of Confidential Information shall not be deemed a waiver by the Disclosing Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

5.6 No Warranties

By providing Confidential Information, neither Party makes any warranties or representations as to its accuracy or completeness.

5.7 Standard of Care

A Receiving Party shall use at least the same standard of care to protect Confidential Information it receives as such Party uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Confidential Information may be used solely to fulfill a Receiving Party's obligations to the Disclosing Party under this Agreement or to comply with Applicable Laws and Regulations.

5.8 Order of Disclosure

If a Governmental Authority with the right, power, and apparent authority to do so requests or requires the Receiving Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, the Receiving Party shall provide the Disclosing Party with prompt notice of such request(s) or

requirement(s) so that the Disclosing Party may seek an appropriate protective order or waive compliance with the terms of this Agreement. Notwithstanding the absence of a protective order or agreement, or waiver, the Receiving Party that is subjected to the request or order may disclose such Confidential Information which, in the opinion of its counsel, the Receiving Party is legally compelled to disclose. The Receiving Party shall use reasonable efforts to obtain reliable assurance that confidential treatment will be accorded to any Confidential Information so furnished.

5.9 Return or Destruction of Confidential Information

A Receiving Party shall, within ten (10) calendar days of receipt of a written request from the Disclosing Party, use reasonable efforts to destroy, erase, or delete (with such destruction, erasure and deletion certified in writing to the Disclosing Party) or to return to the Disclosing Party, without retaining copies thereof, any and all written or electronic Confidential Information received from the Disclosing Party. Notwithstanding the foregoing, a Receiving Party shall not be required to purge any historical backup media.

5.10 Remedies

The Parties agree that monetary damages may be inadequate to compensate a Party for the other Party's breach of its obligations under this Article 5. Each Party accordingly agrees that the other Party shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party breaches or threatens to breach its obligations under this Article 5, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed to be an exclusive remedy for the breach of this Article 5, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope.

5.11 Disclosure to FERC or its Staff

Notwithstanding anything in this Article 5 to the contrary, and pursuant to 18 C.F.R. § 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from a Receiving Party that is otherwise required to be maintained in confidence pursuant to this Agreement, such Receiving Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. § 388.112 or 18 C.F.R. § 388.113, as applicable, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. To the extent permitted by law, the Receiving Party shall notify the Disclosing Party prior to the release of the Disclosing Party's Confidential Information to FERC or its staff. A Receiving Party shall promptly notify the other Party when it is notified by FERC or its staff that a request to release the other Party's Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. § 388.112 or 18 C.F.R. § 388.113, as applicable.

5.12 General Disclosure

Notwithstanding any other provisions of this Article 5, a Receiving Party may disclose the Confidential Information provided by the Disclosing Party to the extent disclosure is: (i) reasonably deemed by the Receiving Party to be required in connection with a dispute between the Parties, or the defense of litigation or dispute; (ii) otherwise permitted by written consent of the Disclosing Party; or (iii) is necessary to fulfill its obligations to an RTO or to a NERC Regional Entity. Prior to any disclosures of the Disclosing Party's Confidential Information under Section 5.12(i) or (iii), the Receiving Party shall promptly notify the Disclosing Party in writing and shall assert confidentiality and cooperate with the Disclosing Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order, or other reasonable measures.

ARTICLE 6 INVOICING AND PAYMENT; TAXES

6.1 Purpose of Invoicing

Any invoice that is issued pursuant to this Agreement shall be for: (i) the establishment of any new Interconnection Point; (ii) the modification of an existing Interconnection Point; or (iii) other purposes as may be set forth in this Agreement.

6.2 <u>Timeliness of Payment</u>

Unless otherwise agreed upon, any invoices issued pursuant to this Agreement shall be rendered as soon as practicable in the month immediately following the calendar month in which expenses were incurred and shall be due and payable, unless otherwise agreed upon, within thirty (30) calendar days of receipt of such invoice. Payment shall be made by electronic transfer or such other means as shall cause such payment to be available for the use of the payee. Interest on unpaid amounts shall accrue daily at the then current prime interest rate (the base corporate loan interest rate) published in the Wall Street Journal, or, if no longer so published, in any mutually agreeable publication, plus two percent (2%) per annum, but will in no event exceed the maximum interest rate allowed pursuant to the law of the state where the Interconnection Point(s) associated with such invoice is or is expected to be located, and shall be payable from the due date of such unpaid amount to the date paid.

6.3 <u>Disputed Invoices</u>

In the event that a Party disputes an invoice, the disputing Party shall pay the invoice in full in accordance with Section 6.2 of this Agreement subject to the refund of any amounts found to have been incorrectly invoiced plus interest on such amount from the date of payment to the date of the refund at the rate stated in Section 6.2. In the event of a billing dispute, the disputing Party shall provide notice of the dispute to the billing Party as set out in Section 12.4. In response to the notice, the billing Party will promptly provide all documentation that is reasonably required in support of its bill and confer with the disputing Party. If these good faith efforts fail to resolve the issue, the matter may, by mutual agreement of the Parties, be settled through the mediation procedures of Article 8.

6.4 <u>Invoice Adjustments</u>

Other than as required by law, regulatory action or metering test adjustments, invoice adjustments shall be made within six (6) months of the rendition of the initial invoice.

6.5 Tax Reimbursement

If, as part of any compensation to be paid under this Agreement, any direct tax, including, but not limited to sales, excise, or similar taxes (other than taxes based on or measured by net income) is levied and/or assessed against either Party by any taxing authority on the power and/or energy manufactured, generated, produced, converted, sold, purchased, transmitted, interchanged, exchanged, exported or imported by the supplying Party to the other Party, then except as provided in Section 6.6, such supplying Party shall be fully compensated by the other Party for such direct taxes.

6.6 Contribution In-Aid of Construction

For payment amounts or for the value of the facilities constructed and turned over to the receiving Party that are classified as contributions in-aid of construction ("CIAC"), and in the event and to the extent such CIAC payment amounts ("CIAC Payment") are classified as taxable income by the receiving Party or if the receiving Party is tax exempt, receipt of such CIAC Payment causes said Party to become taxable, such CIAC Payment shall be increased (or "grossed-up") to fully cover the receiving Party's net tax consequences arising from the CIAC Payment. If at the time of invoicing the receiving Party made a good faith determination that the CIAC Payment would not be classified as taxable income but federal or state income taxes are subsequently imposed upon the receiving Party by the Internal Revenue Service ("IRS") and/or a state department of revenue ("State") arising from the receipt of such CIAC Payment, the Party that originally made the CIAC Payment shall reimburse the receiving Party for the full tax effect of such CIAC Payment computed in accordance with FERC rules and including any interest and penalty charged to the receiving Party by the IRS and/or the State.

ARTICLE 7 INDEMNITY AND INSURANCE

7.1 Indemnity

To the extent permitted by law, each Party (the "Indemnifying Party") shall indemnify, save harmless, and defend the other Party from and against any losses, liabilities, costs, expenses, suits, actions, claims, and all other obligations arising out of injuries or death to persons or damage to property (each a "Loss" and each suffered by or asserted by a third party) to the extent arising out of, in connection with, or resulting from the Indemnifying Party's (or its Contractor's) performance or non-performance of its obligations under this Agreement; provided, however, that a Party's obligation to indemnify the other Party shall not apply to any Losses to the extent arising from the other Party's negligence or intentional misconduct. Promptly after receipt by a Party entitled to indemnity ("Indemnified Party") of any claim or notice of the commencement of any action, administrative or legal proceeding, or investigation as to which the indemnity provided for in this

Section 7.1 may apply, the Indemnified Party shall notify the Indemnifying Party of such fact. Any failure of or delay in such notification shall not affect an Indemnifying Party's indemnification obligation unless such failure or delay is materially prejudicial to the Indemnifying Party.

The Indemnifying Party shall, at the Indemnified Party's option and at the Indemnifying Party's expense, defend the Indemnified Party against any and all suits, actions, or claims arising out of, connected with, or resulting from the performance or non-performance by the Indemnifying Party or any of its Contractors of its obligations under this Agreement. The Indemnifying Party shall not settle or make a plea with respect to any suit, action or claim without the Indemnified Party's prior written consent.

A Party's obligations to another Party under this Section 7.1 shall not be limited in any way by any provision of any workers' compensation, disability benefits, payroll, or other employee benefits laws; provided, however, that nothing herein shall limit or restrict any defense a Party may be entitled to assert with respect to a Loss, including a defense based on the status of such Party as a statutory employer. EACH PARTY HEREBY SPECIFICALLY AND EXPRESSLY WAIVES ANY AND ALL DEFENSES IT MAY HAVE TO AN INDEMNIFICATION OBLIGATION TO THE OTHER PARTY PURSUANT TO THIS AGREEMENT BASED ON ANY IMMUNITY TO WHICH SUCH PARTY MAY BE ENTITLED UNDER ANY WORKERS' COMPENSATION, DISABILITY BENEFITS, PAYROLL, OR EMPLOYEE BENEFITS LAWS.

For the purposes of this Section 7.1 only, the term "Party" shall include the Party's Affiliates and the directors, officers, employees, and agents of the Party and its Affiliates.

7.2 <u>Insurance</u>

7.2.1 Maintaining Insurance

Each Party shall maintain insurance as described in paragraphs A through E below. All insurance shall be procured from insurance companies rated "A-VII" or better by AM Best and approved to do business in a state or states in which the Interconnection Point(s) is located. Failure to maintain required insurance shall be a Breach of this Agreement.

- A. Workers' Compensation insurance with statutory limits, as required by the state and/or jurisdiction in which the Interconnection Point(s) is located, and employer's liability insurance with limits of not less than one million dollars (\$1,000,000.00).
- B. Commercial General Liability Insurance and/or Excess Liability Insurance covering liability arising out of premises, operations, personal injury, advertising, products and completed operations coverage, Contractors coverage, liability assumed under an insured contract, coverage for pollution to the extent normally available and punitive damages to the extent allowable under applicable law, with limits of not less than one million dollars (\$1,000,000) per occurrence/one million dollars (\$1,000,000) general aggregate/one million dollars (\$1,000,000) products and completed operations aggregate.

- C. Business/Commercial Automobile Liability Insurance for coverage of owned, non-owned, and hired vehicles, trailers, or semi-trailers designed for travel on public roads, with a minimum, combined single limit of one million dollars (\$1,000,000) for each accident for bodily injury, including death, and property damage.
- D. Excess and/or Umbrella Liability Insurance with a limit of liability of not less than twenty million dollars (\$20,000,000) per occurrence. This limit applies in excess of the employer's liability, commercial general liability and business/commercial automobile liability coverages described above. This requirement can be met alone or through a combination of primary, excess and/or umbrella insurance.
- E. Professional Liability Insurance providing errors, omissions and/or malpractice coverage in the amount of one million dollars (\$1,000,000) per occurrence/aggregate. Coverage shall be provided for the Parties' Representatives that are responsible for design work associated with the interconnection.

A Party may meet the Professional Liability Insurance requirements by requiring Contractors, designers, engineers, or other parties that are responsible for design work associated with the transmission facilities or Interconnection Facilities necessary for the interconnection to procure Professional Liability Insurance in the amounts and upon the terms prescribed by this Section 7.2.1, and providing evidence of such insurance to the other Party. Nothing in this Section 7.2.1 relieves the Party from complying with the insurance requirements.

7.2.2 Additional Insureds

The Commercial General Liability, Business/Commercial Automobile Liability and Excess and/or Umbrella Liability policies procured by a Party shall include the other Party, and its respective officers, agents and employees as additional insureds, providing all standard coverages and covering liability of the insured Party for bodily injury and/or property damage (including loss of use) arising out of the insured Party's operations, performance, or lack of performance under this Agreement.

7.2.3 Other Required Terms

The above-mentioned insurance policies of a Party (except workers' compensation, excess/umbrella and professional liability) shall provide the following:

- A. Each policy shall contain provisions that specify that it is primary and non-contributory for any liability arising out of the insured Party's liability, and shall apply to such extent without consideration for other policies separately carried by the other Party and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered.
- B. In addition, the following shall apply to the Parties' insurance policies, to the extent

allowable by law.

- i. If any coverage is written on a claims made basis, continuous coverage shall be maintained or an extended discovery period will be exercised for a period of not less than two (2) years after the effective date of the termination of this Agreement.
- ii. The insurance (including workers' compensation) shall include a waiver of all rights of subrogation which a Party's insurance carrier might exercise against the other Party.
- iii. Each Party shall be responsible for its respective deductibles or retentions.

7.2.4 No Limitation of Liability

The requirements contained herein as to the types and limits of all insurance to be maintained by the Parties are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by each Party under this Agreement.

7.2.5 Self-Insurance

Notwithstanding the foregoing, each Party may self-insure to meet the minimum insurance requirements of this Section 7.2 to the extent it maintains a self-insurance program, provided that such Party's or its parent company's senior secured or unsecured debt is rated at investment grade or better by Standard & Poor's or another recognized rating agency and its self-insurance program meets the minimum insurance requirements of Section 7.2. For any period of time that a Party's or its parent company's senior secured or unsecured debt is unrated by Standard & Poor's or another recognized rating agency or is rated at less than investment grade by Standard & Poor's or another recognized rating agency, such Party shall comply with the insurance requirements applicable to it under Section 7.2. In the event that a Party self-insures pursuant to this section, it shall notify the other Party that it satisfies the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with this Agreement.

7.2.6 Notices; Certificates of Insurance

Each Party shall provide the other Party with thirty (30) calendar days' prior written notice of cancellation to any of the insurance required under this Agreement provided, however, that no notice shall be required if a canceled policy is replaced with an equivalent policy without any lapse in coverage. Each Party shall provide the other with certificates of insurance prior to commencement of Interconnection Construction related to an Interconnection Point and thereafter at such time intervals as they shall mutually agree upon, provided that such interval shall not be less than one year. The insured Party's certificates of insurance shall indicate that the other Party is included as an additional insured under the Commercial General Liability, Business/Commercial Automobile Liability and Excess and/or Umbrella Liability coverage, and that this insurance is primary and non-contributory. Each Party's certificates of insurance shall evidence that a waiver of subrogation is included in the required insurance policies in favor of the other Party. After the

initial notification that it is self-insuring, the self-insured Party is not required to annually thereafter provide such notification provided that it continues to satisfy the requirements to self-insure of Section 7.2.5. In the event that the self-insured Party no longer meets the requirements of Section 7.2.5 to self-insure, the self-insured Party must provide to the other Party a new certificate of insurance within thirty (30) calendar days of the date that the requirements to self-insure were no longer being satisfied.

7.2.7 Contractor Insurance

In accordance with Good Utility Practice, each Party shall require each of its Contractors to maintain and provide evidence of insurance coverage of types and in amounts commensurate with the risks associated with the services provided by the Contractor. Bonding of Contractors shall be at the hiring Party's discretion, but regardless of bonding, the hiring principal shall be responsible for the performance or non-performance of any Contractor it hires.

7.2.8 Reporting Incidents

The Parties shall report to each other in writing, as soon as practical, all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this Agreement.

ARTICLE 8 DISPUTES

8.1 Mediation

Any controversy or claim arising out of or relating to this Agreement or Breach thereof that cannot be resolved after a period of thirty (30) calendar days of negotiation may, by mutual agreement of the Parties, be settled by mediation in accordance with this Agreement. During the mediation process, the Parties will try to resolve their differences voluntarily with the aid of an impartial mediator, who will attempt to facilitate negotiations. The mediator will be selected by the mutual agreement of the Parties as soon as practical after the Parties agree to commence the mediation process.

8.2 Confidentiality of Mediation

The mediation will be treated as a settlement discussion and therefore will be confidential. The mediator may not testify for either Party in any later proceedings relating to the dispute. No recording or transcript shall be made of the mediation proceedings.

8.3 Termination of Mediation

If a dispute has not been resolved within forty-five (45) calendar days after the commencement of the mediation process (or a longer period if the Parties agreed to extend the mediation), the mediation shall terminate.

8.4 Rights and Remedies

If any dispute is not settled by mediation, then any Party may pursue any and all rights and remedies available to it under this Agreement, or in law or equity. Notwithstanding the mediation hereunder, the Parties have the right to proceed directly to court to seek relief in law or in equity. The submission of a dispute to mediation shall not limit or in any way affect the applicable Party's right to effect remedies or limit such Party's rights under this Agreement or otherwise.

ARTICLE 9 BREACH AND DEFAULT

9.1 Breach and Default

A Party shall be considered in default of this Agreement ("Default") if it fails to cure a Breach in accordance with the terms of Section 9.1. A breach ("Breach") shall mean the failure of a Party to perform or observe any material term or condition of this Agreement; provided that no Breach shall exist where such failure to discharge an obligation (other than the payment of money) is the result of Force Majeure as defined in this Agreement or the result of an act or omission by the other Party. Upon a Breach, the non-breaching Party shall give written notice of such Breach to the breaching Party. The breaching Party shall have thirty (30) calendar days from receipt of the Breach notice within which to cure such Breach; provided however, if such Breach is not capable of cure within thirty (30) calendar days after notice and continuously and diligently complete such cure within thirty (30) calendar days from receipt of the Breach notice; and, if cured within such time, the Breach specified in such notice shall cease to exist. Either Party may terminate this Agreement upon the Default of the other Party as provided for in Section 2.2.3 of this Agreement.

9.2 Renegotiable Events

If one of the following conditions occurs, the Parties shall negotiate in good faith to amend this Agreement or to take other appropriate action so as to protect each Party's interest in this Agreement:

- A. any change to Applicable Laws and Regulations having a material impact upon the effectiveness or enforceability of any provision of this Agreement;
- B. this Agreement is not approved or accepted by FERC without modification or condition, if filed at FERC;
- C. an applicable RTO or NERC Regional Entity prevents, in whole or in part, either Party from performing any provisions of this Agreement in accordance with its terms;
- D. either Party withdraws as a member of PJM;
- E. RTO Requirements are modified in a manner that materially affects either Party's ability to perform its obligations under this Agreement; or

F. the applicable RTO or NERC Regional Entity, either voluntarily or involuntarily, is dissolved.

9.2.1 <u>Preservation of Intent</u>

This Agreement shall serve as the document upon which such negotiations shall be based and the Parties shall make as minimal modifications as necessary to effectuate the original intent and purpose of this Agreement.

9.2.2 <u>Reservation of Rights</u>

If the Parties are unable to reach an agreement, either Party shall have the right to unilaterally file with FERC, pursuant to Section 205 or Section 206 of the Federal Power Act as appropriate, proposed amendments to this Agreement that the filing Party deems reasonably necessary to protect its interests.

ARTICLE 10 GOVERNMENTAL AUTHORITIES

10.1 Governmental Authorities

This Agreement is made subject to the jurisdiction of FERC and any Governmental Authority having jurisdiction over the rates, terms conditions or services provided under this Agreement.

10.2 Adverse Regulatory Change

The Parties agree to jointly submit and support the filing of this Agreement with FERC, if such filing is required by the Federal Power Act. Any changes or conditions imposed by FERC in connection with such submission or otherwise in respect of this Agreement, any of which is unacceptable to a Party after the Parties' good faith attempt to negotiate a resolution to such objectionable change or condition in accordance with Section 9.2, shall be cause for termination of this Agreement upon thirty (30) calendar days' prior written notice by the non-consenting Party to the other Party, and if applicable, subject to the provisions of Section 2.3 of this Agreement.

10.3 Amendments to the Agreement

10.3.1 Amendments

Except as provided in Section 10.3.2, this Agreement may only be modified in a writing signed by the Parties and acknowledged by the applicable RTOs. In the event that the Parties agree to amend this Agreement, the Parties shall, if required by Applicable Laws and Regulations, file any such amendment or modification with FERC.

10.3.2 Section 205 and 206 Rights

Nothing contained in this Agreement shall preclude either Party from exercising its rights under

Section 205 and 206 of the Federal Power Act to file for a change in any rate, term, condition, or service provided under this Agreement.

ARTICLE 11 MODIFICATIONS OF FACILITIES

11.1 Generally

Each Party may make such Modifications to its facilities as it deems necessary in its sole judgment based on Good Utility Practice, subject to the requirements of Section 3.7 and Section 11.2. Modifications shall be subject to any applicable approval process set forth in the RTO Tariff applicable to each Party.

11.2 Notice

In the event a Party plans to undertake Modifications to its facilities, including its Transmission System that reasonably may be expected to impact the other Party's Transmission System, the initiating Party shall provide the other Party with at least ninety (90) calendar days' advance notice of the desired Modifications. The nature of and the schedule of work for performing such Modifications shall be subject to review and acceptance by the other Party. Such review and acceptance shall not be untimely nor unreasonably withheld or delayed, to ensure that such Modifications: (i) will not adversely affect a Party's Transmission System, or other facilities, and (ii) are consistent with Good Utility Practice. Compliance with Applicable Laws and Regulations relating to and the suitability and responsibility for the safe and adequate design, construction, operation, and maintenance of the initiating Party's Modifications shall be and remain the sole obligation of the initiating Party. If the other Party does not respond within ninety (90) calendar days after receipt of the notice, then the other Party will be deemed to have accepted the proposed Modifications.

11.3 Cost Responsibility

When the actions of a Party necessitate Modifications to the other Party's facilities that are not required by Applicable Laws and Regulations, such Modifications to the other Party's facilities shall be made at the sole cost and expense of the Party whose actions necessitated the Modifications, unless otherwise agreed to in writing. Such Party's responsibility for such cost is limited to those costs that are incremental to costs already planned to be incurred by the other Party for such Modifications.

11.4 Information

Subject to any applicable confidentiality or CEII agreements, each Party agrees that it will furnish to the other Party such information concerning its system as may be reasonably requested by the other Party as reasonably necessary to construct, operate, maintain, and implement Modifications to the other Party's facilities. No review of such information will constitute an acceptance or approval of the Modifications by the reviewing Party.

ARTICLE 12 GENERAL

12.1 Force Majeure

No Party shall be in Breach in respect to any obligation hereunder because of Force Majeure. A Party unable to fulfill any obligation by reason of Force Majeure shall use diligence to remove such disability with appropriate dispatch. A Party unable to fulfill any obligation by reason of Force Majeure shall: (i) provide prompt written notice of such Force Majeure event to the other Party and such notice shall include an estimate of the expected duration of such event; and (ii) attempt to exercise all reasonable efforts to continue to perform its obligations under this Agreement. The failure of a Party to perform its obligations under this Agreement as a result of Force Majeure shall only be excused for the duration of the Force Majeure and while such Party exercises diligence to remove such disability. As soon as the non-performing Party is able to resume performance of its obligations, such Party shall resume performance and give prompt notice thereof to the other Party.

12.2 Waivers

No failure or delay on the part of either Party in exercising any of its rights under this Agreement, no partial exercise by either Party of any of its rights under this Agreement, and no course of dealing between the Parties shall constitute a waiver of the rights of either Party under this Agreement. Any waiver shall be effective only by a written instrument signed by the Party granting such waiver, and such shall not operate as a waiver of, or continuing waiver with respect to, any subsequent failure to comply therewith.

12.3 Liability

- A. To the fullest extent permitted by law and notwithstanding Section 7.1 or any other provision of this Agreement, in no event shall a Party, its Affiliates, or any of their respective owners, officers, directors, employees, agents, successors or assigns be liable to the other Party, its Affiliates or any of their respective owners, officers, directors, employees, agents, successors or assigns, whether in contract, warranty, tort, negligence, strict liability, or otherwise, for any special, indirect, incidental, exemplary, consequential (including, without limitation, attorneys' fees, litigation costs, replacement power costs, lost profits or revenues, loss of good will or lost business opportunities), or punitive damages related to or resulting from performance or nonperformance of this Agreement or any activity associated with or arising out of this Agreement.
- B. APCO, I&M and OPCO are severally, and not jointly, liable for their respective obligations under this Facilities Agreement.
- C. Nothing in this Agreement shall be construed to create or give rise to any liability on the part of PJM or any other RTO of which a Party is a member. The Parties expressly waive any claims that may arise against PJM and any RTO of which a

Party is a member under this Agreement.

D. The Parties acknowledge and understand that the signature of the authorized representative of PJM on this Agreement is for the limited purpose of acknowledging that a representative of PJM has read the terms of this Agreement. The Parties and PJM further state that they understand that FERC desires that the Parties keep PJM fully apprised of the matters addressed herein as well as any reliability and planning issues that may arise under this Agreement, and that the signature of the authorized PJM representative shall not in any way be deemed to imply that PJM takes responsibility for the actions of any Party, that PJM has any affirmative duties under this Agreement or that PJM is liable in any way under this Agreement.

12.4 Written Notices

Any notice or other communication required or permitted by this Agreement may be given by personal delivery, by e-mail (with confirmation of receipt), by any courier service which guarantees overnight, receipted delivery, or by U.S. certified or registered mail, return receipt requested, addressed to PJM or the Party entitled thereto, at:

If to AEP:

Interconnection Services
American Electric Power Service Corporation
1 Riverside Plaza
Columbus, OH 43215
Email: PJMrequest@aep.com

And

Assistant General Counsel – Transactions American Electric Power Service Corporation 1 Riverside Plaza Columbus, OH 43215 Email: legalnoticesinterconnections@aep.com

If to KENTUCKY POWER:

Everett G. Phillips Kentucky Power Company 1645 Winchester Avenue Ashland, KY 41101 email: everett.phillips@libertyutilities.com

And

Sarah Knowlton, General Counsel

Liberty Utilities Co.
116 North Main Street
Concord, NH 03301
email: LegalNotices@libertyutilities.com

If to PJM:

Vice President-Government Policy PJM Interconnection, L.L.C. 1200 G Street, N.W., Suite 600 Washington D.C. 20005

And

General Counsel PJM Interconnection, L.L.C. 2750 Monroe Blvd. Audubon, PA 19403-2497

The above listed titles and addresses for a Party or PJM may be changed by written notice to the Parties and PJM. Such change shall not necessitate a filing under Section 205 of the Federal Power Act. Any such notice or communication will be deemed to have been given as of the date received.

12.5 Primary and Alternate Contacts

For routine administrative matters not appropriately communicated pursuant to Section 12.4, each Party shall appoint an individual as the primary contact and an individual as the alternate contact. All initial contacts regarding a particular administrative matter pursuant to this Agreement shall be made to the primary contact or the alternate contact. Parties shall promptly notify the other and the RTOs of the name, title, mailing address, telephone number(s), and e-mail address of the primary and alternate contact and any changes thereto; provided however, that any such changes shall not be filed with FERC.

12.6 Governing Law

The validity and meaning of this Agreement shall be governed by and construed in accordance with federal law where applicable and, when not in conflict with or preempted by federal law, the applicable law of the state where the Interconnection Points are located, without application of its conflicts of law provisions.

12.7 <u>Defined Terms and Execution</u>

All capitalized terms used in this Agreement shall have the meanings as specified in the body of this Agreement or as defined in the applicable RTO Tariff. In the event of any conflict between defined terms set forth in the RTO Tariff or defined terms in this Agreement, such conflict shall be resolved in favor of the terms set forth in this Agreement. Any provisions of an RTO Tariff relating to this Agreement that uses any such defined term shall be construed using the definition

given to such defined term in this Agreement.

12.8 <u>Counterparts</u>

This Agreement may be executed in one or more counterparts, each of which shall be deemed an original.

12.9 Entire Agreement; Superseding Effect

This Agreement, including all exhibits, schedules, appendices and other attachments hereto, sets forth the entire understanding and agreement of the Parties as to the subject matter of this Agreement and supersedes all prior written and oral understandings, offers, agreements, commitments, representations, writings, discussions or other communications of every kind between the Parties, pertaining to the subject matter hereof.

ARTICLE 13 ASSIGNMENT

13.1 Assignment

This Agreement shall inure to the benefit of and be binding upon the successors and assigns of the Parties. Successors and assigns of PJM and any RTO to which a Party shall become a member shall become signatories to this Agreement for the limited purpose described in Section 12.3(D) of this Agreement. This Agreement shall not be assigned by any Party without the written consent of the other Party, which consent shall not be unreasonably withheld, conditioned, or delayed. Notwithstanding the foregoing, a Party may assign this Agreement to a successor to which substantially all of the business and assets of such Party shall be transferred, or to an Affiliate of the assigning Party for the purposes of a corporate restructuring, provided that in either case, the assigning Party provides reasonable prior written notice to the other Party and the assignee assumes in writing all rights, duties, and obligations arising under this Agreement. In either such event identified in the preceding sentence, the assigning Party shall be released from all further obligations and duties thereafter arising pursuant to the terms of this Agreement.

ARTICLE 14 SURVIVAL

14.1 <u>Survival</u>

The termination of this Agreement shall not discharge either Party from any obligation it owes to the other Party, as contemplated under Article 5, under this Agreement by reason of any transaction, loss, cost, damage, expense or liability that shall occur (or the circumstances, events or basis of which shall occur or arise) prior to such termination. It is the intent of the Parties hereby that any such obligation owed (whether the same shall be known or unknown at the termination of this Agreement) shall survive the termination of this Agreement, and that either Party may enforce its rights against the other Party with respect to such obligations in an action at law or in equity to the fullest extent permitted by law.

This Agreement shall continue in effect after termination to the extent necessary: (i) for final billings and payments; (ii) to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this Agreement was in effect; and (iii) to permit each Party to have access to the real property, including but not limited to leased property and easements of the other Party to disconnect, remove or salvage its own facilities and equipment.

[Next page is the signature page]

IN WITNESS WHEREOF, this Agreement has been executed by an authorized representative of each Party as of the Execution Date.

American Electric Power Service Corporation, as agent for Appalachian Power Company, Ohio Power Company, Indiana Michigan Power Company

By:	/s/ Robert W Bradish
	(Signature)
	Robert W Bradish
Name:	
	(Print)
Title:	Senior Vice President - Regulated Infrastructure Investment Planning

IN WITNESS WHEREOF, this Agreement has been executed by an authorized representative of each Party as of the Execution Date.

Kentucky Power Company

By:	/s/ Robert W Bradish
	(Signature)
	Robert W Bradish
Name:	
	(Print)
Title:	Vice President

The signature below of the authorized representative of PJM Interconnection, L.L.C. is for the limited purpose of acknowledging that a representative of PJM has read this Agreement as of this 13th_day of 2022.

PJM INTERCONNECTION, L.L.C.

By:	/s/ David W. Souder
	(Signature)
	David W. Souder
Name:	
	(Print)
Title:	Executive Director, System Planning

Service Agreement No.: 6463

APPENDIX I Interconnection Point List and One-Line Diagrams

- 1.1 The systems of the Parties shall be interconnected through the transmission lines and substations at the Interconnection Points described below:
 - 1.1.1. The point hereby designated and hereinafter called "Bellefonte South Point 69 kV Circuit #2 Interconnection Point." The Bellefonte South Point 69 kV Circuit #2 Interconnection Point is located where the Bellefonte (KPCO) South Point (OPCO) 69 kV Circuit #2 transmission line connects to OPCO's structure number 3 on the Ironton (OPCO) Bellefonte (KPCO) 69 kV transmission line. Structure number 3 is located on the Ohio side of the Kentucky-Ohio state line at 82.67327134W, 38.51492338N.
 - 1.1.1.1. Interconnection Facilities owned by OPCO: OPCO owns structure number 3 and the 69 kV transmission line that extends 10 miles from the structure to OPCO's South Point station.
 - 1.1.1.2. Interconnection Facilities owned by KPCO: KPCO owns the 69 kV transmission line that extends 1.5 miles from OPCO's structure number 3 to KPCO's Bellefonte station.
 - 1.1.1.3. Metering: KPCO owns the meter and the 69 kV instrument transformers for the Bellefonte South Point 69 kV Circuit #2 transmission line as shown in Figure I.1. The meter, shown as M1 in Figure I.1, is located at KPCO's Bellefonte station and is compensated 1.5 miles to the Kentucky-Ohio state line.
 - 1.1.2. The point hereby designated and hereinafter called "Bellefonte Pleasant Street 69 kV Interconnection Point." The Bellefonte Pleasant Street 69 kV Interconnection Point is located where the Bellefonte (KPCO) Pleasant Street (OPCO) 69 kV transmission line connects to OPCO's structure number 3 on the Ironton (OPCO) Bellefonte (KPCO) 69 kV transmission line. Structure number 3 is located on the Ohio side of the Kentucky-Ohio state line at 82.67327134W, 38.51492338N.
 - 1.1.2.1. Interconnection Facilities owned by OPCO: OPCO owns structure number 3 and the 69 kV transmission line that extends 1235 feet from the structure to OPCO's Pleasant Street station. OPCO owns the conductor and shield wire to the point of attachment to the structure. OPCO owns all of the equipment used to attach the conductor to the structure.
 - 1.1.2.2. Interconnection Facilities owned by KPCO: KPCO owns the 69 kV transmission line that extends 1.5 miles from OPCO's structure number 3 to KPCO's Bellefonte station.

- 1.1.2.3. Metering: KPCO owns the meter and the 69 kV instrument transformers for the Bellefonte Pleasant Street 69 kV transmission line as shown in Figure I.1. The meter, shown as M2 in Figure I.1, is located at KPCO's Bellefonte station and is compensated 1.5 miles to the Kentucky-Ohio state line.
- 1.1.3. The point hereby designated and hereinafter called "Bellefonte South Point 69 kV Circuit #1 Interconnection Point." The Bellefonte South Point 69 kV Circuit #1 Interconnection Point is located where the Bellefonte (KPCO) South Point (OPCO) 69 kV Circuit #1 transmission line connects to KPCO's structure T339 on the Kenova (APCO) England Hill (KPCO) 69 kV transmission line. The structure is located on the Kentucky side of the Kentucky-West Virginia state line at 82.59686293W, 38.40447306N.
 - 1.1.3.1. Interconnection Facilities owned by APCO: APCO and OPCO each own a segment of the 69 kV transmission line that extends 1.7 miles from KPCO's structure T339 toward OPCO's South Point station, with APCO owning 1.4 miles of the line and OPCO owning 0.3 mile of the line. APCO owns the conductor and shield wire to the point of attachment to structure T339.
 - 1.1.3.2. Interconnection Facilities owned by OPCO: OPCO and APCO each own a segment of the 69 kV transmission line that extends 1.7 miles from KPCO's structure T339 toward OPCO's South Point station, with OPCO owning 0.3 mile of the line and APCO owning 1.4 miles of the line.
 - 1.1.3.3. Interconnection Facilities owned by KPCO: KPCO owns structure T339 and the 69 kV transmission line that extends 10 miles from the structure to KPCO's Bellefonte station.
 - 1.1.3.4. Metering: OPCO owns the meter and the 69 kV instrument transformers for the Bellefonte South Point 69 kV Circuit #1 transmission line as shown in Figure I.1. The meter, shown as M3 in Figure I.1, is located at OPCO's South Point station and is compensated 1.7 miles to the Kentucky-West Virginia state line.
- 1.1.4. The point hereby designated and hereinafter called "Bellefonte North Proctorville 138 kV Interconnection Point." The Bellefonte North Proctorville 138 kV Interconnection Point is located at KPCO's structure number 17 on the Bellefonte (KPCO) North Proctorville (OPCO) 138 kV transmission line. The structure is located on the Kentucky side of the Kentucky-Ohio state line at 82.65969216 W, 38.49305151N.
 - 1.1.4.1. Interconnection Facilities owned by OPCO: OPCO owns the 138 kV transmission line that extends 21 miles from KPCO's structure number 17 to OPCO's North Proctorville station.

- 1.1.4.2. Interconnection Facilities owned by KPCO: KPCO owns structure number 17 and the 138 kV transmission line that extends 0.8 mile from the structure to KPCO's Bellefonte station.
- 1.1.4.3. Metering: Bellefonte North Proctorville 138 kV Interconnection Point: OPCO owns the meter and the 138 kV instrument transformers for the Bellefonte North Proctorville 138 kV Interconnection Point as shown in Figure I.1. The meter, shown as M4 in Figure I.1, is located at OPCO's North Proctorville station and is compensated 21 miles to the Kentucky-Ohio state line.
- 1.1.5. The point hereby designated and hereinafter called "Bellefonte East Wheelersburg 138 kV Interconnection Point." The Bellefonte East Wheelersburg 138 kV Interconnection Point is located where the Bellefonte (KPCO) East Wheelersburg (OPCO) 138 kV transmission line connects to KPCO's structure number 17 on KPCO's Bellefonte 138 kV extension transmission line. The structure is located on the Kentucky side of the Kentucky-Ohio state line at 82.65969216W, 38.49305151N.
 - 1.1.5.1. Interconnection Facilities owned by OPCO: OPCO owns the 138 kV transmission line that extends 23 miles from KPCO's structure number 17 to OPCO's East Wheelersburg station.
 - 1.1.5.2. Interconnection Facilities owned by KPCO: KPCO owns structure number 17 and the 138 kV transmission line that extends 0.8 mile from the structure to KPCO's Bellefonte station.
 - 1.1.5.3. Metering: Bellefonte East Wheelersburg 138 kV Interconnection Point: KPCO owns the meter and the 138 kV instrument transformers for the Bellefonte East Wheelersburg transmission line as shown in Figure I.1. The meter, shown as M5 in Figure I.1, is located at KPCO's Bellefonte station and is compensated 0.8 mile to the Kentucky-Ohio state line.
- 1.1.6. The points hereby designated and hereinafter called "Grangston Bellefonte 138 kV Interconnection Point" and "Grangston Big Sandy 138 kV Interconnection Point" are known together as the "Grangston 138 kV Interconnection Points." The Grangston 138 kV Interconnection Points are located at APCO's structure number 4 on the Grangston 138 kV Loop transmission line. The structure is located on the West Virginia side of the Kentucky-West Virginia state line at 82.59664701W, 38.34811394N.
 - 1.1.6.1. Interconnection Facilities owned by APCO: APCO owns structure number 4 and the two 138 kV transmission lines that extend 1300 feet to

- APCO's Grangston station.
- 1.1.6.2. Interconnection Facilities owned by KPCO: KPCO owns the 138 kV transmission line that extends 12.7 miles from APCO's structure number 4 to KPCO's Big Sandy station and the 138 kV transmission line that extends 13.4 miles from the structure to KPCO's Bellefonte station.
- 1.1.6.3. Metering: APCO owns the meter and the 138 kV instrument transformers for the Grangston 138 kV Interconnection Points as shown in Figure I.2. The meter is located at APCO's Grangston station and is not compensated. This meter is used to meter both ties as a combined line. The meter is also used to meter the Independent Power Producer ("IPP") located at Grangston station.
- 1.1.7. The point hereby designated and hereinafter called "Baker Tri-State 345 kV Interconnection Point." The Baker Tri-State 345 kV Interconnection Point is located where APCO's 345 kV transmission line (5.61 miles in length) from APCO's Tri-State station connects to KPCO's structure number 161-35 on the Big Sandy (KPCO) Tri-State (APCO) 345 kV transmission line. The structure is located on the Kentucky side of the Kentucky-West Virginia state line at 82.58033287W, 38.28495575N.
 - 1.1.7.1. Interconnection Facilities owned by APCO: APCO owns the 345 kV transmission line that extends 5.61 miles from KPCO's structure number 161-35 to APCO's Tri-State station. APCO owns the conductor and shield wire to the point of attachment to the structure.
 - 1.1.7.2. Interconnection Facilities owned by KPCO: KPCO owns structure number 161-35 and the 345 kV transmission line that extends 8.31 miles from the structure to KPCO's Baker station.
 - 1.1.7.3. Metering: KPCO owns the meter and the 345 kV instrument transformers for the Baker Tri-State 345 kV transmission line as shown in Figure I.3. The meter, shown as M1 in Figure I.3, is located at KPCO's Baker station and is not compensated.
- 1.1.8. The points hereby designated and hereinafter called "Baker Broadford 765 kV KY-WV #1 Interconnection," "Baker Broadford 765 kV KY-WV #2 Interconnection" and "Baker Broadford 765 kV KY-VA Interconnection" are known together as the "Baker Broadford 765 kV Interconnection Points." The Baker Broadford 765 kV transmission line as represented in Figure I.3 is comprised of three line segments (4.25 miles in West Virginia owned by APCO, 73.7 miles in Kentucky owned by KPCO, and 47.7 miles in Virginia owned by APCO), and the three Baker Broadford 765 kV Interconnection Points identified above. The Baker Broadford 765 kV KY-WV #1 Interconnection Point is

located where APCO's 765 kV transmission line (4.25 miles in length) from the Baker – Broadford 765 kV KY-WV #2 Interconnection Point (KPCO's structure number 76-18) connects to KPCO's Baker station at the terminal pads of the deadend bodies of the 765 kV transmission line. The Baker – Broadford 765 kV KY-WV #2 Interconnection Point is located where APCO's 765 kV transmission line (4.25 miles in length) from the Baker – Broadford 765 kV KY-WV #1 Interconnection Point connects to KPCO's structure number 76-18. Structure number 76-18 is located on the Kentucky side of the Kentucky-West Virginia state line at 82.62268216W, 38.12396495N. The Baker – Broadford 765 kV KY-VA Interconnection Point is located where APCO's 765 kV transmission line (47.7 miles in length) from APCO's Broadford station connects to KPCO's structure number 76-262. Structure number 76-262 is located on the Kentucky side of the Kentucky-Virginia state line at 82.38637702W, 37.25981361N.

- 1.1.8.1. Interconnection Facilities owned by KPCO: KPCO owns the first deadend structure within Baker station to which the Baker Broadford 765 kV transmission line is terminated, the associated vertical strain bus, the instrument transformers attached to the vertical strain bus, and the wave trap within the vertical strain bus. At Baker station KPCO owns the jumper conductors connecting the outgoing Baker Broadford 765 kV circuit to the vertical strain bus contained within the dead-end structure. KPCO owns the Broadford line reactors at Baker station and the associated disconnect switches. KPCO owns structure number 76-18, structure number 76-262, and the 765 kV transmission line (73.7 miles in length) between structures 76-18 and 76-262.
- 1.1.8.2. Interconnection Facilities owned by APCO: At Baker station APCO owns the outgoing transmission line conductors of the Baker Broadford 765 kV circuit including the insulators, dead-end bodies, shackles, and related hardware required to connect the transmission line to the first dead-end structure within Baker station. APCO owns the 765 kV transmission line (4.25 miles in length) from KPCO's Baker station to KPCO's structure number 76-18. APCO owns the 765 kV transmission line (47.7 miles in length) from KPCO's structure number 76-262 to APCO's Broadford station.
- 1.1.8.3. Metering: APCO owns the meter and the 765 kV instrument transformers for the Baker Broadford 765 kV transmission line as shown in Figure I.3. The meter, shown as M2 in Figure I.3, is located at APCO's Broadford station and is compensated 51.95 miles from Broadford station toward KPCO's Baker station. This compensation accounts for losses on the APCO-owned line segments of the Baker Broadford 765 kV transmission line, specifically 47.7 miles in Virginia and 4.25 miles in West Virginia.
- 1.1.9. The point hereby designated and hereinafter called "Baker Hanging Rock 765

- **kV Interconnection Point**." The Baker Hanging Rock 765 kV Interconnection Point is located at OPCO's structure number 1 on the Baker (KPCO) Hanging Rock (OPCO) 765 kV Interconnection transmission line. The structure is located on the Ohio side of the Kentucky-Ohio state line at 82.79616472W, 38.56452137N.
- 1.1.9.1. Interconnection Facilities owned by OPCO: OPCO owns structure number 1 and the 765 kV transmission line that extends 1.6 miles from the structure to OPCO's Hanging Rock station.
- 1.1.9.2. Interconnection Facilities owned by KPCO: KPCO owns the 765 kV transmission line that extends 29 miles from OPCO's structure number 1 to KPCO's Baker station.
- 1.1.9.3. Metering: OPCO owns the meter and the 765 kV instrument transformers for the Baker Hanging Rock 765 kV Interconnection Point as shown in Figure I.3. The meter, shown as M3 in Figure I.3, is located at OPCO's Hanging Rock station and is compensated 1.6 miles to the Kentucky-Ohio state line.
- 1.1.10. The point hereby designated and hereinafter called "Baker Culloden 765 kV Interconnection Point." The Baker Culloden 765 kV Interconnection Point is located where APCO's 765 kV transmission line (33 miles in length) from APCO's Culloden station connects to KPCO's Baker station at the terminal pads of the dead-end bodies of the 765 kV transmission line.
 - 1.1.10.1. Interconnection Facilities owned by APCO: APCO owns the 765 kV transmission line that extends 33 miles from APCO's Culloden station to KPCO's Baker station. At Baker station APCO owns the outgoing transmission line conductors of the Baker Culloden 765 kV circuit including the insulators, dead-end bodies, shackles, and related hardware required to connect the transmission line to the first dead-end structure within Baker station.
 - 1.1.10.2. Interconnection Facilities owned by KPCO: KPCO owns the first deadend structure within Baker station to which the Baker Culloden 765 kV transmission line is terminated, the associated vertical strain bus, the instrument transformers attached to the vertical strain bus, and the wave trap within the vertical strain bus. At Baker station KPCO owns the jumper conductors connecting the outgoing Baker Culloden 765 kV circuit to the vertical strain bus contained within the dead-end structure. KPCO owns the disconnect switches at Baker station associated with the previously-retired Culloden line reactors.
 - 1.1.10.3. Metering: APCO owns the meter and the 765 kV instrument transformers for the Baker Culloden 765 kV Interconnection Point as shown in Figure I.3. The meter, shown as M4 in Figure I.3, is located at APCO's

Culloden station and is compensated 33 miles to the Kentucky-West Virginia state line.

- 1.1.11. The point hereby designated and hereinafter called "Sprigg Borderland Hatfield 138 kV Interconnection Point." The Sprigg Borderland Hatfield 138 kV Interconnection Point is located where the Hatfield (KPCO) Borderland (APCO) segment of the Inez (KPCO) Sprigg (APCO) 138 kV transmission line enters APCO's Borderland station at the terminal pads of the dead-end bodies of the 138 kV transmission line coming from KPCO's Hatfield station.
 - 1.1.11.1. Interconnection Facilities owned by APCO: APCO owns the 138 kV dead-end structure within Borderland station to which the Hatfield (KPCO) Borderland (APCO) segment of the Inez (KPCO) Sprigg (APCO) 138 kV transmission line is terminated, the associated strain bus-work internal to the dead-end structure, and the 138 kV transmission line instrument transformer and its associated jumper conductors. At Borderland station APCO owns switch "Y," the jumper conductors connecting the outgoing Hatfield Borderland 138 kV transmission line segment to switch "Y," and all associated jumper conductors connecting to the station side of switch "Y."
 - 1.1.11.2. Interconnection Facilities owned by KPCO: KPCO owns the 138 kV transmission line segment that extends 5.87 miles from APCO's Borderland station to KPCO's Hatfield station. At Borderland station KPCO owns the outgoing transmission line conductors of the Hatfield (KPCO) Borderland (APCO) segment of the Inez (KPCO) Sprigg (APCO) 138 kV transmission line including the insulators, dead-end bodies, shackles, and related hardware required to connect the transmission line to the 138 kV dead-end structure within Borderland station.
 - 1.1.11.3. Metering: KPCO owns the meter and the 138 kV instrument transformers for the Hatfield (KPCO) Borderland (APCO) segment of the Inez (KPCO) Sprigg (APCO) 138 kV transmission line as shown in Figure I.4. The meter, shown as M1 in Figure I.4, is located at KPCO's Hatfield station and is compensated 5.87 miles to the Kentucky-West Virginia state line.
- 1.1.12. The points hereby designated and hereinafter called "Sprigg Logan 138 kV Circuit #1 (KY-WV "A") Interconnection," "Sprigg Logan 138 kV Circuit #1 (KY-WV "B") Interconnection," "Sprigg Logan 138 kV Circuit #2 (KY-WV "A") Interconnection" and "Sprigg Logan 138 kV Circuit #2 (KY-WV "B") Interconnection" are known together as the "Sprigg Logan 138 kV Interconnection Points." Sprigg Logan 138 kV Circuit #1 and Sprigg Logan 138 kV Circuit #2 together comprise a double-circuit transmission line. The

Sprigg – Logan 138 kV Circuit #1 (KY-WV "A") Interconnection Point is located in APCO's Sprigg station at the terminal pads of the dead-end bodies of the Sprigg – Logan 138 kV Circuit #1. The Sprigg – Logan 138 kV Circuit #2 (KY-WV "A") Interconnection Point is located in APCO's Sprigg station at the terminal pads of the dead-end bodies of the Sprigg – Logan 138 kV Circuit #2. The Sprigg – Logan 138 kV Circuit #1 (KY-WV "B") Interconnection Point and the Sprigg – Logan 138 kV Circuit #2 (KY-WV "B") Interconnection Point are located at KPCO's structure number 132-56 on the Sprigg (APCO) – Logan (APCO) 138 kV double-circuit transmission line. Structure number 132-56 is located on the Kentucky side of the Kentucky-West Virginia state line at 82.18004146W, 37.63811893N.

- 1.1.12.1. Interconnection Facilities owned by APCO: APCO owns the 138 kV double-circuit transmission line that extends 18 miles from KPCO's structure number 132-56 to APCO's Logan station. APCO owns the 138 kV steel dead-end structure at Sprigg station to which the Sprigg – Logan 138 kV Circuit #1 is terminated, including all associated transmission line attachment plates. For the Sprigg – Logan 138 kV Circuit #1 transmission line at Sprigg station, APCO owns circuit breaker "B" and its associated bus- and line-side disconnect switches, the line jumper conductors and bus tubing connecting the transmission line to the line-side disconnect switches of circuit breaker "B," the surge arrester, and associated jumper conductors between the surge arrester and the line jumper conductors. APCO owns the 138 kV steel dead-end structure at Sprigg station to which the Sprigg – Logan 138 kV Circuit #2 is terminated, including all associated transmission line attachment plates. For the Sprigg – Logan 138 kV Circuit #2 transmission line at Sprigg station, APCO owns circuit breaker "A," and its associated bus- and lineside disconnect switches, the line jumper conductors and bus tubing connecting the transmission line to the line-side disconnect switches of circuit breaker "A," the surge arrester, and associated jumper conductors between the surge arrester and the line jumper conductors.
- 1.1.12.2. Interconnection Facilities owned by KPCO: KPCO owns structure number 132-56 and the 138 kV double-circuit transmission line that extends 0.5 mile from structure number 132-56 to APCO's Sprigg station. At Sprigg station KPCO owns the outgoing transmission line conductors of the Sprigg Logan 138 kV Circuit #1 including the insulators, dead-end bodies, shackles, and related hardware required to connect the transmission line to the associated 138 kV dead-end structure within Sprigg station. At Sprigg station KPCO owns the outgoing transmission line conductors of the Sprigg Logan 138 kV Circuit #2 including the insulators, dead-end bodies, shackles, and related hardware required to connect the transmission line to the associated 138 kV dead-end structure within Sprigg station.
- 1.1.12.3. Metering: The Sprigg Logan 138 kV Interconnection Points as shown

in Figure I.4 are unmetered as the double-circuit transmission line comprised of Sprigg – Logan 138 kV Circuit #1 and Sprigg – Logan 138 kV Circuit #2 does not connect to any KPCO load.

- 1.1.13. The point hereby designated and hereinafter called "Sprigg Stone 138 kV Interconnection Point." The Sprigg Stone 138 kV Interconnection Point is located at KPCO's structure K726-7 on the Sprigg (APCO) Stone (KPCO) 138 kV transmission line. The structure is located on the Kentucky side of the Kentucky-West Virginia state line at 82.21439826W, 37.62296027N.
 - 1.1.13.1. Interconnection Facilities owned by APCO: APCO owns the 138 kV transmission line that extends 1.7 miles from KPCO's structure K426-47 to APCO's Sprigg station.
 - 1.1.13.2. Interconnection Facilities owned by KPCO: KPCO owns structure K726-7 and the 138 kV transmission line that extends 3.6 miles from the structure to KPCO's Stone station.
 - 1.1.13.3. Metering: APCO owns the meter and the 138 kV instrument transformers for the Sprigg Stone 138 kV Interconnection Point as shown in Figure I.4. The meter, shown as M2 in Figure I.4, is located at APCO's Sprigg station and is compensated 1.7 miles to the Kentucky-West Virginia state line.
- 1.1.14. The point hereby designated and hereinafter called "Sprigg Barrenshe 69 kV Interconnection Point." The Sprigg Barrenshe 69 kV Interconnection Point is located where the Coleman (KPCO) Barrenshe (KPCO) Sprigg (APCO) 69 kV transmission line connects to APCO's Sprigg station at the terminal pads of the tap to the metering on the transmission line.
 - 1.1.14.1. Interconnection Facilities owned by APCO: APCO owns the Sprigg 69 kV dead-end structure to which the Coleman (KPCO) Barrenshe (KPCO) Sprigg (APCO) 69 kV transmission line is terminated, including the steel angle associated with providing the connection point on the dead-end structure for the transmission line. APCO owns circuit breaker "T" in Sprigg station, its disconnect switches, and the connections to the circuit breaker. APCO owns the jumper conductors connecting the Coleman Barrenshe Sprigg 69 kV transmission line to the metering located in Sprigg station. APCO owns the bolted tee connector attached to the 69 kV transmission line that provides the terminal pad for the jumper conductors to the metering in Sprigg station. APCO owns the Coleman Barrenshe Sprigg 69 kV transmission line metering equipment (including instrument transformers and arresters), the series reactors, and the jumper conductors between such facilities.

- 1.1.14.2. Interconnection Facilities owned by KPCO: KPCO owns the 69 kV transmission line that extends 6.9 miles from APCO's Sprigg station to KPCO's Barrenshe station. At Sprigg station KPCO owns the outgoing transmission line conductors of the Coleman (KPCO) Barrenshe (KPCO) Sprigg (APCO) 69 kV transmission line including the insulators, dead-end bodies, shackles, and related hardware required to connect the transmission line to the 69 kV dead-end structure within Sprigg station.
- 1.1.14.3. Metering: APCO owns the meter and the 69 kV instrument transformers for the Sprigg Barrenshe 69 kV Interconnection Point as shown in Figure I.4. The meter, shown as M3 in Figure I.4, is located at APCO's Sprigg station and is compensated to the Kentucky-West Virginia state line.
- 1.1.15. The points hereby designated and hereinafter called "Sprigg Grapevine Fork Switching Station 46 kV KY-WV #1 Interconnection" and "Sprigg – Grapevine Fork Switching Station 46 kV KY-WV #2 Interconnection" are known together as the "Sprigg - Grapevine Fork Switching Station 46 kV Interconnection Points." The Sprigg (APCO) – Grapevine Fork Switching Station (APCO) – Wharncliffe (APCO) 46 kV transmission line consists of six conductors terminating to APCO's Sprigg station 46 kV dead-end structure rather than the usual three. The Sprigg – Grapevine Fork Switching Station 46 kV KY-WV #1 Interconnection Point is located at APCO's Sprigg station where the station jumper conductors tap the 46 kV transmission line down to circuit breaker "H." Only three of the 46 kV transmission line's six conductors are tapped down to circuit breaker "H." The other three conductors simply dead-end to the Sprigg station 46 kV dead-end structure and terminate at that point. The Sprigg - Grapevine Fork Switching Station 46 kV KY-WV #2 Interconnection Point is located at KPCO's structure K387-6 on the Sprigg (APCO) – Grapevine Fork Switching Station (APCO) – Wharncliffe (APCO) 46 kV transmission line. Structure K387-6 is located on the Kentucky side of the Kentucky-West Virginia state line at 82.17628734W, 37.63777432N.
 - 1.1.15.1. Interconnection Facilities owned by APCO: APCO owns the 46 kV transmission line that extends 9 miles from KPCO's structure K387-6 to APCO's Grapevine Fork Switching Station. In Sprigg station APCO owns the 46 kV steel dead-end structure and all associated transmission line attachment plates, circuit breaker "H" and its associated bus- and line-side disconnect switches, the jumper conductors connecting the Sprigg (APCO) Grapevine Fork Switching Station (APCO) Wharncliffe (APCO) 46 kV transmission line to the line-side disconnect switches of circuit breaker "H," and the structure supporting such jumper conductors.
 - 1.1.15.2. Interconnection Facilities owned by KPCO: KPCO owns structure

K387-6 and the 46 kV transmission line that extends 0.6 mile from the structure to APCO's Sprigg station. At Sprigg station KPCO owns the six outgoing transmission line conductors of the Sprigg (APCO) – Grapevine Fork Switching Station (APCO) – Wharncliffe (APCO) 46 kV transmission line including the insulators, dead-end bodies, shackles, and related hardware required to connect the transmission line to the 46 kV dead-end structure within Sprigg station.

- 1.1.15.3. Metering: The Sprigg Grapevine Fork Switching Station 46 kV Interconnection Points as shown in Figure I.4 are unmetered as the Sprigg (APCO) Grapevine Fork Switching Station (APCO) Wharncliffe (APCO) 46 kV transmission line does not connect to any KPCO load.
- 1.1.16. The point hereby designated and hereinafter called "Sprigg Belfry 46 kV Interconnection Point." The Sprigg Belfry 46 kV Interconnection Point is located at KPCO's structure K426-47 on the Sprigg (APCO) Belfry (KPCO) Stone (KPCO) 46 kV transmission line. The structure is located on the Kentucky side of the Kentucky-West Virginia state line at 82.22012693W, 37.63804774N.
 - 1.1.16.1. Interconnection Facilities owned by APCO: APCO owns the 46 kV transmission line that extends 1.9 miles from KPCO's structure K426-47 to APCO's Sprigg station.
 - 1.1.16.2. Interconnection Facilities owned by KPCO: KPCO owns structure K426-47 and the 46 kV transmission line that extends 2.9 miles from the structure to KPCO's Belfry station.
 - 1.1.16.3. Metering: APCO owns the meter and the 46 kV instrument transformers for the Sprigg Belfry 46 kV Interconnection Point as shown in Figure I.4. The meter, shown as M4 in Figure I.4, is located at APCO's Sprigg station and is compensated 1.9 miles to the Kentucky-West Virginia state line.
- 1.1.17. The point hereby designated and hereinafter called "Big Sandy Wayne 34 kV Interconnection Point." The Big Sandy Wayne 34 kV Interconnection Point is located where APCO's 34 kV transmission line (15 miles in length) from APCO's Wayne station connects to KPCO's structure number 8. The structure is located on the Kentucky side of the Kentucky-West Virginia state line at 82.62505021W, 38.17079923N.
 - 1.1.17.1. Interconnection Facilities owned by APCO: APCO owns the 34 kV transmission line that extends 15 miles from KPCO's structure number 8 to APCO's Wayne station.

- 1.1.17.2. Interconnection Facilities owned by KPCO: KPCO owns structure number 8 and the 34 kV transmission line that extends 0.4 mile from the structure to KPCO's Big Sandy station.
- 1.1.17.3. Metering: APCO owns the meter and the 34 kV instrument transformers for the Big Sandy Wayne 34 kV Interconnection as shown in Figure I.5. The meter, shown as M1 in Figure I.5, is located at APCO's Wayne station and is compensated 15 miles to the Kentucky-West Virginia state line.
- 1.1.18. The points hereby designated and hereinafter called "Big Sandy Busseyville 138 kV KY-WV #1 Interconnection" and "Big Sandy – Busseyville 138 kV KY-WV #2 Interconnection" are known together as the "Big Sandy – Busseyville 138 kV **Interconnection Points.**" The Big Sandy – Busseyville 138 kV transmission line as represented in Figure I.5 is comprised of three line segments (0.25 mile in Kentucky owned by KPCO, 2.9 miles in West Virginia owned by APCO, and 3.8 miles in Kentucky owned by KPCO), and the two Big Sandy – Busseyville 138 kV Interconnection Points identified above. The Big Sandy – Busseyville 138 kV KY-WV #1 Interconnection Point is located where APCO's 138 kV transmission line (2.9 miles in length) from the Big Sandy - Busseyville 138 kV KY-WV #2 Interconnection Point (KPCO's structure K109-15) connects to KPCO's structure K107-80. KPCO's structure K107-80 is located on the Kentucky side of the Kentucky-West Virginia state line at 82.61990514W, 38.16958586N. The Big Sandy – Busseyville 138 kV KY-WV #2 Interconnection Point is located where APCO's 138 kV transmission line (2.9 miles in length) from the Big Sandy – Busseyville 138 kV KY-WV #1 Interconnection Point (KPCO's structure K107-80) connects to KPCO's structure K109-15. KPCO's structure K109-15 is located on the Kentucky side of the Kentucky-West Virginia state line at 82.63096488W, 38.13517744N.
 - 1.1.18.1. Interconnection Facilities owned by KPCO: KPCO owns structure K107-80 and the 138 kV transmission line that extends 0.25 mile from structure K107-80 to KPCO's Big Sandy station. KPCO owns structure K109-15 and the 138 kV transmission line that extends 3.8 miles from structure K109-15 to KPCO's Busseyville station.
 - 1.1.18.2. Interconnection Facilities owned by APCO: APCO owns the 138 kV transmission line that extends 2.9 miles from KPCO's structure K107-80 to KPCO's structure K109-15.
 - 1.1.18.3. Metering: The Big Sandy Busseyville 138 kV Interconnection Points as shown in Figure I.5 are unmetered as the Big Sandy Busseyville 138 kV transmission line connects two KPCO-owned stations (Big Sandy and Busseyville).

- 1.1.19. The point hereby designated and hereinafter called "Big Sandy Hubbardstown 138 kV Interconnection Point." The Big Sandy Hubbardstown 138 kV Interconnection Point is located where APCO's 138 kV transmission line (2 miles in length) from APCO's Hubbardstown station connects to KPCO's structure K107-80. The structure is located on the Kentucky side of the Kentucky-West Virginia state line at 82.61990514W, 38.16958586N.
 - 1.1.19.1. Interconnection Facilities owned by APCO: APCO owns the 138 kV transmission line that extends 2 miles from KPCO's structure K107-80 to APCO's Hubbardstown station.
 - 1.1.19.2. Interconnection Facilities owned by KPCO: KPCO owns structure K107-80 and the 138 kV transmission line that extends 0.25 mile from the structure to KPCO's Big Sandy station.
 - 1.1.19.3. Metering: APCO owns the meter and the 138 kV instrument transformers for the Big Sandy Hubbardstown 138 kV Interconnection as shown in Figure I.5. The meter, shown as M2 in Figure I.5, is located at APCO's Hubbardstown station and is compensated 2 miles to the Kentucky-West Virginia state line.
- 1.1.20. The points hereby designated and hereinafter called "Big Sandy Inez 138 kV KY-WV #1 Interconnection" and "Big Sandy - Inez 138 kV KY-WV #2 Interconnection" are known together as the "Big Sandy - Inez 138 kV Interconnection Points." The Big Sandy – Inez 138 kV transmission line as represented in Figure I.5 is comprised of three line segments (0.5 mile in Kentucky owned by KPCO, 7.7 miles in West Virginia owned by APCO, and 24.6 miles in Kentucky owned by KPCO), and the two Big Sandy – Inez 138 kV Interconnection Points identified above. The Big Sandy – Inez 138 kV KY-WV #1 Interconnection Point is located where APCO's 138 kV transmission line (7.7 miles in length) from the Big Sandy – Inez 138 kV KY-WV #2 Interconnection Point (KPCO's structure number 690-45) connects to KPCO's structure number 690-4. KPCO's structure number 690-4 is located on the Kentucky side of the Kentucky-West Virginia state line at 82.61144796W, 38.17437968N. The Big Sandy – Inez 138 kV KY-WV #2 Interconnection Point is located where APCO's 138 kV transmission line (7.7 miles in length) from the Big Sandy – Inez 138 kV KY-WV #1 Interconnection Point (KPCO's structure number 690-4) connects to KPCO's structure number 690-45. KPCO's structure number 690-45 is located on the Kentucky side of the Kentucky-West Virginia state line at 82.57479391W, 38.07955193N.
 - 1.1.20.1. Interconnection Facilities owned by KPCO: KPCO owns structure number 690-4 and the 138 kV transmission line that extends 0.5 mile from structure number 690-4 to KPCO's Big Sandy station. KPCO owns structure number 690-45 and the 138 kV transmission line that extends 24.6 miles from structure number 690-45 to KPCO's Inez station.

- 1.1.20.2. Interconnection Facilities owned by APCO: APCO owns the 138 kV transmission line that extends 7.7 miles from KPCO's structure number 690-4 to KPCO's structure number 690-45.
- 1.1.20.3. Metering: The Big Sandy Inez 138 kV Interconnection Points as shown in Figure I.5 are unmetered as the Big Sandy Inez 138 kV transmission line connects two KPCO-owned stations (Big Sandy and Inez).
- 1.1.21. The point hereby designated and hereinafter called "Grays Branch Franklin Furnace Switch 69 kV Interconnection Point." The Grays Branch Franklin Furnace Switch 69 kV Interconnection Point is located where KPCO's 69 kV transmission line (0.79 mile in length) from KPCO's Grays Branch station connects to OPCO's structure number 4. The structure is located on the Ohio side of the Kentucky-Ohio state line at 82.85570589W, 38.63873305N.
 - 1.1.21.1. Interconnection Facilities owned by OPCO: OPCO owns structure number 4 and the 69 kV transmission line that extends 0.34 mile to OPCO's Franklin Furnace Switch station.
 - 1.1.21.2. Interconnection Facilities owned by KPCO: KPCO owns the 69 kV transmission line that extends 0.79 mile from OPCO's structure number 4 to KPCO's Grays Branch station.
 - 1.1.21.3. Metering: The Grays Branch Franklin Furnace Switch 69 kV Interconnection is metered by a combination of two meters shown as M1 and M2 in Figure I.6. The meter shown as M1 in Figure I.6 is located on the low side of the 69/12 kV transformer at KPCO's Grays Branch station and is not compensated. Meter M1 and its associated instrument transformers are owned by KPCO. The meter shown as M2 in Figure I.6 is located on the outgoing Argentum Grays Branch 69 kV transmission line at East Kentucky Power Cooperative's ("EKPC") Argentum station. Meter M2 and its associated instrument transformers are owned by EKPC. OPCO accesses EKPC's M2 meter data for business purposes.
- 1.1.22. The point hereby designated and hereinafter called "Beaver Creek Fremont 138 kV Interconnection Point." The Beaver Creek Fremont 138 kV Interconnection Point is located where APCO's 138 kV transmission line (8.9 miles in length) from APCO's Fremont station connects to KPCO's structure K113-107. The structure is located on the Kentucky side of the Kentucky-Virginia state line at 82.51375W, 37.2169N.
 - 1.1.22.1. Interconnection Facilities owned by APCO: APCO owns the 138 kV

- transmission line that extends 8.9 miles from KPCO's structure K113-107 to APCO's Freemont station.
- 1.1.22.2. Interconnection Facilities owned by KPCO: KPCO owns structure K113-107 and the 138 kV transmission line that extends 17 miles from the structure to KPCO's Beaver Creek station.
- 1.1.22.3. Metering: KPCO owns the meter and the 138 kV instrument transformers for the Beaver Creek Fremont 138 kV transmission line as shown in Figure I.7. The meter is located at KPCO's Beaver Creek station and is compensated 17 miles to the Kentucky-Virginia state line.
- 1.1.23. The point hereby designated and hereinafter called "Breaks Haysi 69 kV Interconnection Point." The Breaks Haysi 69 kV Interconnection Point is located where KPCO's 69 kV transmission line (2 miles in length) from KPCO's Breaks station connects to APCO's structure number 302-13A. The structure is located on the Virginia side of the Kentucky-Virginia state line at 82.33390039W, 37.2811393N.
 - 1.1.23.1. Interconnection Facilities owned by APCO: APCO owns structure number 302-13A and the 69 kV transmission line that extends 6.3 miles from the structure to APCO's Haysi station.
 - 1.1.23.2. Interconnection Facilities owned by KPCO: KPCO owns the 69 kV transmission line that extends 2 miles from APCO's structure number 302-13A to KPCO's Breaks station.
 - 1.1.23.3. Metering: KPCO owns the meter and the 69 kV instrument transformers for the Breaks Haysi 69 kV Interconnection as shown in Figure I.8. The meter is located at KPCO's Breaks station and is compensated 2 miles to the Kentucky-Virginia state line.
- 1.1.24. The points hereby designated and hereinafter called "Jefferson Hanging Rock 765 kV KY-IN Interconnection" and "Jefferson Hanging Rock 765 kV KY-OH Interconnection" are known together as the "Jefferson Hanging Rock 765 kV Interconnection Points." The Jefferson Hanging Rock 765 kV transmission line as represented in Figure I.9 is comprised of three line segments (0.76 mile in Indiana owned by I&M, 154.6 miles in Kentucky owned by KPCO, and 6.1 miles in Ohio owned by OPCO), and the two Jefferson Hanging Rock 765 kV Interconnection Points identified above. The Jefferson Hanging Rock 765 kV KY-IN Interconnection Point is located where KPCO's 765 kV transmission line (154.6 miles in length) from the Jefferson Hanging Rock 765 kV KY-OH Interconnection Point (KPCO's structure number 22) connects to I&M's structure number 608 on the Indiana side of the Kentucky-Indiana state line at 85.43078945W, 38.73159953N. The Jefferson Hanging Rock 765 kV KY-OH

Interconnection Point is located where OPCO's 765 kV transmission line (6.1 miles in length) from OPCO's Hanging Rock station connects to KPCO's structure number 22 on the Ohio side of the Kentucky-Ohio state line at 82.85113738W, 38.60816558N.

- 1.1.24.1. Interconnection Facilities owned by I&M: I&M owns structure number 608 and the 765 kV transmission line that extends 0.76 mile from the structure to I&M's Jefferson station.
- 1.1.24.2. Interconnection Facilities owned by KPCO: KPCO owns structure number 22 and the 765 kV transmission line that extends 154.6 miles from structure number 22 to I&M's structure number 608.
- 1.1.24.3. Interconnection Facilities owned by OPCO: OPCO owns the 765 kV transmission line that extends 6.1 miles from KPCO's structure number 22 to OPCO's Hanging Rock station.
- 1.1.24.4. Metering: OPCO owns the meter and the 765 kV instrument transformers for the Jefferson Hanging Rock 765 kV transmission line as shown in Figure I.9. The meter is located at OPCO's Hanging Rock station. The Jefferson Hanging Rock 765 kV transmission line serves no load in Kentucky.
- 1.1.25. The point hereby designated and hereinafter called "Jenkins Pound 69 kV Interconnection Point." The Jenkins Pound 69 kV Interconnection Point is located where APCO's 69 kV transmission line (4.4 miles in length) from APCO's Pound station connects to KPCO's structure K410-23A. The structure is located on the Kentucky side of the Kentucky-Virginia state line at 82.64397304W, 37.15274369N.
 - 1.1.25.1. Interconnection Facilities owned by APCO: APCO owns the 69 kV transmission line that extends 4.4 miles from KPCO's structure K410-23A to APCO's Pound station.
 - 1.1.25.2. Interconnection Facilities owned by KPCO: KPCO owns structure K410-23A and the 69 kV transmission line that extends 1.3 miles from the structure to KPCO's Jenkins station.
 - 1.1.25.3. Metering: KPCO owns the meter and the 69 kV instrument transformers for the Jenkins Pound 69 kV Interconnection Point as shown in Figure I.10. The meter is located at KPCO's Jenkins station and is compensated 1.3 miles to the Kentucky-Virginia state line.
- 1.1.26. The point hereby designated and hereinafter called "Kenova Ashland 69 kV Interconnection Point." The Kenova Ashland 69 kV Interconnection Point is

located where APCO's 69 kV transmission line (0.5 mile in length) from APCO's Kenova station connects to KPCO's structure T339. The structure is located on the Kentucky side of the Kentucky-West Virginia state line at 82.59686293W, 38,40447306N.

- 1.1.26.1. Interconnection Facilities owned by APCO: APCO owns the 69 kV transmission line that extends 0.5 mile from KPCO's structure T339 to APCO's Kenova station.
- 1.1.26.2. Interconnection Facilities owned by KPCO: KPCO owns structure T339 and the 69 kV transmission line that extends 5.2 miles from the structure to KPCO's Ashland station.
- 1.1.26.3. Metering: APCO owns the meter and the 69 kV instrument transformers for the Kenova Ashland 69 kV Interconnection Point as shown in Figure I.11. The meter, shown as M1 in Figure I.11, is located at APCO's Kenova station and is compensated 0.5 mile to the Kentucky-West Virginia state line.
- 1.1.27. The point hereby designated and hereinafter called "**Kenova England Hill 69 kV**Interconnection Point." The Kenova England Hill 69 kV Interconnection Point is located where APCO's 69 kV transmission line (0.5 mile in length) from APCO's Kenova station connects to KPCO's structure T339. The structure is located on the Kentucky side of the Kentucky-West Virginia state line at 82.59686293W, 38.40447306N.
 - 1.1.27.1. Interconnection Facilities owned by APCO: APCO owns the 69 kV transmission line that extends 0.5 mile from KPCO's structure T339 to APCO's Kenova station.
 - 1.1.27.2. Interconnection Facilities owned by KPCO: KPCO owns structure T339 and the 69 kV transmission line that extends 2.8 miles from the structure to KPCO's England Hill station.
 - 1.1.27.3. Metering: APCO owns the meter and the 69 kV instrument transformers for the Kenova England Hill 69 kV Interconnection Point as shown in Figure I.11. The meter, shown as M2 in Figure I.11, is located at APCO's Kenova station and is compensated 0.5 mile to the Kentucky-West Virginia state line.
- 1.1.28. The point hereby designated and hereinafter called "South Neal Miller Street Switch Leach 69 kV Interconnection Point." The South Neal Miller Street Switch Leach 69 kV Interconnection Point is located where APCO's 69 kV transmission line (1700 feet in length) from APCO's Miller Street Switch station connects to KPCO's structure number 21. The structure is located on the

Kentucky side of the Kentucky-West Virginia state line at 82.59726484W, 38.36818768N.

- 1.1.28.1. Interconnection Facilities owned by APCO: APCO owns the 69 kV transmission line that extends 1700 feet from KPCO's structure number 21 to APCO's Miller Street Switch station.
- 1.1.28.2. Interconnection Facilities owned by KPCO: KPCO owns structure number 21 and the 69 kV transmission line that extends 1.4 miles from the structure to KPCO's Leach station.
- 1.1.28.3. Metering: KPCO owns the meter and the 69 kV instrument transformers for the South Neal Miller Street Switch Leach 69 kV Interconnection Point as shown in Figure I.12. The meter, shown as M1 in Figure I.12, is located at KPCO's Leach station and is compensated 1.4 miles to the Kentucky-West Virginia state line.
- 1.1.29. The point hereby designated and hereinafter called "South Neal Cannonsburg 69 kV Interconnection Point." The South Neal Cannonsburg 69 kV Interconnection Point is located where KPCO's 69 kV transmission line (5 miles in length) from KPCO's Cannonsburg station connects to APCO's structure number 515-2. The structure is located on the West Virginia side of the Kentucky-West Virginia state line at 82.59598029W, 38.34894437N.
 - 1.1.29.1. Interconnection Facilities owned by APCO: APCO owns structure number 515-2 and the 69 kV transmission line that extends 1100 feet from the structure to APCO's South Neal station.
 - 1.1.29.2. Interconnection Facilities owned by KPCO: .KPCO owns the 69 kV transmission line that extends 5 miles from APCO's structure number 515-2 to KPCO's Cannonsburg station.
 - 1.1.29.3. Metering: APCO owns the meter and the 69 kV instrument transformers for the South Neal Cannonsburg 69 kV Interconnection Point as shown in Figure I.12. The meter, shown as M2 in Figure I.12, is located at APCO's South Neal station and is compensated 1100 feet to the Kentucky-West Virginia state line.
- 1.1.30. The point hereby designated and hereinafter called "South Neal Calgon Switch 69 kV Interconnection Point." The South Neal Calgon Switch 69 kV Interconnection Point is located where KPCO's 69 kV transmission line (1.1 miles in length) from KPCO's Calgon Switch station connects to APCO's structure number 515-2. The structure is located on the West Virginia side of the Kentucky-West Virginia state line at 82.59598029W, 38.34894437N.

- 1.1.30.1. Interconnection Facilities owned by APCO: APCO owns structure number 515-2 and the 69 kV transmission line that extends 1100 feet from the structure to APCO's South Neal station.
- 1.1.30.2. Interconnection Facilities owned by KPCO: KPCO owns the 69 kV transmission line that extends 1.1 miles from APCO's structure number 515-2 to KPCO's Calgon Switch station.
- 1.1.30.3. Metering: APCO owns the meter and the 69 kV instrument transformers for the South Neal Calgon Switch 69 kV Interconnection Point as shown in Figure I.12. The meter, shown as M3 in Figure I.12, is located at APCO's South Neal station and is compensated 1100 feet to the Kentucky-West Virginia state line.
- 1.1.31. The point hereby designated and hereinafter called "Lockhart Dorton 138 kV Interconnection Point." The Lockhart Dorton 138 kV Interconnection Point is located where APCO's 138 kV transmission line (6.6 miles in length) from APCO's Lockhart station connects to KPCO's structure K113-107. The structure is located on the Kentucky side of the Kentucky-Virginia state line at 82.51375W, 37.2169N.
 - 1.1.31.1. Interconnection Facilities owned by APCO: APCO owns the 138 kV transmission line that extends 6.6 miles from KPCO's structure K113-107 to APCO's Lockhart station.
 - 1.1.31.2. Interconnection Facilities owned by KPCO: KPCO owns structure K113-107 and the 138 kV transmission line that extends 4.4 miles from the structure to KPCO's Dorton station.
 - 1.1.31.3. Metering: APCO owns the meter and the 138 kV instrument transformers for the Lockhart Dorton 138 kV Interconnection Point as shown in Figure I.13. The meter is located at APCO's Lockhart station and is compensated 6.6 miles to the Kentucky-Virginia state line.
- 1.1.32. The point hereby designated and hereinafter called "Inez Lovely Marrowbone 138 kV Interconnection Point." The Inez Lovely Marrowbone 138 kV Interconnection Point is located where the Lovely (KPCO) Marrowbone (APCO) segment of the Inez (KPCO) Logan (APCO) 138 kV transmission line enters KPCO's Lovely station at the terminal pads of the dead-end bodies of the 138 kV line segment coming from APCO's Logan Station via APCO's Marrowbone station.
 - 1.1.32.1. Interconnection Facilities owned by APCO: At Lovely station APCO owns the outgoing transmission line conductors of the Lovely (KPCO) Marrowbone (APCO) segment of the Inez (KPCO) Logan (APCO) 138kV transmission line including the insulators, dead-end bodies,

- shackles, and related hardware required to connect the transmission line segment to the 138 kV dead-end structure within Lovely station. APCO owns the 138 kV transmission line segment (5.1 miles in length) from KPCO's Lovely station to APCO's Marrowbone station.
- 1.1.32.2. Interconnection Facilities owned by KPCO: KPCO owns the 138 kV dead-end structure within Lovely station to which the Lovely (KPCO) Marrowbone (APCO) segment of the Inez (KPCO) Logan (APCO) 138 kV transmission line is terminated. At Lovely station KPCO owns switch "W," the jumper conductors connecting the Lovely (KPCO) Marrowbone (APCO) 138 kV transmission line segment to switch "W," the instrument transformer, and the jumper conductors connecting the line instrument transformer to the 138 kV line segment.
- 1.1.32.3. Metering: KPCO owns the meter and the 138 kV instrument transformers for the Inez Lovely Marrowbone 138 kV Interconnection Point as shown in Figure I.14. The meter is located at KPCO's Lovely station and is not compensated.
- 1.1.33. The point hereby designated and hereinafter called "Lovely Middle Burning Creek 34 kV Interconnection Point." The Lovely Middle Burning Creek 34 kV Interconnection Point is located where APCO's 34 kV distribution line (0.28 mile in length) from APCO's Middle Burning Creek station connects to KPCO's pole number 38820771A40364. The pole is located on the Kentucky side of the Kentucky-West Virginia state line at 82.3991654W, 37.8264974N.
 - 1.1.33.1. Interconnection Facilities owned by APCO: APCO owns the 34 kV distribution line that extends 0.28 mile from KPCO's pole number 38820771A40364 to APCO's Middle Burning Creek station.
 - 1.1.33.2. Interconnection Facilities owned by KPCO: KPCO owns pole number 38820771A40364 and the 34 kV distribution line that extends 0.51 mile from the pole to KPCO's Lovely station.
 - 1.1.33.3. Metering: The Lovely Middle Burning Creek 34 kV Interconnection Point as shown in Figure I.14 does not have a dedicated meter. Metering for the Lovely Middle Burning Creek 34 kV distribution line is estimated based upon the aggregate of retail meters served by the 34 kV distribution line.
- 1.1.34. The point hereby designated and hereinafter called "Millbrook Park South Portsmouth 138 kV Interconnection Point." The Millbrook Park South Portsmouth 138 kV Interconnection Point is located where OPCO's 138 kV transmission line (2 miles in length) from OPCO's Millbrook Park station connects to KPCO's structure number 10. The structure is located on the Kentucky side of

- the Kentucky-Ohio state line at 82.90727081W, 38.75017318N.
- 1.1.34.1. Interconnection Facilities owned by OPCO: OPCO owns the 138 kV transmission line that extends 2 miles from KPCO's structure number 10 to OPCO's Millbrook Park station.
- 1.1.34.2. Interconnection Facilities owned by KPCO: KPCO owns structure number 10 and the 138 kV transmission line that extends 5.2 miles from the structure to KPCO's South Portsmouth station.
- 1.1.34.3. Metering: OPCO owns the meter and the 138 kV instrument transformers for the Millbrook Park South Portsmouth 138 kV Interconnection Point as shown in Figure I.15. The meter, shown as M1 in Figure I.15, is located at OPCO's Millbrook Park station is compensated 2 miles to the Kentucky-Ohio state line.
- 1.1.35. The point hereby designated and hereinafter called "Millbrook Park Siloam 69 kV Interconnection Point." The Millbrook Park Siloam 69 kV Interconnection Point is located where OPCO's 69 kV transmission line (2 miles in length) from OPCO's Millbrook Park station connects to KPCO's structure number 10. The structure is located on the Kentucky side of the Kentucky-Ohio state line at 82.90727081W, 38.75017318N.
 - 1.1.35.1. Interconnection Facilities owned by OPCO: OPCO owns the 69 kV transmission line that extends 2 miles from KPCO's structure number 10 to OPCO's Millbrook Park station.
 - 1.1.35.2. Interconnection Facilities owned by KPCO: KPCO owns structure number 10 and the 69 kV transmission line that extends 1.2 miles from the structure to KPCO's Siloam station.
 - 1.1.35.3. Metering: OPCO owns the meter and the 69 kV instrument transformers for the Millbrook Park Siloam 69 kV Interconnection Point as shown in Figure I.15. The meter, shown as M2 in Figure I.15, is located at OPCO's Millbrook Park station and is compensated 2 miles to the Kentucky-Ohio state line.
- 1.1.36. The point hereby designated and hereinafter called "Mill Street South Shore Siloam 69 kV Interconnection Point." The Mill Street South Shore Siloam 69 kV Interconnection Point is located where KPCO's 69 kV transmission line (2 miles in length) from KPCO's South Shore station connects to APCO's structure number 23. The structure is located on the Ohio side of the Kentucky-Ohio state line at 82.98770812W, 38.72820704N.
 - 1.1.36.1. Interconnection Facilities owned by OPCO: OPCO owns structure number 23 and the 69 kV transmission line that extends 848 feet from

the structure to OPCO's Mill Street station.

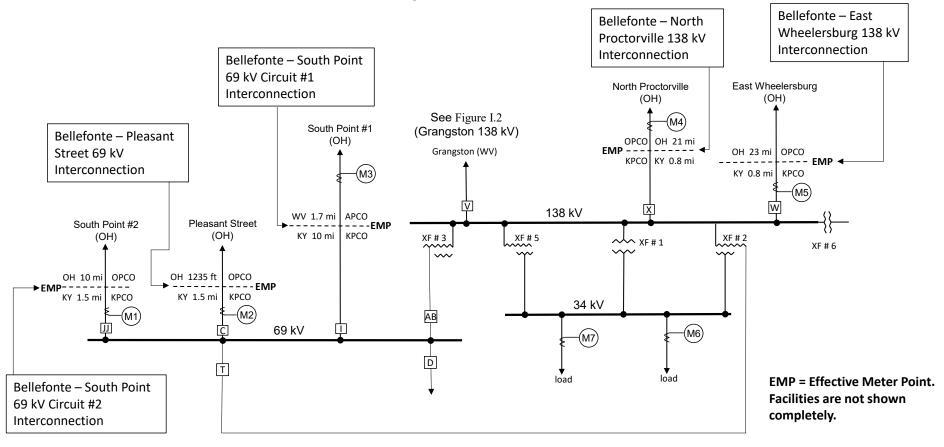
- 1.1.36.2. Interconnection Facilities owned by KPCO: KPCO owns the 69 kV transmission line that extends 2 miles from OPCO's structure number 23 to KPCO's South Shore station.
- 1.1.36.3. Metering: OPCO owns the meter and the 69 kV instrument transformers for the Mill Street South Shore Siloam 69 kV Interconnection Point as shown in Figure I.16. The meter is located at OPCO's Mill Street station and is compensated 848 feet to the Kentucky-Ohio state line.
- 1.1.37. The points hereby designated and hereinafter called "Chadwick Tri-State 138 kV Circuit #1 Interconnection Point" and "Chadwick Tri-State 138 kV Circuit #2 Interconnection Points." Chadwick Tri-State 138 kV Circuit #1 and Chadwick Tri-State 138 kV Circuit #2 together comprise a double-circuit transmission line. The Chadwick Tri-State 138 kV Circuit #1 Interconnection Point is on the Chadwick Tri-State 138 kV Circuit #1 transmission line. The Chadwick Tri-State 138 kV Circuit #2 Interconnection Point is on the Chadwick Tri-State 138 kV Circuit #2 Interconnection Point is on the Chadwick Tri-State 138 kV Circuit #2 Interconnection Point is on the Chadwick Tri-State 138 kV Interconnection Points are located where KPCO's double-circuit 138 kV transmission line (1.85 miles in length) from KPCO's Chadwick station connects to APCO's structure number 192-19A. The structure is located on the West Virginia side of the Kentucky-West Virginia state line at 82.59601725W, 38.34854363N.
 - 1.1.37.1. Interconnection Facilities owned by APCO: APCO owns structure number 192-19A and the double-circuit 138 kV transmission line that extends 3.55 miles from the structure to APCO's Tri-State station.
 - 1.1.37.2. Interconnection Facilities owned by KPCO: KPCO owns the double-circuit 138 kV transmission line that extends 1.85 miles from APCO's structure number 192-19A to KPCO's Chadwick station. KPCO owns the conductor and shield wire to the point of attachment to the structure.
 - 1.1.37.3. Metering: KPCO owns the meter and the 138 kV instrument transformers for the Chadwick Tri-State 138 kV Circuit #1 Interconnection Point as shown in Figure I.17. The meter, shown as M1 in Figure I.17, is located at KPCO's Chadwick station and is compensated 1.85 miles to the Kentucky-West Virginia state line. KPCO owns the meter and the 138 kV instrument transformers for the Chadwick Tri-State 138 kV Circuit #2 Interconnection Point as shown in Figure I.17. The meter, shown as M2 in Figure I.17, is located at KPCO's Chadwick station and is compensated 1.85 miles to the

Kentucky-West Virginia state line.

- 1.1.38. The point hereby designated and hereinafter called "Wurtland Dow Chemical (Hanging Rock) 69 kV Interconnection Point." The Wurtland Dow Chemical (Hanging Rock) 69 kV Interconnection Point is located where KPCO's 69 kV transmission line (1.5 miles in length) from KPCO's Wurtland station connects to OPCO's structure number 1. The structure is located on the Ohio side of the Kentucky-Ohio state line at 82.79736811W, 38.56485209N.
 - 1.1.38.1. Interconnection Facilities owned by OPCO: OPCO owns structure number 1 and the 69 kV transmission line that extends 1.4 miles from the structure to OPCO's Dow Chemical (Hanging Rock) station.
 - 1.1.38.2. Interconnection Facilities owned by KPCO: KPCO owns the 69 kV transmission line that extends 1.5 miles from OPCO's structure number 1 to KPCO's Wurtland station.
 - 1.1.38.3. Metering: KPCO owns the meter and the 69 kV instrument transformers for the Wurtland Dow Chemical (Hanging Rock) 69 kV Interconnection Point as shown in Figure I.18. The meter is located at KPCO's Wurtland station and is compensated 1.5 miles to the Kentucky-Ohio state line.

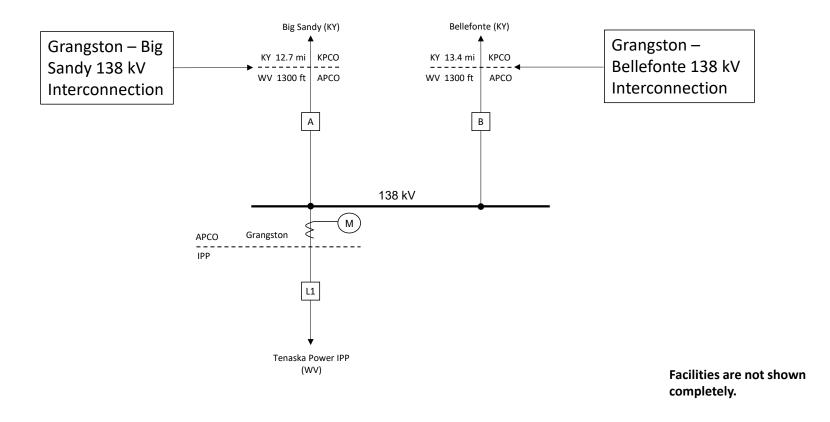
Bellefonte 138 kV, 69 kV, 34 kV

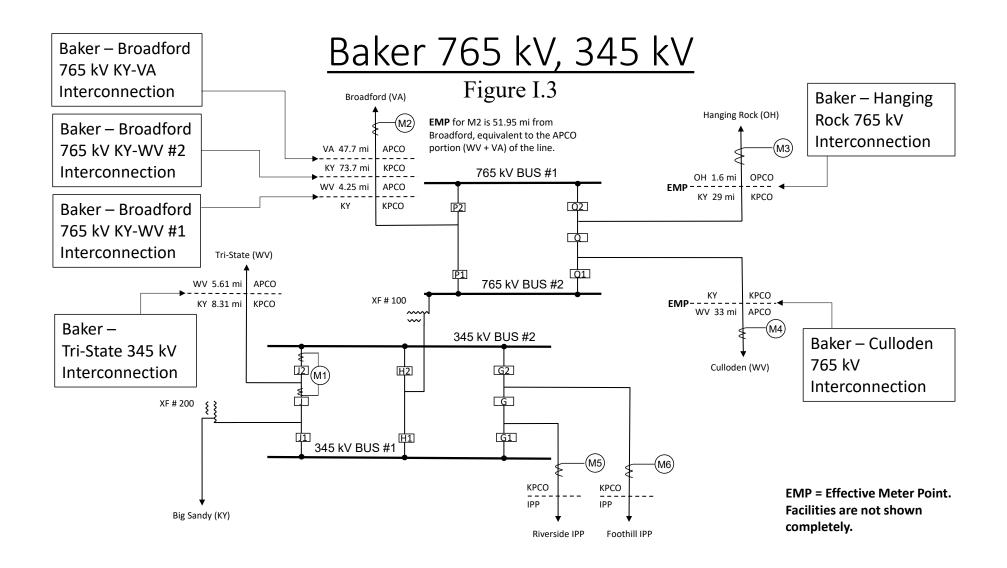
Figure I.1

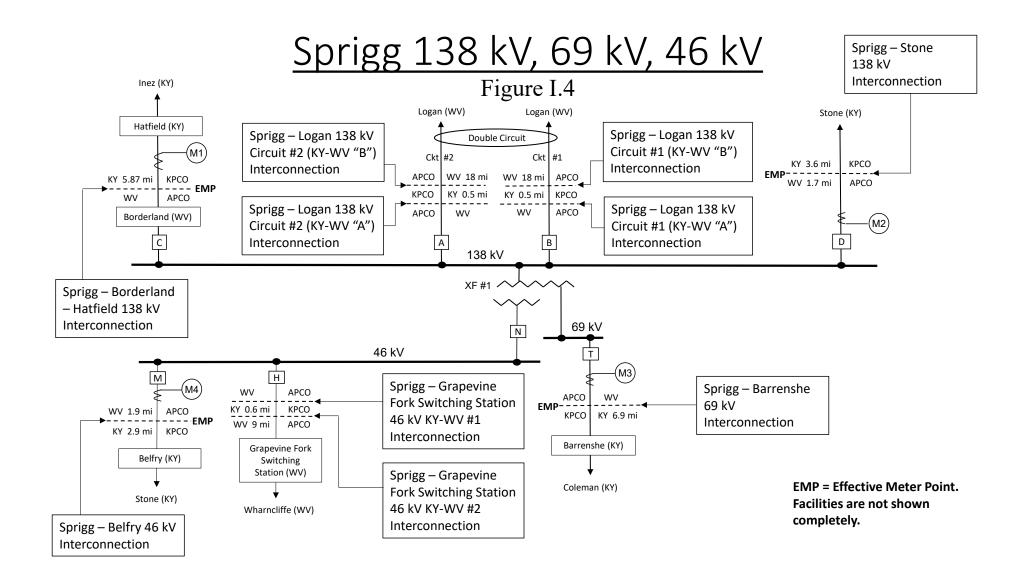


Grangston 138 kV

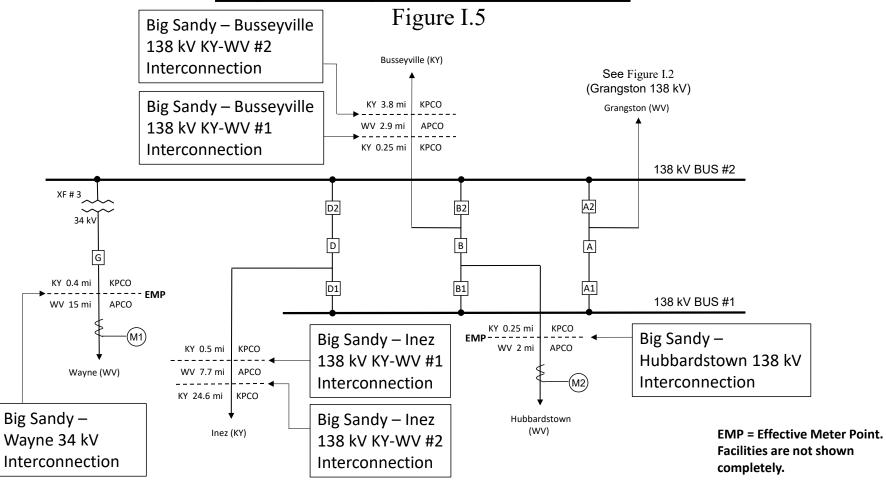
Figure I.2



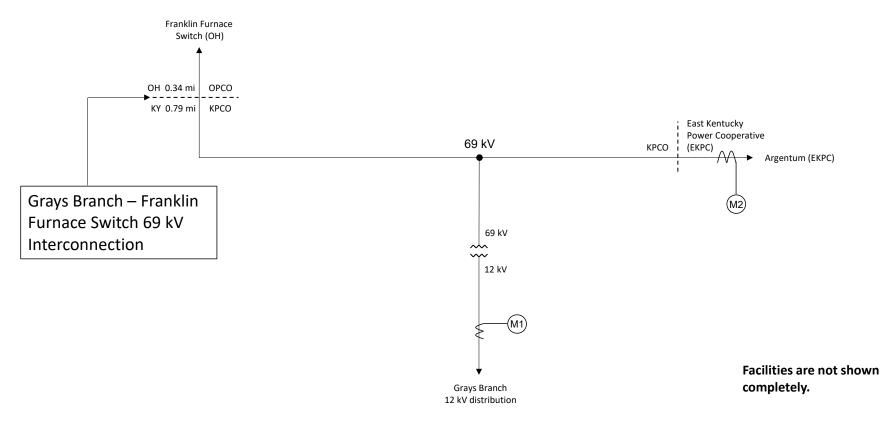




Big Sandy 138 kV, 34 kV

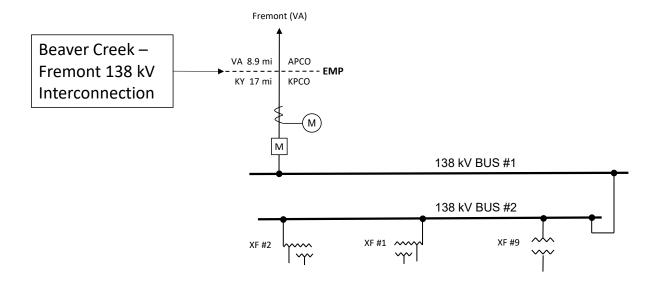


Grays Branch 69 kV, 12 kV Figure I.6



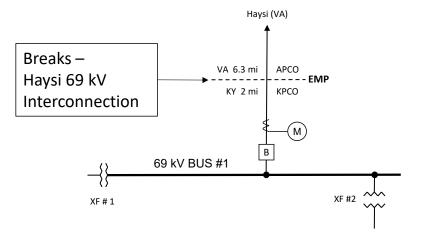
Beaver Creek 138 kV

Figure I.7



EMP = Effective Meter Point. Facilities are not shown completely.

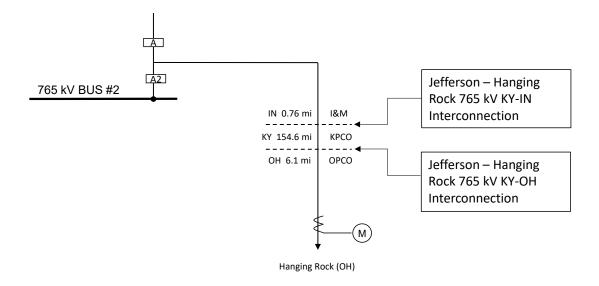
$\frac{Breaks\ 69\ kV}{^{Figure\ I.8}}$



EMP = Effective Meter Point. Facilities are not shown completely.

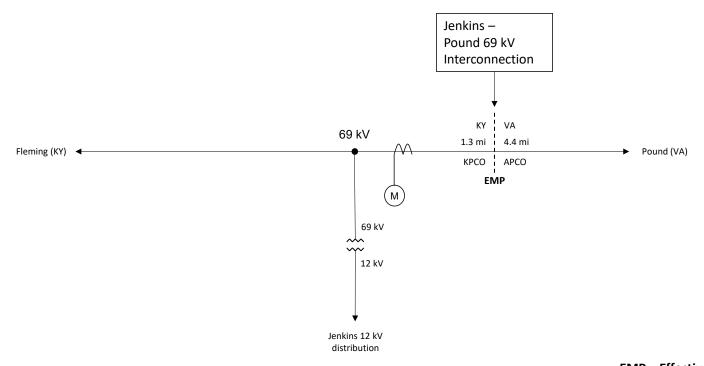
Jefferson 765 kV

Figure I.9



Facilities are not shown completely.

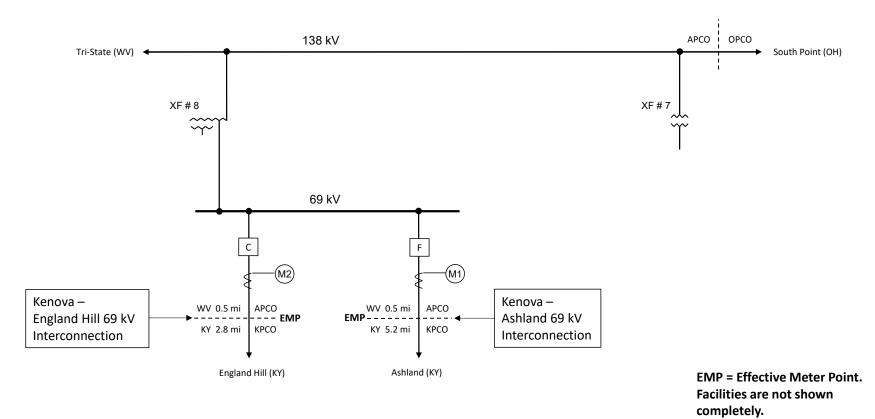
$\frac{Jenkins~69~kV,~12~kV}{_{Figure~I.10}}$



EMP = Effective Meter Point. Facilities are not shown completely.

Kenova 138 kV, 69 kV

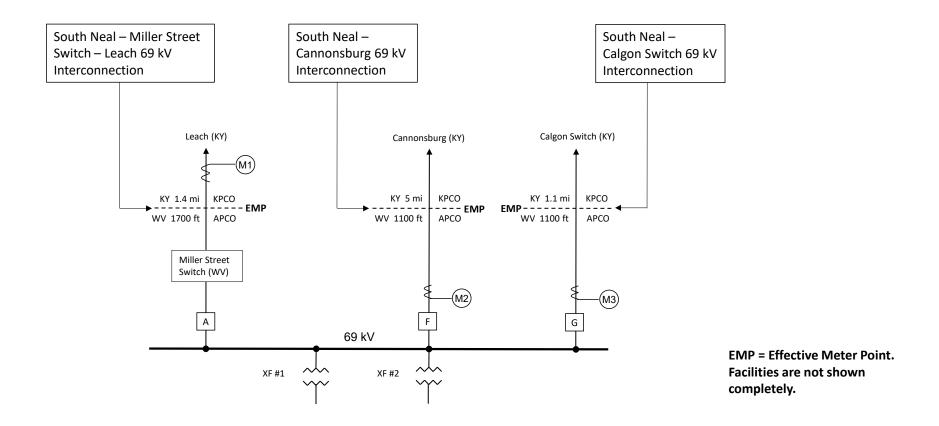
Figure I.11



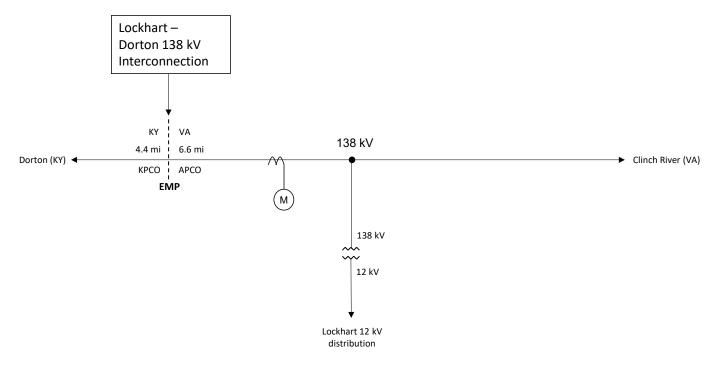
I-34

South Neal 69 kV

Figure I.12

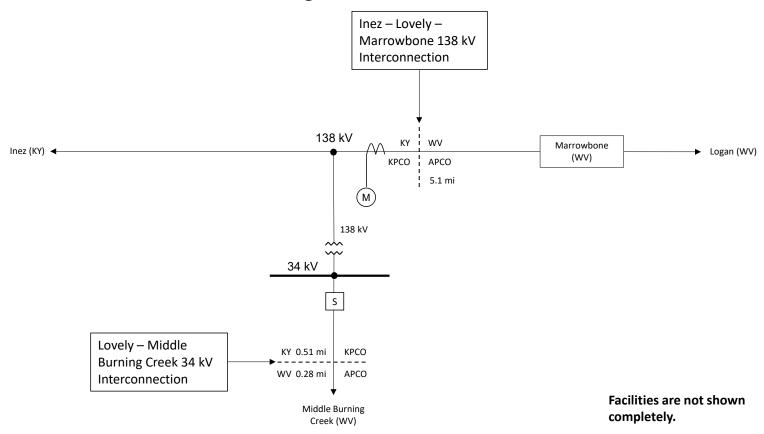


$\frac{Lockhart\ 138\ kV,\ 12\ kV}{{\rm Figure\ I.13}}$



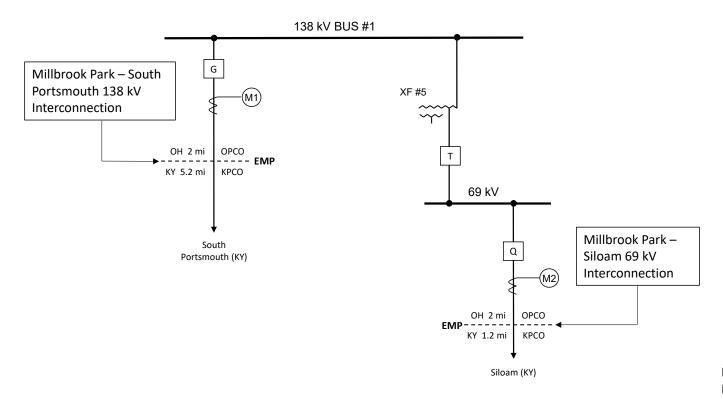
EMP = Effective Meter Point. Facilities are not shown completely.

Lovely 138 kV, 34 kV Figure I.14



Millbrook Park 138 kV, 69 kV

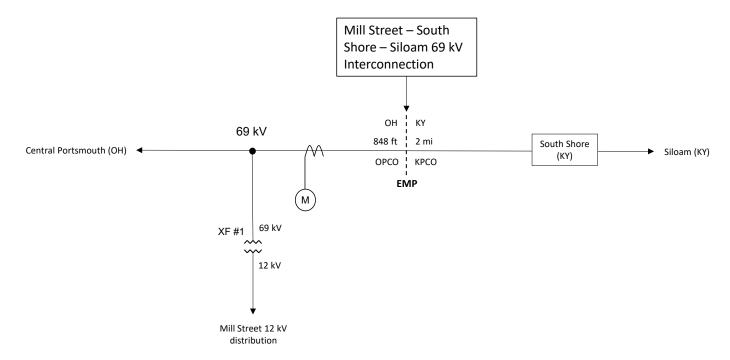
Figure I.15



EMP = Effective Meter Point. Facilities are not shown completely.

Mill Street 69 kV, 12 kV

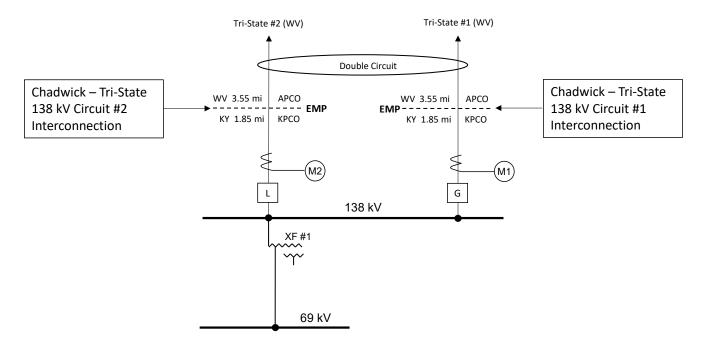
Figure I.16



EMP = Effective Meter Point. Facilities are not shown completely.

Chadwick 138 kV, 69 kV

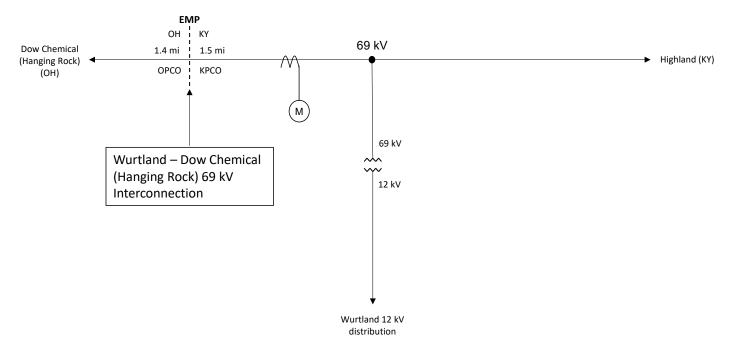
Figure I.17



EMP = Effective Meter Point. Facilities are not shown completely.

Wurtland 69 kV, 12 kV

Figure I.18



EMP = Effective Meter Point. Facilities are not shown completely.

APPENDIX II

Metering, Data Requirements, and Obligations to the RTO

I. METERING EQUIPMENT

1.1 Purpose

The purpose of this section is to delineate the coordination of each Party's responsibilities to comply with the requirements and standards for metering as applicable to an Interconnection Point under this Agreement. The Parties shall conform and adopt the use of Appendix II as a guide to acknowledge the general principles for metering. In the event of conflict between Appendix II and any mandatory and enforceable requirement (e.g., Applicable Laws and Regulations, RTO Requirements, and NERC Reliability Standards), such conflict shall be resolved in favor of the applicable mandatory and enforceable requirement.

1.2 <u>Metering Points</u>

The Metering Points are described in Appendix I.

1.3 <u>Metering Equipment</u>

Suitable and reliable metering equipment shall be installed at each Metering Point, and shall include potential and current transformers, revenue meters, test switches and such other equipment as may be needed. The metering design and functionality established by this Appendix II shall serve as a guideline for all new interconnection metering installations, including any modification, addition or upgrade to any metering equipment after the date of this Agreement. As such, a Party may deviate from this metering design and functionality with the other Party's consent, which shall not be unreasonably withheld, conditioned or delayed.

All electric meters shall be sealed, and such seals may be broken only by its owner on such occasions when the meters are to be inspected, tested, calibrated or adjusted. Each Party shall comply with any reasonable request of the other Party concerning: (i) sealing of meters; (ii) the presence of a representative of the other Party when the seals are broken; and (iii) other matters affecting interchange measurements.

I.3.1 General Requirements. All metering quantities shall be measured at the Interconnection Point. Metering equipment, including the accuracy of the meters for points of interconnection of the Transmission System shall meet the applicable NERC Reliability Standards, RTO Requirements, and the American National Standards Institute ("ANSI") standards. The Parties may agree by amendment to this Agreement to install metering at locations other than the Interconnection Point; however, measured metering quantities shall be compensated for losses to the

Interconnection Point. The Parties shall exercise reasonable efforts to avoid such compensating metering installations.

All reasonable costs for meter changes or meter upgrades requested by a Party shall be borne by the requesting Party, unless agreed otherwise.

1.3.2 <u>Industry Standard Requirements</u>. Three metering elements are to be used unless both Parties agree doing so is unreasonable. In the event three metering elements are not used, the (N-1) metering elements will be used to measure all real and reactive power crossing the Interconnection Point, where N is the number of wires in service including the ground wire. The revenue quality metering package (consisting of instrument transformers, meters, sockets, and test switches) shall be installed, calibrated, and tested (at the requesting Party's expense) in accordance with the latest approved version of (but not limited to) the ANSI standards listed below, or their successors(s) including the standard testing procedures and guidelines of the Party that owns the metering equipment:

ANSI C12.1: Code For Electricity Metering

ANSI C12.7: Requirements for Watt-Hour Meter Socket ANSI C12.9: Test Switches for Transformer-Rated Meters

ANSI C12.11: Instrument Transformers for Revenue Metering,

10KV Through 350KV BIL

ANSI C12.10: Electromechanical Watt-hour Meters

ANSI C12.16: Solid State Electricity Meters

ANSI C12.20: For Electricity Meters 0.2 and 0.5 Accuracy Class

ANSI C37.90.1: Surge Withstand Capability (SWC) Test

ANSI/IEEE C57.13: Standard Requirements for Instrument Transformers ANSI/IEEE C57.13.6: Standard Requirements for High-Accuracy

Instrument Transformers

To the extent that the above requirements conflict with the manuals, standards or guidelines of the NERC regarding interchange metering and transactions, the manuals, standards and guidelines of the NERC shall control.

1.3.3 Metering Equipment Maintenance and Testing. Upon installation, unless otherwise specified, the revenue meters for Interconnection Points of 500 kW or larger shall be inspected and tested in accordance with the latest applicable ANSI standards and at least once every two (2) years, or at any other mutually agreed frequency thereafter. More frequent meter tests can be performed at the request of any Party; however, the test will be performed at the requesting Party's expense if the meter is found to be within the established ANSI tolerances.

The Party that owns the metering shall inform the other Party with at least three (3) weeks' advance notice of impending meter tests, and invite the other Party to attend and witness the tests.

The accuracy of the revenue meter shall be maintained at two tenths of one percent (0.2%) accuracy or better, and the meter test shall require a meter standard with accuracy traceable to the National Institute of Standards and Technology.

If upon testing metering equipment, an accuracy error exceeding one plus or minus one percent (1%) shall be disclosed between the Parties. The account between the Parties shall be adjusted to correct for the accuracy error disclosed over the shorter of the following two periods: (1) for the 30-day period immediately preceding the day of the test, or (2) for the period that such inaccuracy may be determined to have existed.

No meter shall be left in service if the percent accuracy error is found to be more than plus or minus one percent (1%).

The Party that owns the metering equipment shall maintain compliance records, including all meter tests and maintenance conducted in accordance with Good Utility Practice for the life of the Interconnection Point. The Non-Owning Party shall have reasonable access to such records and the Party that owns the metering equipment will provide such records to the Non-owning Party upon request. If revenue metering equipment fails to function, the energy registration shall be determined from the best available data, including the check metering, if applicable. The Instrument Transformers shall also be inspected and maintained based on Section 1.3.2 of this Appendix II, and existing standards and practices of the Party that owns the metering equipment.

1.3.4 <u>Current Transformer Requirements</u>. Each Metering Point shall have a dedicated set of metering class current transformers. Unless otherwise agreed upon by the Parties, all metering shall be three element metering, and have three (3) metering accuracy current transformers.

Current transformers should meet or exceed an accuracy class of 0.15% (as defined in IEEE C57.13.6), or better. Current transformers shall comply with the minimum BIL rating as specified in standards IEEE C57.13 and ANSI C12.11.

The mechanical and thermal short term current ratings of the current transformer shall exceed or withstand the available fault current, while the secondary burden of the current transformer shall not exceed its stated name plate burden rating.

1.3.5 <u>Voltage Transformers Requirements</u>. Each Metering Point shall have a dedicated set of metering class voltage transformers. Unless otherwise agreed upon by the Parties, all metering should be three element metering, and have three (3) metering accuracy voltage transformers. Voltage transformers shall meet or exceed an accuracy class of 0.15% (as defined in IEEE C57.13.6). The secondary of the revenue metering voltage transformers shall be wired to the revenue meters only. The secondary burden of the metering voltage transformers shall not exceed the nameplate burden rating. Voltage transformers with two secondary windings, may

have one winding dedicated to the revenue meters, and the other winding used for the relaying purposes or for other station metering. The nameplate burden rating on either winding must not be exceeded.

Voltage transformers shall comply with the minimum BIL rating as specified in standards IEEE C57.13.3 and ANSI C12.11.

1.4 Remote Meter Access and Data Communications

For all Interconnection Points not designated as normally open, the Owning Party that owns the metering equipment at such Interconnection Point, unless otherwise mutually agreed, shall be responsible for installation of the communications facilities for remotely accessing the meter. The Owning Party shall also be responsible for operation and maintenance, and on-going monthly costs of the communication facilities.

- 1.4.1 Remote Billing Data Retrieval. The Owning Party may provide appropriate communication capability of electronic remote interrogation of the billing data in a manner that is compatible with commonly used billing data systems such as MV-90.
- 1.4.2 <u>Real Time Communications</u>. Revenue meters shall be capable of communicating with DAS equipment such as Remote Terminal Units ("RTU") to provide the following real-time bi-directional power and energy data: instantaneous real and reactive power flows per phase and three-phase averaged Root-Mean-Squared ("RMS") voltages, per phase and three-phase averaged RMS currents and frequency with at least two decimal points. Alternative systems which provide the same data may be used upon agreement of the Parties.
- 1.4.3 Energy Flow Data. A continuous accumulating record of active and reactive energy flows shall be provided by means of the registers on the meters. The deployed revenue meter(s) shall be capable of providing bi-directional energy data flow in either kyz pulse signals format, or accumulated counters to RTU. All Parties shall share the same data register buffers regardless of the types of employed data communication methods. If the accumulation counter method is used, only one Party shall be responsible for freezing the accumulator buffers and the owner of the metering equipment shall freeze them. The accumulator freezing signals shall be synchronized to Universal Coordinated Time within 1/2 seconds.

1.5 Metering Device Requirements

All revenue meters shall be programmable and capable of measuring, recording, and displaying bi-directional active and reactive energy and four quadrant power quantities. Where applicable, revenue meters shall be programmable for compensating for power transformer and line losses and, when applicable, such compensation shall be used in determining the settlement of power transferred at the Interconnection Point. The revenue meters may preferably have at least one serial

communication, one Ethernet port, hard-wired "kyz" pulse output, and internal modem for data communication.

1.6 Revenue and Additional Metering

Each Interconnection Point shall have a primary and a backup meter. The revenue meters shall be powered by the station service source or by automatic transfer to an alternate AC source. However, each Party may have additional metering at any existing Interconnection Point. The Parties will cooperate to determine correct meter values as needed.

1.7 Meter Access

A Party whose metering equipment is located within a substation owned by the other Party shall have reasonable access to said metering equipment for purposes of meter reading, inspection, testing, and other such valid operating purposes. Such access shall not be unreasonably withheld.

1.8 Meter Removal

Upon termination of this Agreement or when the metering is no longer needed, a Party Owning meter equipment in another Party's station shall remove such metering equipment from the premises of the other Party within one (1) year after termination or within one (1) year after the Party that owns the meter equipment determines that the interchange metering is no longer needed. In all cases, the removal of the metering equipment shall not adversely affect other existing measurement devices.

II. DAS EQUIPMENT

2.1 Need for Data Acquisition Provisions

In recognition that the coordination of the system operations by the Parties may require the sharing of power flow and other real time information from meters and other equipment at the Interconnection Points, the Parties agree to cooperate on the installation and operation of data acquisition system ("DAS") equipment (including, but not limited to, remote terminal units ("RTUs"), meters, MW/MVAR and Volt transducers, telecommunication devices, and lease lines) at points which shall from time to time be mutually agreed upon. This Appendix II shall govern the general principles of such DAS arrangements. Each of these general principles may be modified within and by a specific agreement for a specific DAS arrangement.

For purposes of this Appendix II, the term "Requesting Party" means a Party that wishes to obtain information from an Owning Party through the installation of DAS equipment, and the term "Owning Party" means the Party that owns the station facilities in which the DAS equipment would be installed.

Pursuant to a separately negotiated and executed agreement, a Party's RTU or equivalent devices may be shared by the Requesting Party. Pursuant to such an agreement, the RTU shall support multiple dedicated communication ports with mutually agreed upon communication protocols. Where there are protocol restrictions because of existing legacy systems, industry standard

protocols such as DNP 3.0 or ICCP shall be offered. If a proprietary communication protocol is to be used solely for one Party, the Requesting Party shall be responsible for the cost of adding the customized communication protocol to the RTU.

For the existing installations, the following real time data shall be provided to all Parties as minimum requirements: three phase bi-directional energy flows (e.g. MWH, MVARH, (when available)), three phase instantaneous power flows (e.g. MW, MVAR), per phase RMS voltages (when available), per phase RMS currents (when available), and frequency measurement with at least two decimal points resolution shall be provided. In addition to the real time data, the status of all switching devices on the interconnection circuit(s) shall also be provided. For the energy flow data, either or both accumulated data or hourly interval data shall be provided based on mutually agreed formats. If accumulated data is used, the owner of the RTU will freeze the accumulated data buffers at the top of each hour and the Requesting Party will read the frozen data. This shall be accomplished in a manner providing for both Parties to have the same accumulator data readings even though the accumulator data reading frequencies may not be synchronized.

The DAS equipment covered herein shall be associated with the interconnection metering points specified in Appendix I. When requests for additional data, and/or DAS equipment upgrade, is received from the Requesting Party by the Owning Party, the Parties shall corporate with each other, based on Good Utility Practice. Unless otherwise mutually agreed, the Requesting Party will bear the cost associated with such requests.

2.2 <u>Commissioning Test Procedures</u>

When new interconnection metering and/or DAS equipment is installed, replaced or upgraded, a commissioning test shall be performed based on a mutually agreed test procedure. Before the equipment is officially placed in service, the following processes shall be followed, as a minimum requirement:

The Owning Party shall inform the Requesting Party of the commissioning test.

The Owning Party will coordinate a three-way conference call between the interconnection site and operation centers of both Parties.

Bidirectional test currents shall be injected to the interconnection energy meter and the instantaneous analog data values displayed by the meter shall be checked against the corresponding readings received at each control center. This verification test will typically be made at the minimum, midpoint and max cases (typically 0, 2.5 and 5 Amp), and with unity and 50% power factors.

The pulse accumulator counter data shall be tested in the same manner and the accumulator freeze functionality shall be verified.

A "roll-over" count test will be performed for each accumulator data point in order to verify the "roll-over" count is properly processed by both operation centers.

2.3 New DAS Arrangement

The details of individual DAS arrangements for new or existing Interconnection Points shall be in writing and signed by the Parties.

- 2.4 Ownership, Installation and Maintenance of New DAS Equipment
- 2.4.1 The installation of such DAS equipment shall be paid for and owned by the Owning Party, unless it is mutually agreed otherwise to share in the cost, provided, however, the Owning Party shall have the responsibility to install all the DAS equipment.
- 2.4.2 The Owning Party shall provide, install, own and maintain the relays, transducers, wiring, protection equipment and associated materials ("Owning Party Equipment") required to support the installation of the Other Party's data acquisition equipment ("Requesting Party's Equipment"). Provided, however, that if the Interconnection Point is established for the benefit of and at the request of a Party, the Party benefiting and requesting the Interconnection shall install, own and maintain, the DAS equipment arrangement and shall provide access to the DAS data to the Requesting Party. Equipment that is shared in common between the Owning Party and the Requesting Party (including, but not limited to, duplicating relays and test switches) shall likewise be provided, installed, owned and maintained by the Owning Party, and shall be part of the Owning Party's Equipment, unless agreed otherwise: Unless otherwise mutually agreed, each party will maintain its own equipment on their side of the Interconnection Point.
- 2.4.3 The Requesting Party shall provide the Owning Party documents listing and describing the Requesting Party's Equipment that the Requesting Party will supply for installation by the Owning Party. These documents will generally consist of a hardware list and detailed drawings and/or circuit diagram. If the Owning Party does not stock the DAS equipment or other components specified by the Requesting Party, then the Requesting Party will supply the necessary components including spare parts. The Owning Party reserves the right to refuse to install any material supplied by the Requesting Party that has not been approved by the Owning Party for use in its installations.
- 2.4.4 The Requesting Party shall provide, own and maintain as part of the Requesting Party's Equipment, the data communication circuits (leased lines), including any necessary data circuit protection equipment, and be responsible for the costs of such circuit. Where deemed appropriate by the Owning Party, the Requesting Party personnel shall be permitted to work independently on its equipment. Generally, however, work performed by the Other Party's personnel shall be performed under the supervision of the Owning Party personnel, unless such equipment is located outside, or is only accessible from, outside the Owning Party's facilities.
- 2.4.5 Unless otherwise mutually agreed, the Owning Party will provide station battery power to the DAS equipment at 48, 125, or 250 Volt DC, via a DC circuit (fused or circuit breaker) at 15, 5, or 5 ampere, respectively. Under no circumstances shall the Requesting Party connect either the positive or negative side of this circuit to ground. The Requesting Party's Equipment shall be connected to the station's grounding conductor through the Owning

Party's breaker control panel. The Owning Party's shall provide station service power for the data acquisition equipment via a 115 V, 60 hz, with a 15 ampere (fused or circuit breaker) circuit.

2.5 Location and Site Access

The Owning Party may permit the Requesting Party to locate its data acquisition equipment and data circuit protection equipment in the Owning Party's station control building, if adequate space exists or is available, or outside the Owning Party's station switchyard, if no control house is available. In choosing equipment location, consideration shall be given to equipment security, protection and access needs of both Parties. In cases where escorted access to the station control house or outdoor equipment is required, the Requesting Party shall notify the Owning Party at least 24 hours prior to any planned visit. If access is needed on a short notice, the Parties shall endeavor to arrange such visits by mutual agreement. The Owning Party shall not unreasonably withhold access to the equipment to the Requesting Party; provided, however, the Owning Party may deny access based upon safety considerations, operating condition or other relevant criteria.

2.6 Proprietary and Confidential Information

The Requesting Party shall treat all shared telemetry information received via telemetry from the Owning Party as Confidential Information pursuant to Article 6 of this Agreement.

2.7 <u>Cost Estimate, Billing and Payment</u>

Prior to the installation of the Requesting Party's equipment, both the Owning Party and the Requesting Party shall prepare an estimate of the costs associated with such installation. All billings and payments terms and conditions, billing disputes and resolutions shall be handled pursuant to Article 6 of this Agreement.

III. ADDITIONAL DATA REQUIREMENTS RELATED TO PJM REPORTING

- 3.1 <u>Data Requirements and Availability</u>. AEP shall determine the Network Service Peak Load ("NSPL") for each Load-Serving Entity ("LSE") within the AEP Zone. AEP will also provide Customer the information provided to PJM annually under Sections 3.1.1 and 3.1.2. Customer may also arrange to receive the information provided to PJM on a daily basis pursuant to Sections 3.1.3 and 3.1.4, as applicable, provided Customer and AEP agree as to the terms and fees for such service.
 - 3.1.1 NSPL Determinations. AEP shall provide to PJM each year in December, the NSPL of each LSE within the AEP Zone in the hour of the PJM peak load (1CP) for the twelve (12) consecutive months ending on October 31 of the year prior to the calendar year during which the NSPL will be used. The NSPL ratio share shall be used by PJM as the transmission service billing determinant for transmission service charges and annual FTR allocations. If the basis of NSPL and FTR allocation determinations is changed by PJM, AEP shall cooperate with PJM and Customer to the extent necessary and appropriate to make available such data as is needed.

- 3.1.2 Peak Load Contribution ("PLC"). AEP shall provide to PJM the PLC of each LSE in the AEP Zone on a forecasted annual and on a day-ahead basis for the purpose of calculating the LSE's capacity obligation to serve its load. Each year PJM will inform AEP of the day and hour of the five highest PJM unrestricted daily peaks (5CP) for the twelve (12) months ending October 31 of such year. AEP will then determine each LSE's contribution to the 5CP loads of the AEP Zone. This load ratio will be applied to the forecasted AEP Zone load, adjusted for weather normalization and forecasted load growth, to determine each LSE's PLC. PJM will utilize this information in the development of each LSE's capacity obligation. If the basis used by PJM for PLC and relative determinations of customer load obligations is changed by PJM, AEP shall cooperate with PJM and Customer to the extent necessary and appropriate to make available such data as is needed.
- 3.1.3 Hourly Energy Requirements. AEP will also provide to PJM each working day, via PJM's eSchedule system, the initial hourly energy assignment (load plus losses) for each LSE in the AEP Zone. This data will generally be supplied by 5:00 PM eastern prevailing time ("EPT") on Monday for the prior Friday, Saturday and Sunday and by 1:00 PM EPT Tuesday through Friday for the prior weekday. PJM will use this data to calculate each LSE's capacity obligation for each hour for the next day. Unless PJM has recognized a transfer of load obligation from or to Customer (LSE) to or from another Customer (LSE), the capacity obligation will not change daily. Within two months of the end of each settlement month, AEP shall validate the LSE's hourly load and submit the changes via the eSchedule system, as appropriate, for PJM to resettle the respective LSE's account. If the basis used by PJM to receive hourly energy assignments for the LSE, or to calculate each LSE's capacity obligation for each hour for the next day, is changed by PJM, AEP shall cooperate with PJM and Customer to the extent necessary and appropriate to make available such data as needed.
- 3.1.4 <u>Behind the Delivery Point Meter Generation</u>. AEP shall cooperate with PJM and parties operating generators connected behind Kentucky Power load metering, such that PJM will receive such generator output meter information as it requires, for the following two categories of generation (including storage) behind Kentucky Power load meter operating within the AEP Zone:
 - Alternatively, Kentucky Power may provide AEP access to the meter to download the generator output meter data using dial-up remote interrogation. Kentucky Power shall ensure that generators that do not participate in the PJM markets do not flow power onto the AEP system.
 - b) <u>Generation that does participate in the PJM Markets</u>. Kentucky Power will ensure generating party shall provide real-time unit or plant output required by PJM via an Inter-Control Center Protocol

- data link to AEP. In addition, Kentucky Power shall permit AEP to remotely interrogate the meters to obtain integrated hourly meter data each day. Kentucky Power shall provide AEP a copy of any Wholesale Market Participant Agreement among PJM, generating party, and Kentucky Power.
- c) <u>Submission of Data</u>. AEP shall provide the generation data obtained from the generating party to PJM through PJM's eSuites or EMS application within the PJM time requirements, as applicable. If the basis used by PJM for receiving hourly generator output metering information is changed by PJM, Kentucky Power shall cooperate with PJM and AEP to the extent necessary and appropriate to make available such data as is needed.
- 3.2 <u>Post Settlement of PJM Inadvertent Energy Allocation</u>. PJM will dispatch generators for supplying inadvertent energy payback to the Eastern Interconnection and recover such costs from the PJM region-wide load. The summation of hourly inadvertent energy (total monthly) charges assigned by PJM to the AEP Zone each month will be allocated to each LSE in the AEP Zone in proportion to the LSE's NSPL or by such other method as FERC approves.
- 3.3 LMP Node/Zone Aggregator. LSEs in PJM may choose to have PJM use the zonal average load weighted locational marginal price ("LMP") used as the basis for energy delivery pricing or request a specific load bus aggregate prior to the annual FTR allocation processes. It is the responsibility of the LSE to contact PJM in a timely manner if a specific load aggregation is desired. PJM may in turn request AEP to work with the LSE to determine the appropriate configuration of the load bus aggregate. AEP will cooperate with Kentucky Power to derive an LMP load bus aggregate, using existing transmission planning case studies to determine the percent of the load at each load bus that is served by the LSE. If AEP determines that existing studies are not sufficient and additional study development is needed to satisfy Kentucky Power's request, Kentucky Power may be asked to execute a study agreement and reimburse AEP for the study-related costs. The LSE may provide such data to PJM and, based on results from PJM, the LSE will choose whether to utilize the aggregate or the AEP Zonal weighted average LMP price.

APPENDIX III

Definitions

For the purposes of this Agreement, the following capitalized terms shall have the meanings set forth below or as otherwise defined in this Agreement, regardless of any potential conflict between the meanings set forth herein and any definitions of the same terms in the RTO Tariff.

- "Affiliate"- shall mean with respect to a corporation, limited liability company, partnership or other entity, each such other corporation, limited liability company, partnership or other entity that either directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, limited liability company partnership or other entity.
- "Applicable Laws and Regulations"- shall mean (i) all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority having jurisdiction over a Party, its respective facilities, and/or the respective services it provides.
- "Applicable Technical Standards" -- shall mean those certain technical requirements and standards applicable to the interconnection of transmission facilities with AEP's and Kentucky Power's Transmission System, as posted on PJM's website.
- "Confidential Information" shall mean all the information designated as confidential that is furnished to a Party or its reviewing Representatives by the Disclosing Party. Confidential Information includes notes, analyses, reports, and other documents to the extent that such documents contain the Disclosing Party's Confidential Information. Confidential Information includes information defined as "Critical Energy/Electric Infrastructure Information" ("CEII") in accordance with the Commission's regulations at 18 C.F.R. § 388.113.
- "Contractor" shall mean one or more persons or entities designated by either Party or its Affiliates to provide or perform all or a portion of the supply of any work, services, labor, supervision, equipment, data, materials or any other item related to the Interconnection Point(s) identified in this Agreement.
- "Disclosing Party" shall mean the Party providing its Confidential Information to the Receiving Party.
- "Due Diligence" shall mean the exercise of commercially reasonable efforts consistent with Good Utility Practice.
- "Force Majeure" shall mean any cause beyond the control of the affected Party, including but not restricted to, acts of God, flood, drought, earthquake, storm, fire, lightning, epidemic, war, riot, civil disturbance or disobedience, labor dispute, labor or material shortage, sabotage, acts of a public enemy or terrorist, explosions, orders, regulations or restrictions imposed by governmental, military, or lawfully established civilian authorities, which, in any of the foregoing cases, by exercise of Due Diligence such Party could not reasonably have been expected to avoid, and which,

by the exercise of Due Diligence, it has been unable to overcome. Force Majeure does not include: (i) a failure of performance that is due to an affected Party's own negligence or intentional wrongdoing; (ii) any removable or remediable causes (other than settlement of a strike or labor dispute) which an affected Party fails to remove or remedy within a reasonable time; or (iii) economic hardship of an affected Party.

"Good Utility Practice" - shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region; including those practices required by Section 215(a)(4) of the Federal Power Act.

"Governmental Authority" - shall mean any federal, state, local or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, arbitrating body, or other governmental authority, having responsibility over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include either Party, nor any Affiliate thereof.

"Interconnected Operation" - shall mean the physical and electrical interconnection with AEP's and Kentucky Power's Transmission System, pursuant to the RTO Tariff and this Agreement.

"Interconnection Construction" - shall mean construction to establish the initial Interconnection Point between the Parties, construction to establish any subsequent Interconnection Points between the Parties, and the modification of facilities by one Party materially affecting the facilities of the other Party at an existing Interconnection Point.

"Interconnection Facilities" - shall mean those facilities that are owned, controlled, operated and maintained by a Party on that Party's side of a Point of Interconnection that are necessary to physically and electrically interconnect the Transmission System of such Party to the Transmission System of the other Party at a Point of Interconnection.

"Interconnection Point" - shall mean each point of electrical connection between the Transmission System of one Party and the Transmission System of the other Party as set forth in this Agreement.

"Modification" - Any material new construction, additions, design changes or modifications made to, or the abandonment, retirement, relocation or rearrangement of facilities.

"NERC" - shall mean the North American Electric Reliability Corporation or any successor or other entity assuming or charged with similar responsibilities related to the operation and reliability of the North American electric interconnected transmission grid and the electric transmission facilities addressed in this Agreement, including with respect to each Party's own transmission facilities, any regional or other subordinate council of which either Party is a member.

- "NERC Regional Entity" shall mean an organization that NERC has delegated the authority to propose and enforce NERC Reliability Standards pursuant to the Federal Power Act to which a Party's Transmission System are located within the organization's region.
- "NERC Reliability Standards" shall mean mandatory and enforceable requirements, administered by NERC, approved by FERC under Section 215 of the Federal Power Act, to provide for reliable operation of the bulk-power system.
- "Receiving Party" shall mean the Party receiving and/or holding Confidential Information belonging to the Disclosing Party.
- "Representatives" shall mean a Party's Affiliates, and the Party's and its Affiliates' equity owners, governing persons, officers, employees, advisors, attorneys, and prospective or actual lenders or investors.
- "RTO Requirement" shall mean any rule, charge, procedure, or other requirements of an RTO, including the applicable RTO Tariff, applicable to FERC-jurisdictional service provided over the Transmission System of either Party.
- "RTO Tariff" shall mean PJM's or a successor Regional Transmission Organization's Open Access Transmission Tariff as on file with FERC and in effect.
- "Third Party Claim" shall mean a claim, demand, cause of action or proceeding made or brought by a person that is not a Party or an Affiliate of a Party.
- "Transmission System" shall mean the facilities that are controlled or operated by a Party within the "PJM Regions," as "PJM Region" is defined in the PJM OATT.

IN WITNESS WHEREOF, this Agreement has been executed by an authorized representative of each Party as of the Execution Date.

American Electric Power Service Corporation, as agent for Appalachian Power Company, Ohio Power Company, Indiana Michigan Power Company

By: Robert W Bradish (Signature) 3440A...

Robert W Bradish

(Print)

Name:

Title: Senior Vice President - Regulated Infrastructure

Investment Planning



IN WITNESS WHEREOF, this Agreement has been executed by an authorized representative of each Party as of the Execution Date.

Kentucky Power Company

DocuSigned by:

By:

Robert W Bradish Name:

(Print)

Title: Vice President



The signature below of the authorized representative of PJM Interconnection, L.L.C. is for the limited purpose of acknowledging that a representative of PJM has read this Agreement as of this 13th day of May 2022.

PJM INTERCONNECTION, L.L.C.

By:	David W. Souder
	(Signature)
Name:	David W. Souder
	(Print)
Title:	Executive Director, System Planning

Service Agreement No.: 6463