

Kentucky Power Company
KPSC Case No. 2020-00004
Commission Staff's First Set of Data Requests
Dated February 11, 2020

DATA REQUEST

KPSC 1_1 For the period under review, provide the amount of coal purchased in tons and the percentage of purchases that were spot versus contract.

RESPONSE

Please refer to KPCO_R_KPSC_1_01_Attachment_1 for the requested information. For purposes of the Company's monthly fuel adjustment clause back-up filings, Kentucky Power defines a spot purchase as an agreement with a term of one year or less. To permit the Commission to reconcile this response to the Company's fuel adjustment clause back-up filings, the term "spot purchase" is likewise defined for purposes of KPCO_R_KPSC_1_01_Attachment 1 as any purchase with a term of one year or less.

The Company's definition of spot purchase for purposes of this response (and Kentucky Power's fuel adjustment clause back-up filings) differs slightly from that used by Staff in KPSC 1-2 (defining spot purchase as less than one year) and the accompanying response by Kentucky Power.

Witness: Amy E. Jeffries

Counterparty	Type of Purchase	Total Tons
Contura Coal Sales, LLC*	Spot	82,342
Contura Coal Sales, LLC*	Contract	130,426
Case Coal Sales, LLC	Spot	6,118
Blackjewel Marketing and Sales, LLC	Spot	33,428
Coal Network, LLC**	Contract	6,361
Consolidation Coal Company and McElroy Coal Company	Contract	454,285
Ember Energy, LLC**	Contract	19,341
Blackhawk Coal Sales, LLC	Contract	33,888
SNR Appalachian Trading, LLC	Spot	28,461
SNR RiverOps, LLC	Spot	7,034

TOTAL	801,682
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Total Contract	80%
Total Spot	20%

*Includes Alpha Coal Sales Co., LLC following the name change

**Originally executed as a Spot purchase, but amended with the Term in excess of one year.

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DATA REQUEST

- KPSC 1_2** For the period under review, list each coal purchase made under a long-term contract (one year or greater). For each purchase, list:
- a. Contract or purchase order number;
 - b. The supplier's name;
 - c. The location(s) of production facilities from which the coal is sourced;
 - d. The method of delivery, (i.e. , barge, truck, rail, other);
 - e. The actual quantity received during the review period;
 - f. The tonnage requirement for the review period; and
 - g. Current price paid per ton.

RESPONSE

Please refer to attachment KPCO_R_PSC_1_02_Attachment_1 for the requested information presented in conformity with the provided definition of “long term” fuel contract.

Witness: Amy E. Jeffries

This response is provided for the time period of May 1, 2019 through October 31, 2019 and lists all pertinent fuel contract information requested. Tonnage information is reported per Kentucky Power ownership share.

a. Contract/Purchase Order No.	b. Supplier Name	c. Location of Production Facilities	d. Method of Delivery	e. Tonnage Quantity Received During Review Period	f. Tonnage Quantity Requirement for Review Period	g. Current Price per Ton
03-00-17-004	Ember Energy, LLC	Various Mines, Magoffin County, KY	Barge	19,341	13,500	\$54.49
03-00-17-007	Coal Network, LLC	Perry County, KY	Barge	6,361	14,400	\$55.05
03-00-18-002	Contura Coal Sales, LLC	Mammoth, Black Castle, Republic, Empire- Kanawha, Boone, Raleigh Counties, WV	Barge	82,342	125,000	\$53.00
03-00-18-004	Contura Coal Sales, LLC	Mammoth, Black Castle, Republic, Empire- Kanawha, Boone, Raleigh Counties, WV	Barge	61,730	33,750	\$58.00
03-00-18-005	Blackjewel Marketing and Sales, LLC	Coal River Energy Mine 9, Boone County, WV	Barge	33,428	40,000	\$61.07
03-00-18-006	Case Coal Sales, LLC	Stanbaugh, Louisa, and Flatgap, KY	Barge	6,118	12,000	\$62.50
03-00-18-007	SNR RiverOps, LLC	Ivel, KY; Ft. Gay, WV; Toler, KY; White Oak, KY	Barge	7,034	34,000	\$58.00
03-00-18-008	Blackhawk Coal Sales, LLC	Blue Creek Mine, Kanawha, WV	Barge	14,506	16,250	\$63.50
03-00-18-009	Contura Coal Sales, LLC	Mammoth, Black Castle, Republic, Empire- Kanawha, Boone, Raleigh Counties, WV	Barge	68,696	48,750	\$63.00
03-00-18-010	Blackhawk Coal Sales, LLC	Blue Creek Mine, Kanawha, WV	Barge	19,381	17,300	\$63.50
03-00-18-4M1	SNR Appalachian Trading, LLC	Ivel, KY; Ft. Gay, WV; White Oak, KY	Barge	28,461	16,275	\$62.50
07-77-05-900	Consolidation Coal Company and McElroy Coal Company	McElroy Mine, Marshall County, WV and Century Mine, Belmont/Monroe Counties, OH	Conveyor	454,285	700,000	\$39.86

Note 1

Note 1

Originally a Spot agreement

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DATA REQUEST

- KPSC 1_3**
- a. As of the last day of the review period, state the coal inventory level in tons and in number of days' supply. Provide this information by generating station and in the aggregate.
 - b. Describe the criteria used to determine number of days' supply.
 - c. State the target coal inventory level for each generating station and for the total system.
 - d. If actual coal inventory exceeds the target inventory by ten days' supply, state the reasons for the excess inventory.
 - e.
 - (1) State whether any significant changes in the current coal inventory target are expected within the next 12 months.
 - (2) If so, state the expected change and the reasons for this change.

RESPONSE

a. As of October 31, 2019 Kentucky Power's actual coal inventory levels were as follows:

Mitchell High Sulfur*: 229,324 tons, or 60 days of supply

Mitchell Low Sulfur*: 205,662 tons, or 54 days of supply

*Company share

b. Days' supply is determined by dividing the Company's share of tons of coal in storage by the full load burn rate (tons per day).

For Mitchell High Sulfur, $\frac{229,324 \text{ tons in storage as of } 10/31/2019}{3,829 \text{ (full load burn rate* - tons/day)}} = 60 \text{ days}$

For Mitchell Low Sulfur, $\frac{205,662 \text{ tons in storage as of } 10/31/2019}{3,829 \text{ (full load burn rate* - tons/day)}} = 54 \text{ days}$

*Company share

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c. As of October 31, 2019,

Mitchell High Sulfur: Target Inventory Days = 15 days, Actual Inventory Days = 60 days
(45 days over target)

Mitchell Low Sulfur: Target Inventory Days = 30 days, Actual Inventory Days = 54 days
(24 days over target)

d. High-sulfur coal inventory remains above target due to contractual supply commitments in addition to lower than forecasted consumption. Low-sulfur coal inventory is above target due to lower than forecasted consumption.

e. (1) No. Kentucky Power does not expect any significant changes in the coal inventory target for the Mitchell plant within the next 12 months.

Witness: Amy E. Jeffries

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- KPSC 1_4** List each written coal-supply solicitation issued during the period under review.
- a. For each solicitation, provide the date of the solicitation, the type of solicitation (contract or spot), the quantities solicited, a general description of the quality of coal solicited, the period over which deliveries were requested, and the generating unit(s) for which the coal was intended.
 - b. For each solicitation, state the number of vendors to whom the solicitation was sent, the number of vendors who responded, and the selected vendor. Provide the bid tabulation sheet or corresponding document that ranked the proposals. (This document should identify all vendors who made offers.) State the reasons for each selection. For each lowest-cost bid not selected, explain why the bid was not selected.

RESPONSE

a. and b. Please refer to KPCO_R_KPSC_1_04_Attachment_1 for information concerning the Company's written coal-supply solicitation on August 21, 2019.

Please also refer to KPCO_R_KPSC_1_04_Attachment_2 for information relating to the offering and selected vendors for the August 21, 2019 solicitation.

Additionally, refer to KPCO_R_PSC_1_04_Attachment_3 (Low Sulfur) and KPCO_R_PSC_1_04_Attachment_4 (High Sulfur) for information relating to the offering vendors, analyses, and ranked proposals for the August 21, 2019 solicitation.

Witness: Amy E. Jeffries



August 21, 2019

INTRODUCTION

American Electric Power Service Corporation (AEPSC) is seeking proposals on behalf of one or more of AEPSC's affiliated or associated companies for the supply of coal to one or more power plants.

This solicitation seeks coal that meets the specifications listed in Exhibit A "Coal Specifications". All proposals shall be priced subject to the attached Master Purchase and Sale Agreement (Exhibit B).

AEPSC is seeking proposals for the following:

Coal Region	Q4 2019	Q1 2020	CY 2020	CY 2021	CY 2022
Central Appalachian Basin	-	350,000		750,000	750,000
Powder River Basin	1,300,000	2,000,000	-	1,500,000	1,500,000
Illinois Basin	-	-	-	250,000	500,000
Northern Appalachian Basin	-	-	250,000	250,000	1,500,000

Each valid proposal should include:

- The Seller's and Producer's name(s);
- The location of the mine;
- The mine type (surface or underground);
- The seam of coal being mined;
- The mine district;
- The quality of the coal, inclusive of suspension/rejection limits;
- The coal preparation (washed, crushed run-of-mine, etc.);
- The tons proposed for delivery each month;
- The stated price per ton;
- The commencement date and months of delivery; and
- MSHA ID Number, Environmental Permits (if new mine), and the intended method of mining (surface or deep)

Please complete all attached forms with a valid offer.

COAL PROPOSAL PACKAGE

In order to ensure that proposals are responsive to AEPSC's needs and provide a uniform basis for evaluation, please complete the "Coal Proposal Form" (see Excel attachment within RFP email). For each Coal Proposal Form, complete all six (6) tabs of the spreadsheet for each offer and specification. Typical coal analyses, including the Proximate, Ultimate, Trace Element and Mineral Ash Analyses, Grindability Index, and Ash Fusion Temperatures, shall be submitted along with the Coal Proposal Form.

BID SUBMITTAL

Tab 6 of the Coal Proposal Form(s) should be printed, signed by a person having proper authority to legally obligate the offering company, and scanned to a .pdf file for submittal. Tabs 1 through 5 of the Coal Proposal Form should be submitted electronically in the excel format. The Coal Proposal Form, along with any additional supporting materials, and must be received no later than 5:00 p.m. EDT time, **WEDNESDAY, SEPTEMBER 4, 2019**. Proposals are to be kept open for AEPSC's acceptance until 5:00 p.m EDT., **TUESDAY, SEPTEMBER 17, 2019**. All proposals are to be submitted by e-mail to aepfuelsrfp@aep.com.

If you do not wish to receive future solicitations, please send an email to aepfuelsrfp@aep.com with the subject line "Remove from Solicitation" on or before WEDNESDAY, SEPTEMBER 4, 2019.

BID EVALUATION

Proposals will be evaluated based upon the following factors:

- 1) Delivered cost (cents per million Btu);
- 2) Coal quality with appropriate price adjustments for guaranteed percent ash and pounds SO₂ per million Btu based on the relevant SO₂ emissions allowances and SO₂ removal costs, inclusive of rejection limits;
- 3) Reliability of supply and transportation flexibility;
- 4) Previous experience with bidder or bidding company in past business with AEPSC;
- 5) Creditworthiness of bidding company;
- 6) Agreement Terms and Conditions

AEPSC reserves the right to modify or withdraw this invitation, to reject any or all proposals, and to terminate any subsequent negotiations at any time. AEPSC also reserves the right to accept one or more proposal(s) for a portion or for all of the quantities of coal it seeks to acquire with this invitation.

AEPSC will retain in confidence all proposals and other information received pursuant to this invitation, except when the same is requested by a court or government agency, or otherwise required to be disclosed.

Those submitting proposals shall be responsible for the completeness and accuracy of all information contained in and used in preparation of its proposal(s) and for having supplied all necessary information.

It should be noted that for payment purposes, weighing and sampling shall be performed at the same location. Sampling and analysis shall be performed by a mutually agreeable third party laboratory.

All proposals shall be submitted by the offering company at their sole cost and expense.

Should further information be required, please contact Amy Jeffries at (614) 716-6235, Tina Sefcik at (614) 716-6113 or Amanda Torgerson at (614) 716-6222.

Thank You.

EXHIBIT A
COAL SPECIFICATIONS

Central Appalachian Basin (FOB NYMEX Barge or CSX Rail)	Contracted Half-Month	Shipment Rejection Limit
Calorific Value (Btu/lb.)	12,000 to 12,600	< 11,800
Moisture (%)	10.00	> 10.00
Ash (%)	12.00	> 13.50
Sulfur Dioxide (lbs. SO ₂ /mmBtu)	<i>up to 1.67</i>	> 1.75
Ash Fusion Temp. (H=1/2W) °F Red. Atm	2,700	< 2,600
Powder River Basin (FOB Rail)	Contracted Half-Month	Shipment Rejection Limit
Calorific Value (Btu/lb.)	8,600 to 9,000	< 8,400
Moisture (%)	27.00	> 31.00
Ash (%)	5.50	> 7.00
Sulfur Dioxide (lbs. SO ₂ /mmBtu)	<i>up to 0.80</i>	> 1.20
Illinois Basin (FOB Barge)	Contracted Half-Month	Shipment Rejection Limit
Calorific Value (Btu/lb.)	11,200 to 12,600	< 10,900
Moisture (%)	13.00	> 14.00
Ash (%)	8.50	> 10.50
Sulfur Dioxide (lbs. SO ₂ /mmBtu)	<i>up to 5.5</i>	> 5.60
Chlorine (%)	-	> 0.20
Northern Appalachian Basin (FOB Barge or CSX Rail)	Contracted Half-Month	Shipment Rejection Limit
Calorific Value (Btu/lb.)	11,500 to 13,000	< 11,300
Moisture (%)	8.00	> 12.00
Ash (%)	9.50	> 12.50
Sulfur Dioxide (lbs. SO ₂ /mmBtu)	<i>up to 7.4</i>	> 7.50
Ash Fusion Temp. (H=1/2W) °F Red. Atm	2,100	> 2,300

The above specifications may not exactly match one or more of the coal types a prospective supplier may have, but should be included in the one that most closely fits such specification.

EXHIBIT B
AEP MASTER AGREEMENT TEMPLATE



Master Coal
Purchase and Sale A

(Double click on PDF icon to open document or refer to attachments in email)

MASTER COAL PURCHASE AND SALE AGREEMENT [Agreement #]

THIS MASTER COAL PURCHASE AND SALE AGREEMENT ("**Agreement**") is entered into on _____, by and between [INSERT AEP ENTITY] ("**Buyer**"), and _____ ("**Seller**"). Both Buyer and Seller may be referred to herein individually as a "**Party**" and collectively as the "**Parties.**"

WITNESSETH:

WHEREAS, Seller is in the business of selling coal, primarily to the electric utility industry; and

WHEREAS, Buyer desires to purchase from Seller and Seller desires to sell to Buyer coal pursuant to one or more separate confirmations and upon the terms and conditions hereinafter set forth to secure an assured and dependable supply of coal.

NOW THEREFORE, for good and valuable consideration, and intending to be legally bound, the Parties hereby agree as follows:

DEFINITIONS

Unless the Parties expressly state otherwise in writing, the provisions of this Agreement shall govern all purchases and sales of Coal between the Parties. Both Parties intend the provisions of each individual Confirmation and the provisions of this Agreement be construed as a single, integrated agreement. The Parties intend that without a written Confirmation setting forth the terms of a Transaction, the Parties would not otherwise and shall not be bound to enter into a Transaction. Any inconsistency or conflict between provisions of a Confirmation and provisions of this Agreement shall be resolved in favor of any provisions of the Confirmation.

Each of the following terms when used in this Agreement or in any Confirmation shall have the meaning given to it as follows:

"**AEP**" as used herein denotes Buyer's affiliation to American Electric Power Company, Inc.

"Affiliates" means with respect to any entity, any other entity that directly or indirectly, through one or more intermediaries, controls or is controlled by, or is under common control with, such entity. For this purpose, "control" means the direct or indirect ownership of 50% or more of the outstanding capital stock or other equity interests having ordinary voting power.

"Agreement" shall have the meaning set forth in the preamble.

"Applicable Contracted Period" shall mean either a monthly period or a half-month period, as set forth in the Confirmation.

"Approved Production Source(s)" shall have the meaning set forth in the Confirmation.

"ASTM" means ASTM International, formerly known as the American Society for Testing and Materials.

"Bankruptcy Proceeding" means with respect to a Party or entity, such Party or entity (a) makes an assignment or any general arrangement for the benefit of creditors, (b) files a petition, has a petition filed against it or its assets, or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause of action under any bankruptcy or similar law for the protection of creditors, (c) otherwise becomes bankrupt or insolvent (however evidenced), or (d) is unable to pay its debts as they fall due.

"Btu" means the amount of energy required to raise the temperature of one (1) pound of pure water one (1) degree Fahrenheit from 59.5° Fahrenheit to 60.5° Fahrenheit at a constant pressure of 14.73 pounds per square inch absolute.

"Business Day" means a day on which Federal Reserve member banks in New York City, New York are open for business; and a Business Day shall open at 8:00 a.m. and close at 5:00 p.m. eastern prevailing time.

"Buyer" shall have the meaning set forth in the Preamble.

"Certification Date" shall have the meaning set forth in a Confirmation or, if not set forth therein, shall mean the date of said Confirmation.

"Claiming Party" shall have the meaning set forth in the definition of Force Majeure.

"Coal" means coal to be sold by Seller and purchased by Buyer, the quality of which shall conform to the Quality Specifications set forth in an applicable Confirmation, and which does not trigger Buyer's rejection rights under Article III, or is otherwise acceptable by Buyer under this Agreement. Such Coal shall (i) be substantially free from any extraneous materials (including, but not limited to mining debris, synthetic fuels, bone, slate, iron, steel, petroleum coke, earth, rock, pyrite, wood or blasting wire), (ii) be substantially consistent in quality throughout a Shipment, (iii) meet the size required, (iv) have no intermediate sizes (including fines) added or removed; and (v) be substantially uniform in quality throughout the truck, barge, or unit train, as applicable.

"Coal Agent[s]" shall have the meaning set forth in Section 3.2.

“Commercially Reasonable” means the taking by a Party of such action as would be in accordance with reasonable commercial practices as applied to the particular matter in question to achieve the result as expeditiously as practicable; provided, however, that such action shall not require that such Party incur unreasonable expense.

“Confirmation” means any document, which shall be substantially in the form as set forth in Exhibit A, attached hereto and hereby made a part hereof, entered into on or after the date hereof between the Parties which sets forth, identifies, and defines for an individual Transaction the following: the Plant(s), Designated Delivery Point(s), Term, Product, Contract Quantity, Approved Production Sources, Certification Date (if applicable), Delivery Period, Contract Price, Quality Specifications, Force Majeure Production Source, Force Majeure Destination Plant and any other Transaction-specific provisions mutually agreeable to the Parties. However, as used in the definitions of “Costs”, “Gains”, “Losses”, and “Material Adverse Change” and in Articles XVIII (Section 18.1 (i), (ii), and (iii) (Event of Default), XIX (Remedies for Default), XXV (Expenses), and Article XXXI, (Entire Agreement,)”Confirmation” means each and every Confirmation entered into by the Parties.

“Contract Half-Year” means the first half and the last half of each Contract Year.

“Contract Month” means, unless otherwise stated in a Confirmation, the period commencing on the first day of each calendar month and ending on the last day of such calendar month.

“Contract Price” means the price in United States dollars per Ton to be paid by Buyer to Seller for the purchase of Coal as set forth in a Confirmation.

“Contract Quantity” shall have the meaning set forth in a Confirmation.

“Contract Year” shall mean, in respect of each Confirmation, the period commencing on the first day of the Term and ending on the immediately succeeding December 31, and thereafter each period thereafter commencing January 1 and ending the immediately succeeding December 31 during the Term.

“Costs” means any brokerage fees, commissions and other transactional costs and expenses reasonably incurred either by the Non-Defaulting Party as a result of entering into new arrangements in order to replace the Contract Quantity not delivered by Seller or not accepted by Buyer, as the case may be, under a Confirmation as of the Early Termination Date, and reasonable legal costs incurred by the Non-Defaulting Party.

“Credit Support Provider” means the entity, if any, that supports the obligations of Seller through a guaranty in a format acceptable to Buyer (hereafter **“Credit Support”**).

“Defaulting Party” shall have the meaning set forth in Article XVIII.

“Delivery Period” shall have the meaning set forth in a Confirmation.

“Designated Delivery Point(s)” means FOB railcar at the specified coal loading facility(ies), and/or FOB barge at the specified coal loading facility(ies), and/or FOB Plant .

"Early Termination Date" shall have the meaning set forth in Article XVIII.

"Effective Date" shall have the meaning set forth in the Confirmation.

"Event of Default" shall have the meaning set forth in Article XVIII hereof.

"FOB" shall have the meaning given to such term as provided in the Uniform Commercial Code of the State of New York.

"Force Majeure" means an event or circumstance which prevents one Party (the **"Claiming Party"**) from performing its obligations under the Confirmation, which is not within the reasonable control of the Claiming Party, and which by the exercise of due diligence, the Claiming Party is unable to overcome or avoid or cause to be avoided. Force Majeure includes, but is not limited to, an event or occurrence beyond the control of either Party, such as without limitation, acts of God, war, terrorism, insurrection, riots, nuclear disaster, strikes, labor disputes, threats of violence, labor, equipment and material shortages, fires, explosions, floods, river freeze-ups, not reasonably anticipated adverse geological mining conditions, breakdowns or damage to mines, plants, equipment, or facilities (including a forced outage or an unanticipated extension of a scheduled outage of equipment or facilities to make repairs to avoid breakdowns thereof or damage thereto), interruptions to or slowdowns in transportation, railcar shortages, barge shortages, lock and dam outages and delays, embargoes, orders, or acts of civil or military authority, laws, regulations, or administrative rulings, or total or partial interruptions of either Party's operations which are due to any enforcement action or other administrative or judicial action arising from any law or regulation. Notwithstanding the foregoing, neither Party shall be prevented from invoking the provisions of Article IX herein to the extent applicable. Force Majeure shall not be based on: (1) Buyer's inability to economically use or resell the Coal purchased hereunder; (2) Buyer's ability to purchase coal meeting the Quality Specifications at a price less than the Contract Price; (3) the Seller's inability to economically obtain coal meeting the Quality Specifications from the Source; or (4) Seller's ability to sell the Coal at a price greater than the Contract Price.

"Force Majeure Production Source" means an Approved Production Source designated by Seller in a Confirmation pursuant to Section 12.3 of this Agreement as the production source for that Confirmation for purposes of determining the existence of a Force Majeure, notwithstanding the source from which Coal is being delivered under this Agreement.

"Force Majeure Destination Plant" means a generating plant designated by Buyer in a Confirmation pursuant to Section 12.4 of this Agreement as the destination plant for that transaction for purposes of determining the existence of a Force Majeure, notwithstanding the generating plant to which Coal is being delivered under this Agreement.

"Free Loading Day" means a loading day for which Seller shall not be obligated to pay demurrage charges with respect to a barge. A loading day shall commence at 7:00 a.m. of a calendar day and end at 7:00

a.m. the next calendar day. The first Free Loading Day shall commence at the later of the first 7:00 a.m. immediately following the delivery of said barge to a Designated Delivery Point, or 7:00 a.m. on the barge loading date specified in Seller's request for placement of barges. For clarification, Seller shall be charged with a minimum of one loading day for each barge delivered to Seller prior to 7:00 a.m. and loaded by Seller before the same 7:00 a. m.

"Free Loading Period" means a period of two (2) consecutive Free Loading Days.

"Gains" means, with respect to a Party, an amount equal to the present value of the economic benefit to it, if any, (exclusive of Costs) resulting from the termination of its obligations with respect to the Confirmation as of the Early Termination Date, determined in a Commercially Reasonable manner.

"Generating Unit" means, with respect to Buyer, a boiler or group of boilers and associated equipment that is used for the production of electricity. A Generating Unit or group of Generating Units at one location shall make up a Plant.

"Interest Rate" shall have the meaning set forth in Article IV.

"Letter of Credit" means an irrevocable, standby letter of credit, issued by a major United States commercial bank or the United States branch office of a foreign bank, reasonably acceptable to the beneficiary with, in either case, a senior unsecured credit rating of at least (a) "A-" by S&P and "A3" by Moody's, if such entity is rated by both S&P and Moody's or (b) "A-" by S&P or "A3" by Moody's, if such entity is rated by either S&P or Moody's but not both, in a form acceptable to the Party in whose favor the Letter of Credit is issued.

"Liabilities" shall have the meaning set forth in Article XV.

"Losses" means, with respect to a Party, an amount equal to the present value of the economic loss to it, if any, (exclusive of Costs) resulting from the termination of its obligations with respect to the Confirmation as of the Early Termination Date, determined in a Commercially Reasonable manner.

"Material Adverse Change" means a material change in the condition (financial or otherwise), including but not limited to net worth, properties or operations, which, when taken as a whole can reasonably be anticipated to impair the ability of such Party, or such Party's Credit Support Provider, as applicable, to fulfill its obligations under a Confirmation or Credit Support, respectively, or there is reasonable grounds to believe that the creditworthiness of such Party or such Party's Credit Support Provider, as applicable, has become unsatisfactory or its ability to perform under a Confirmation or Credit Support, respectively, has been materially impaired.

"Moody's" means Moody's Investors Service, Inc. or its successor.

“New Taxes” means any Taxes, fees, or assessments enacted and effective after the Effective Date of the Confirmation, including, without limitation, that portion of any Taxes or New Taxes that constitutes an increase.

“Non-Conforming Shipment” shall have the meaning set forth in Section 3.3 (a).

“Non-Defaulting Party” shall have the meaning set forth in Article XVIII.

“Non-Sampling Party” shall mean the Party that is not sampling and analyzing the Coal for purposes of determining adjustments to the Contract Price (Article VII) or compliance (Article VIII).

“Non-Weighing Party” shall mean the Party that is not weighing the Coal for purposes of determining payments by Buyer pursuant to Section 4.1.

“Party” and **“Parties”** have the meanings set forth in the preamble.

“Plant” means one or more Generating Units at one location as designated in a Confirmation.

“Pledgor” shall have the meaning set forth in Article XXI.

“Product” shall have the meaning set forth in a Confirmation.

“Performance Assurance” means collateral in the form of either cash or Letters of Credit or such other security of the type and amount requested by the Party demanding Performance Assurance.

“Quality Specifications” means the quality characteristics on an “As-Received” basis, using ASTM standards, specified on any Confirmation as well as specified in Section 3.1.

“Sampling Party” shall mean the Party that is sampling and analyzing the Coal for purposes of determining adjustments to the Contract Price (Article VII) or compliance (Article VIII).

“S&P” means the Standard & Poor’s Ratings Services, a division of The McGraw-Hill Companies, Inc. or its successor.

“Seller” has the meaning set forth in the preamble.

“Selling Price” shall have the meaning set forth in Article VII.

“Settlement Amount” shall have the meaning set forth in Article XIX

“Shipment” means, as applicable: (a) one unit trainload of Coal or, at Buyer’s election a composite of two or more unit trainloads; (b) the aggregate of single railcars loaded on any one day (only where single car rates apply), (c) one barge load, or, at Buyer’s election a composite of two or more barge loads of Coal; (d) the aggregate of the truckloads of Coal that are unloaded FOB Plant on any one (1) day; or (e) the aggregate of the amounts of Coal delivered FOB Plant on any one (1) day via the belt, all in accordance with the applicable Transportation Specifications.

“SO₂” means sulfur dioxide and **“SO₂ per MMBtu”** means sulfur dioxide per million Btu.

“Source(s)” shall mean the Approved Production Source(s) for the Confirmation.

“Taxes” means any or all ad valorem, property, business and occupation, occupation, severance, generation, first use, conservation, Btu or energy, utility, gross receipts, privilege, sales, use, consumption, excise,

lease, transaction, and other taxes, governmental charges, licenses, fees, reclamation fees, black lung fees, royalties, permits and assessments, or increases therein, other than taxes based on net income or net worth.

“**Term**” shall have the meaning set forth in a Confirmation.

“**Third Party Impositions**” shall have the meaning set forth in Section 6.1

“**Ton**” means 2,000 pounds avoirdupois weight.

“**Transaction**” means a particular transaction agreed to by the Parties relating to the purchase, sale, or exchange of Coal, subject to this Agreement, the terms of which shall be set forth in a Confirmation.

“**Transportation Specifications**” means the timing and tonnage requirements for Shipment(s) set forth in Article II.

“**Transporter**” means the entity or entities transporting Coal on behalf of Seller to and at the Designated Delivery Point or on behalf of Buyer or Buyer’s designee from the Designated Delivery Point.

“**Uniform Commercial Code**” or “**UCC**” shall have the meaning set forth in Article XXIX.

“**Weighing Party**” shall mean the Party that is weighing the Coal for purposes of determining payments by Buyer pursuant to Section 4.1.

ARTICLE I

Term and Delivery Period; Survival; Confirmation)

This Agreement shall remain in effect until terminated by either Party hereto upon 30 days prior written notice to the other Party, but shall not be terminated prior to the later of thirty (30) days following the expiration of the latest Delivery Period of any Confirmation or until each Party has fulfilled all of its obligations with respect to such Confirmation. The rights of either Party pursuant to Article VI (Taxes and Other Liabilities); Article X (Representations); Article XI (Audit); Article XIII (Representations and Warranties/Limitation of Liability); Article XIV (Guaranty); Article XV (Title, Risk of Loss, and Indemnity); Article XVI (Netting and Setoff); Article XIX (Remedies for Default); Article XXI (Grant of Security Interest); Article XXII (Successors, Assigns, and Assignment); Article XXIV (Counterparts, Survival, and Severability); Article XXVIII (Confidentiality); Article XXIX (Governing Law; Waiver of Jury Trial), Article XXX (Venue); Article XXXI (Miscellaneous); and the obligations to make payment hereunder shall survive the termination of this Agreement or any Confirmation.

ARTICLE II

Obligations and Deliveries

Section 2.1 Contract Quantity. During the Term of a Confirmation, Seller agrees to sell and deliver to the Buyer and Buyer agrees to purchase and accept from Seller, at the Designated Delivery Point, the Contract Quantity of Coal set forth in a Confirmation (which Confirmation shall be substantially in the form attached hereto as Exhibit A).

Section 2.2 Reconsignment and/or Resale Rights. From time to time, and at any time, and except as may be otherwise provided in any Confirmation, Buyer shall have the right, but not the obligation, to have all or any part of the Coal under a Confirmation reconsigned for delivery to any destination, and/or to make all or any part of the Coal under a Confirmation available for purchase by any person(s), whether or not affiliated with Buyer, through Buyer's assignment, in whole or in part, of such Confirmation and/or this Agreement, or Buyer's purchase and subsequent resale to others of Coal under a Confirmation.

Should Buyer exercise its right to resell all or any part of the Coal, the Parties agree that Buyer's customer may perform some or all of Buyer's obligations. All information to be supplied by Seller to Buyer under this Agreement (including, without limitation, analysis, weights, train manifest, and invoicing information) shall be supplied to Buyer and Seller shall also be responsible for transmitting such information to Buyer's customer. In addition, Buyer and Seller are specifically released from its confidentiality obligations under Article XXVIII with respect to quality and weighing information and other relevant information provided by Buyer or Seller to Buyer's customer.

Section 2.3 Scheduling. Buyer will propose a delivery schedule for the Term and each month during the Term. If Buyer receives no response to a proposed delivery schedule within five (5) calendar days after sending such notice, then the delivery schedule shall be deemed acceptable to Seller. If such schedule is not acceptable to Seller, then the Parties will work together in good faith to agree on a reasonable and mutually acceptable delivery schedule. If the Parties do not agree upon a mutually agreeable schedule, then the remaining Tons shall be delivered ratably during each month for the remainder of the applicable portion of the Term. For example, if the Term is two years, with X tons to be delivered in the first Contract Half-Year, Y tons to be delivered in the second Contract Half-Year, and Z tons to be delivered in the second Contract Year and there is no agreement on the delivery schedule for Y tons, then the monthly deliveries for the Y tons shall be Y tons divided by six (6). Time for delivery of the quantities set forth in the Confirmation is of the essence.

Section 2.4 Delivery. The Coal shall be delivered to Buyer at the Designated Delivery Point in accordance with the Transportation Specifications detailed in Schedule 2.4 (attached hereto and hereby made a part of this Agreement).

Buyer will schedule and, (i) if delivery is to be by rail, assuming railroad acceptance of the railcars and the assignment of railroad power to move such railcars, provide, or cause to be provided, railcars to the railroads transporting Coal under each Confirmation in a sufficient number to permit delivery by Seller of the Contract Quantity at an agreed upon schedule; or (ii) if delivery is to be by barge, to provide, or cause to be provided, barges under each Confirmation in a sufficient number to permit delivery by Seller of the Contract Quantity at an agreed upon schedule.

Seller shall be responsible for any costs or charges imposed on or associated with the delivery of the Contract Quantity up to the Designated Delivery Point. Buyer shall be responsible for any costs or charges imposed on or associated with the Contract Quantity upon taking title to the Coal at the Designated Delivery Point in accordance with Article XV.

If a Party is charged for any increased transportation charges, penalties, or other costs, including demurrage, attributable to the other Party's failure to timely load or unload the Coal in accordance with the terms of this Agreement, including the timing and tonnage requirements of the Transportation Specifications, and if such failure is not due to Force Majeure, such failing Party shall reimburse the other for such charges.

Each Party shall immediately contact the other Party in the event of a curtailment or interruption in the delivery or receipt of Coal hereunder. Each Party shall contact the other Party with as much advance notice as reasonably possible regarding any such impending curtailment or interruption.

ARTICLE III

Quality Specifications

Section 3.1 Quality Specifications. Seller shall cause all Coal delivered to Buyer, pursuant to this Agreement, to comply with Quality Specifications set forth in this Section or in any applicable Confirmation. Included in the Quality Specifications are the requirements that the Coal shall be free flowing, free of extraneous materials, with nothing added or removed, have a maximum topsize not exceeding the size as set forth in the Confirmation..

Section 3.2 Coal Agent(s). At Buyer's verbal request to be promptly confirmed by facsimile or electronic mail prior to shipment and upon Buyer and Seller agreeing to the applicable charges, Seller shall cause a freeze-conditioning agent, side-release agent, and/or such other treatment agent(s) agreed upon by the Parties ("**Coal Agent(s)**") to be applied to the Coal, railcar, barge, or truck. Seller will cause only the Coal Agent(s) specified by Buyer to be used and will cause the Coal Agent(s) to be applied in a reasonable manner as specified by Buyer. Buyer will provide reasonable advance notice of the dates for starting and ending the Coal Agent(s) application. The applicable charges to be invoiced to and paid by Buyer shall be equal to Seller's costs at the Designated Delivery Point of supplying and applying the Coal Agent, provided Seller has done so in strict accordance with this Agreement.

Section 3.3 Rejection and Suspension. In addition to all other remedies at law or in equity, and in addition to the price adjustments provided for in Article VII, Buyer shall have the following rights and remedies upon Seller's failure to conform to the requirements as set forth in a Confirmation(s):

(a) Rejection of Non-Conforming Shipments. If any Shipment of Coal fails to conform to any Quality Specification specified in the applicable Confirmation(s) (a "**Non-Conforming Shipment**"), Buyer shall have the option, exercisable by notice to Seller of either (i) rejecting such Non-Conforming Shipment at the Designated Delivery Point or in route, but prior to unloading from Transporter's equipment or (ii) accepting any Non-Conforming Shipment with a Contract Price adjustment agreed to between Seller and Buyer. Should Buyer exercise such right of rejection, it shall notify Seller by electronic mail or verbally upon discovery of the nonconformance, any verbal notification to be promptly confirmed in writing. If Buyer fails to exercise its rejection rights hereunder as to a Non-Conforming Shipment, Buyer shall be deemed to have waived such rights with respect to that Non-Conforming Shipment only. If Buyer rejects the Non-Conforming Shipment, at Buyer's request, Seller shall be responsible for promptly transporting the rejected coal to an alternative destination determined by Seller and, if applicable, promptly unloading such coal, and shall reimburse Buyer for all reasonable costs and expenses associated with the transportation, storage, handling and removal of the Non-Conforming Shipment. Seller shall, at Buyer's request, replace the rejected coal as soon as possible, provided that Buyer gives written notice to Seller of Buyer's desire for replacement coal within 30 days after rejection of the Non-Conforming Shipment.

(b) Suspension Due to Multiple Non-Conforming Shipments. If there are three (3) Non-Conforming Shipments, whether rejected or not, under an individual Confirmation in any three (3) month period or if two (2) out of four (4) consecutive Shipments under such Confirmation are Non-Conforming Shipments, then Buyer may upon notice to Seller suspend the receipt of future Shipments (except Shipments already loaded or in transit to Buyer) under such Confirmation. Should Buyer exercise such right to suspend further Shipments pursuant to this Section 3.3(b), Buyer shall notify Seller of its exercise of the right of suspension within ten (10) Business Days after the day on which Buyer receives from Seller the quality analysis for the applicable Non-Conforming Shipment. A waiver by Buyer of the suspension right for any one period shall not constitute a waiver for subsequent periods. If Seller, within ten (10) Business Days of its receipt of such notice, provides reasonable assurances in writing to Buyer that future Shipments under the applicable Confirmation will conform to the Quality Specifications and Buyer has accepted such assurances (such acceptance not to be unreasonably withheld), Shipments shall resume at the rate specified in Article II and any tonnage deficiencies shall be made up within the Term at Buyer's option and delivery of make up tonnage shall be scheduled so that such deliveries shall be shipped no later than 365 calendar days following resumption of shipments. If (i) Seller fails to provide such acceptable assurances within such ten (10) Business Day period, or (ii) after such assurances are provided and for a period of three (3) months thereafter, any Shipment of coal fails to conform

to the requirements specified in the applicable Confirmation, then such event shall constitute an Event of Default under Article XVIII hereof.

(c) Suspension Due to Failure to Meet Applicable Contracted Period Suspension Limit. If any of the weighted average Coal qualities fail to conform to the Applicable Contracted Period Suspension Limit specifications set forth in a Confirmation, then Buyer may suspend the receipt of future Shipments (except Shipments already loaded or in transit to Buyer) under such Confirmation. Should Buyer exercise such right to suspend further Shipments pursuant to this Section 3.3(c), Buyer shall notify Seller of its exercise of the right of suspension within ten (10) Business Days after the day on which Buyer receives from Seller the quality analysis for the applicable Non-Conforming Shipment. A waiver by Buyer of the suspension right for any one period shall not constitute a waiver for subsequent periods. If Seller, within ten (10) Business Days of its receipt of such notice, provides reasonable assurances in writing to Buyer that future Shipments under a Confirmation will conform to the Quality Specifications and Buyer has accepted such assurances (such acceptance not to be unreasonably withheld), Shipments shall resume at the rate specified in Article II and any tonnage deficiencies shall be made up within the Term of such Confirmation at Buyer's option and delivery of make up tonnage shall be scheduled so that such deliveries shall be shipped no later than 365 calendar days following resumption of shipments. If (i) Seller fails to provide such acceptable assurances within such ten (10) Business Day period, or (ii) after such assurances are provided and for a period of three (3) months thereafter, any Shipment of coal fails to meet any of the limits under this Section for any of the Rejection or Applicable Contracted Period Suspension Limits for which there was a prior suspension under a Confirmation, then such event shall constitute an Event of Default as provided in Article XVIII hereof.

(d) Other Suspension Rights and Obligations; Cure. Buyer shall have the right to suspend performance under a Confirmation if Buyer, in its reasonable judgment, determines through operating experience that the Coal delivered to Buyer by Seller at the Plant cannot reasonably be utilized at the Plant using Buyer's then existing equipment, facilities, practices, and processes, even though the Coal complies with the requirements set forth in the Confirmation. In the event Buyer desires to exercise its suspension rights, Buyer shall provide Seller with written notice, which written notice shall identify the Plant and provide a detailed summary of the issue(s) attributed to the coal and shall include copies of any technical documentation then in Buyer's possession supporting such claims (the "Suspension Notice").

For a period of thirty (30) days from and after Seller's receipt of the Suspension Notice (the "**Suspension Period**"), Buyer and Seller shall work together in good faith to resolve the issues identified in the Suspension Notice. During the Suspension Period: (i) Seller shall permit Buyer reasonable access to the Approved Production Sources and related facilities hereunder and to all engineering and quality data related thereto, subject to any confidentiality requirements of Seller, (ii) Buyer shall permit Seller reasonable access to the Plant and all related facilities and to all engineering data related thereto, subject to any confidentiality

requirements of Buyer, and (iii) Buyer and Seller shall each have the right, but not the duty, to appoint a representative to participate in any and all discussions relating to the identified issue(s) and to recommend procedures such that the Coal can be reasonably utilized at the Plant. Buyer will consider, but will not in any way be obligated, to modify, add to, or remove existing equipment, facilities, practices, and processes at the Plant, whether related to utilizing or to handling of the Coal.

Not later than five (5) Business Days following the end of the Suspension Period, Seller may provide Buyer with written assurances that Seller has either (i) modified the characteristics of the Coal to be shipped hereunder (whether specifically set forth in the Quality Specifications or not) to meet both the requirements, if any, and specifications of a Confirmation, as they may have been amended, or (ii) committed to provide coal from an alternative Buyer-approved source (Buyer's approval not to be unreasonably withheld, conditioned or delayed) that will be in compliance with the requirements and specifications of a Confirmation, as they may have been amended, such that the Coal may reasonably be utilized at the Plant, provided that the delivered cost of the coal to the Plant from the alternative source will not exceed the delivered cost of coal from the Source to the Plant.

Shipments suspended under a Confirmation pursuant to this Section 3.3(d) shall resume upon Buyer's acceptance of Seller's assurances (which acceptance shall not be unreasonably withheld, conditioned or delayed) and, if Buyer deems necessary, completion of and Buyer's commercially reasonable satisfaction with, a reasonable test burn at the Plant, which test burn shall be conducted within sixty (60) days following Seller's providing the assurances set forth in the preceding paragraph.

A Confirmation may be terminated (a) by either Party in the event the Parties cannot mutually agree upon a resolution of the identified issue(s) during the Suspension Period or any mutually agreed upon extension thereof, (b) by Buyer in the event Seller does not provide the aforesaid assurances within the specified time period, (c) by Buyer in the event Seller's assurances are not acceptable (subject to the restrictions set forth in this Section 3.3(d), or (d) by Buyer in the event that the results of the test burn demonstrate to Buyer, using commercially reasonable judgment, that the identified issue(s) have not been resolved. Upon such termination, neither Party shall have any obligation to the other Party, except for payment for prior performance, and, provided that the Coal delivered has met the Quality Specifications, such termination shall not constitute an Event of Default as provided for in Article XVIII.

Any documentation or other information provided by either Party pursuant to this Section shall be expressly subject to the confidentiality provisions of this Agreement.

ARTICLE IV

Billing and Payment; Financial Reports

Section 4.1 Billing and Payment. Buyer shall pay Seller by wire transfer or electronic means (recipient's account per Seller's invoice) in immediately available United States funds for all coal delivered hereunder.

The Weighing Party shall submit to the Non-Weighing Party the weight, analytical, and price data on such Coal delivered during each Applicable Contracted Period to each respective consigned destination within five (5) Business Days after the end of such Period. Such invoice shall include a reference to the applicable Confirmation number.

Buyer shall make payment by electronic transfer to Seller within twenty (20) calendar days after the end of each Applicable Contracted Period, provided Seller's invoice is submitted in accordance with the preceding paragraph, otherwise, Buyer shall pay Seller within twenty (20) calendar days of receipt of invoice providing the weight, analytical, and price data on such Coal delivered for the Applicable Contracted Period; provided, however, that in no event will payment be due earlier than twenty (20) calendar days after the end of the subject Applicable Contracted Period. Seller shall provide Buyer all pertinent wire transfer remittance instructions on each invoice (containing the bank name, account name, ABA number, and account number, as well as Seller's federal tax identification number).

Buyer shall remit payment to Seller at the following account, or to such other account as Seller may specify in writing from time to time:

SEND INVOICES TO:	REMIT PAYMENT TO:
AEP Fuel Accounting	Bank:
303 Marconi Boulevard, Suite 300	
Columbus, OH 43215	ABA Number (ACH):
Email: cantonfuelaccounting@aep.com	Account Number:
	Account Name:

Any change in remittance instructions shall be provided by Seller in a letter (containing the bank name, account name, ABA number, and the account number, as well as Seller's federal tax identification number) which shall be signed by an officer of Seller.

Section 4.2 Disputed Invoices. If Buyer in good faith reasonably disputes an invoice, it shall provide a written explanation specifying in detail the basis for the dispute and pay any undisputed portion no later than the due date. Upon resolution of any dispute involving an invoice, any additional amount owing shall be paid with interest (the prime rate of interest for United States Dollars as published from time to time under the section titled, "Money Rates" by *The Wall Street Journal*, plus two percent (2%) per annum, but not to exceed

the maximum applicable lawful interest rate (hereinafter "**Interest Rate**"). If any Party fails to pay amounts under this Agreement or any Confirmation when due, unless such amount is the subject of a dispute as provided above, or is excused by Force Majeure, in addition to the rights and remedies provided in this Agreement, the aggrieved Party shall have the right to suspend performance under this Agreement or any applicable Confirmation until such amounts plus interest at the Interest Rate have been paid, and/or exercise any remedy available at law or in equity to enforce payment of such amount plus interest at the Interest Rate defined herein.

Section 4.3 Financial Statements. Either Party shall have the right, but not the obligation, to request from the other Party or its Credit Support Provider, as applicable, audited annual financial statements (which each Party shall be obligated to make available to the other Party within 120 days following the end of each fiscal year) and quarterly unaudited financial statements (which each Party shall be obligated to make available to the other Party within 60 days following the end of each of the first three fiscal quarters of each fiscal year). A Party will be deemed to have satisfied its obligations under this Section 4.3 to the same extent that such statements are available to the other Party electronically from the SEC or Edgar.

ARTICLE V

Contract Price

The Contract Price shall be set forth in a Confirmation and shall be firm and shall not be subject to any adjustment, except as provided under Article VI, Taxes and Other Liabilities, and Article VII, Adjustments to the Contract Price.

ARTICLE VI

Taxes and Other Liabilities

Section 6.1. Taxes and Other Third Party Impositions. Each Party shall use Commercially Reasonable Efforts to administer this Agreement and implement the provisions in accordance with the intent to minimize Taxes, but neither Party shall be obligated to incur additional expenses in doing so. Seller shall be solely responsible as for all assessments, fees, costs, expenses, charges, liabilities, and Taxes (including without limitation, New Taxes) imposed by governmental authorities or other third parties ("**Third Party Impositions**") relating to the mining, beneficiation, production, sale, use, loading and delivery of Coal to Buyer or in any way accrued or levied at or prior to the transfer of title to the Coal to Buyer. Buyer shall be solely responsible for Third Party Impositions relating to the Coal accrued or levied after the transfer of title to the Coal to Buyer. Each Party shall be responsible for any taxes relating to or assessed upon its own net income or net worth.

Section 6.2. Exemption from Taxes. If either Party is exempt from Taxes, it shall provide a certificate of exemption or direct pay permit, or other reasonable satisfactory evidence of such exemption. The Contract Price is inclusive of all Third Party Impositions in effect as of the Effective Date.

Section 6.3. Indemnity from Third Party Impositions. Each Party shall indemnify, release, defend, and hold harmless the other Party, its officers, directors, Affiliates, agents, and employees, from and against any and all Third Party Impositions with respect to the Coal that are the responsibility of such Party.

ARTICLE VII

Adjustments to the Contract Price

Adjustments to the Contract Price for variances in quality shall be made in accordance with the provisions of Schedule 7 (attached hereto and hereby made a part of this Agreement). The Contract Price as adjusted by such provisions is referred to as the "Selling Price."

ARTICLE VIII

Weighing, Sampling, and Analyses

Weighing, sampling, and analyses shall be performed in accordance with the provisions of Schedule 8 (attached hereto and hereby made a part of this Agreement).

ARTICLE IX

Other Governmental Legislation, Regulations, and Orders

Section 9.1. Compliance with Applicable Law. Seller and Buyer shall make good faith efforts to comply with the provisions of all federal, state, local, and other governmental laws and any applicable orders, rules and/or regulations, or any amendments or supplements thereto, which have been, or may at any time be, issued by a governmental agency.

Section 9.2. If any federal, state, or other governmental law, regulation, or order (including but not limited to the Clean Air Act Amendments of 1990) is enforced or imposed upon Buyer regarding the purchasing, burning, transporting, or the use of, the Coal specified in a Confirmation reducing the emissions below the current standard, or the sulfur or other chemical content of the Coal to be burned at the Plant, resulting in Buyer, in its reasonable judgment, wholly or partially discontinuing the use of the Coal at the Plant; or if, as a result of any federal, state, or other governmental law, regulation, or order (including but not limited to the Clean Air Act Amendments of 1990) relating to the sulfur or other chemical content of the Coal and/or the stack emission limitations at a group of plants comprised of the Plant and any other generating plant(s) operated by the American Electric Power Company, Inc., or any of its Affiliates, Buyer voluntarily or

involuntarily revises the specifications of the Coal to be burned at the Plant and/or voluntarily or involuntarily reduces the stack emission limitations at the Plant, in order that the Plant or such group of plants may be in compliance with said federal, state, or other governmental law, regulation, or order; or if as a result of any of the foregoing, Buyer in its sole reasonable judgment decides to reduce or discontinue the use of Coal at the Plant, then Buyer may, by written notice to Seller, reduce the quantity of Coal to be purchased and sold under any such Confirmation as of the date determined pursuant to Section 9.4 on a pro rata basis (to the extent that Buyer is contractually permitted to do so) with other coal used by the Plant which is similarly affected by such law, regulation, or order. In the event it becomes unreasonable for Buyer to utilize any such coal at the Plant, then the quantity of Coal to be sold and purchased by Buyer pursuant to the Confirmation may be reduced to zero. If Buyer so requests, Seller may, but is not obligated to, agree to deliver Coal having such different specifications and/or quantity requirements in accordance with the remainder of the terms and conditions of such Confirmation (specifically at the price provisions set forth in Article V); provided, however, that those provisions dealing with quantity and/or quality will be changed appropriately to accommodate such different specifications and/or quantities. If, within 30 days of Seller's receipt of Buyer's notice to Seller pursuant to this paragraph, Seller has not agreed to continue deliveries as provided above, Buyer may terminate such Confirmation by written notice to Seller. Should Buyer make such termination election, such Confirmation shall terminate as of the date determined pursuant to Section 9.4.

Section 9.3. In the event of the enactment of any new federal, state, or other governmental law, or the promulgation of any regulation or order thereunder which prohibits (or restricts so as effectively to prohibit) mining or processing, or shipping, as may be applicable, of the Coal specified in any Confirmation, Seller may elect to be relieved of its obligation upon the effective date of implementation (compliance date) of such law, regulation, or order to deliver the total quantity of Coal to be delivered under such Confirmation to the extent of the amount of tonnage represented by the percentage of production by Seller of such mining or processing, or shipping, as may be applicable, of Coal so affected by such law, regulation, or order to the total amount of Coal produced and processed to meet the quantity requirements of such Confirmation.

Section 9.4. (a) In the event Buyer elects to invoke Section 9.2 relative to the Clean Air Act Amendments of 1990, Buyer shall notify Seller in writing setting forth the date upon which Buyer's election shall become effective; provided, however, that said effective date shall in no event be earlier than 60 days after the date of delivery of such notice.

(b) Except as provided for in Section 9.4(a), should either Buyer or Seller elect to invoke Section 9.2 or 9.3, respectively, the Party so invoking shall notify the other Party in writing, stating the grounds upon which such invocation is based. Said notice shall also state the date upon which the notifying Party's election shall become effective, which said date shall not be earlier than 120 days prior to the effective date of the implementation (compliance date) of such law, regulation, or order giving rise to the election; provided,

however, that notwithstanding anything to the contrary herein, said effective date shall in no event be earlier than 60 days after the date of delivery of notice.

Section 9.5. If Buyer elects to terminate any Confirmation under the provisions of this Article, then neither Party shall have, after the effective date of such termination, any further obligation under such Confirmation; provided, however, that such termination shall not affect any rights or obligations of Buyer or Seller existing under such Confirmation for Coal shipped or required to be shipped prior to the effective date of said termination.

ARTICLE X

Representations

Section 10.1. Representations. On the date of this Agreement and on each Effective Date, each Party represents and warrants to the other Party that:

- (i) it is duly organized, validly existing and in good standing under the laws of jurisdiction of its formation;
- (ii) it has all regulatory authorizations necessary for it to legally perform its obligations under this Agreement;
- (iii) the execution, delivery and performance of this Agreement and the Confirmation are within its powers, have been duly authorized by all necessary action and do not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any law, rule, regulation, order or the like applicable to it;
- (iv) this Agreement, any Confirmation, and each other document executed and delivered in accordance with this Agreement and any Confirmation constitutes its legally valid and binding obligation enforceable against it in accordance with its terms, subject to any equitable defenses;
- (v) Buyer is acting as an agent for disclosed Parties, and Seller is acting for its own account; each Party has made its own independent decision to enter into this Agreement and any Confirmation and as to whether this Agreement and any Confirmation are appropriate or proper for it based upon its own judgment, is not relying upon the advice or recommendations of the other Party in so doing, and is capable of assessing the merits of and understanding, and understands and accepts, the terms, conditions and risks of this Agreement and any Confirmation;
- (vi) it is not bankrupt and there are no Bankruptcy Proceedings pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or becoming bankrupt;
- (vii) Except as otherwise set forth in a Confirmation, there is not pending or, to its knowledge, threatened against it or any of its Affiliates any legal proceedings that could materially adversely affect its ability to perform its obligations under this Agreement;

- (viii) no Event of Default with respect to it has occurred and is continuing and no such event or circumstance would occur as a result of its entering into or performing its obligations under this Agreement;
- (ix) it is a "forward contract merchant" and this Agreement and each Confirmation is a "forward contract" within the meaning of the United States Bankruptcy Code;
- (x) with respect to this Agreement and each Confirmation, it is an "eligible contract participant" as defined in Section 1a(18) of the Commodity Exchange Act, as amended [7 USC 1a(18)];
- (xi) has entered into this Agreement and will enter into each Confirmation in connection with the conduct of its business and it has the capacity or ability to make or take delivery, as applicable to the Party, of all Coal referred to in this Agreement and such Confirmation;
- (xii) no event or circumstance exists at any Force Majeure Production Source, with respect to Seller, or Force Majeure Destination Plant, with respect to Buyer, as provided under any applicable Confirmation, that would constitute an event of Force Majeure under this Agreement;
- (xiii) all applicable information that is furnished in writing by it or on behalf of it to the other Party pursuant to this Agreement is as of the date provided true, accurate and complete in every material respect. For purposes of this representation, financial information provided via posting on the Internet shall be deemed to be written information provided to the other Party;

Section 10.2. Authorized Signatures. Each Party represents that the individuals signing this Agreement on behalf of each of them has been duly authorized to do so. This Agreement and any subsequent Confirmation will become valid and binding contracts only upon their execution by such persons authorized to bind both Parties.

ARTICLE XI

Audit

Each Party (and its representatives) has the right, at its sole expense during normal working hours and upon reasonable advance notice, to examine the records of the other Party, but only to the extent reasonably necessary to verify the accuracy of any statement, charge or computation made pursuant to this Agreement and each Confirmation entered into pursuant to this Agreement. If requested, a Party shall provide to the requesting Party statements evidencing the quantities and qualities of Coal delivered or received at the Designated Delivery Point. If any such examination reveals any inaccuracy in any statement, the necessary adjustments in such statements and the payments thereof will be promptly made and shall bear interest calculated at the Interest Rate from the date the overpayment or underpayment was made until paid; provided, however, that no adjustment for any statement or payment shall be made unless such examination shall have

been completed and, if appropriate, an objection to the accuracy thereof and a written demand for resolution thereof, has been provided to the other Party within two (2) years following the later of the end of the Contract Year in which (a) such statement was generated or (b) such payment was made, except with respect to adjustments related to governmental audits, in respect of which the time period shall be the applicable statute of limitations; and provided further, that for the purpose of such statement and payment objections, this Article XI will survive the expiration or any termination of this Agreement.

ARTICLE XII

Force Majeure

Section 12.1 Force Majeure. To the extent either Party is prevented by Force Majeure from carrying out, in whole or part, its obligations under a Confirmation and such Party (the "**Claiming Party**") gives notice and details, orally and confirmed promptly in writing, of the Force Majeure to the other Party as soon as practicable (but in no event later than thirty (30) days after the occurrence thereof), then the Claiming Party shall be excused from the performance of its obligations during such event. The non-Claiming Party shall not be required to perform or resume performance of its obligations to the Claiming Party corresponding to the obligations of the Claiming Party that are excused by Force Majeure. Failure to give such notice and furnish such information within the time specified shall be deemed a waiver of all rights under this paragraph for such period of time beginning on the date of occurrence of the Force Majeure through and including the date that is thirty (30) days prior to the date that such notice was given and such information was furnished to the non-Claiming Party. Neither the Claiming Party nor the non-Claiming Party will be relieved by Force Majeure from the obligation to make payment when due, including the obligation of Buyer to make payment for Coal delivered when due, except in cases where a Party is prevented from making payment by Force Majeure affecting banking and financial systems or institutions, in which case those payments will be made as soon as reasonably practicable. The Claiming Party shall exercise reasonable efforts to mitigate or eliminate the conditions which have caused the Force Majeure condition, provided, however, nothing herein contained shall be construed as requiring the Claiming Party to accede to any demands of labor, or labor unions, or suppliers, or other parties which the Claiming Party, in the exercise of its good faith reasonable judgment, considers unacceptable. The Claiming Party shall furnish the non-Claiming Party a statement for the Applicable Contract Period by the 15th day of the immediately following Applicable Contract Period setting forth the amount of tonnage not shipped or to be reduced because of Force Majeure causes asserted during the second preceding Applicable Contract Period.

Section 12.2 Make-Up of Force Majeure Tonnage; Termination due to Force Majeure. Except as set forth in this paragraph, no suspension or reduction by reasons of Force Majeure shall invalidate the remainder of a Confirmation but, on the removal of the cause, shipments shall resume at the specified rate. If an event of

Force Majeure persists for (i) a continuous period of sixty (60) days or (ii) an aggregate of seventy-five (75) days in any rolling twelve-month period or during the Term of a Confirmation (if the Term is less than twelve months), and either (i) or (ii) above results in a cancellation in Shipments of greater than fifty percent (50%) of the Shipments scheduled for that period then, at any time thereafter during the Force Majeure period, the non-Claiming Party shall have the option, upon three (3) days' prior written notice, to terminate the applicable Confirmation and the obligations of the Parties thereunder.

In the event of a Force Majeure, delivery of the affected quantity of coal shall be made up in the discretion of the Non-Claiming Party, at the price in effect at the time the Coal would have been delivered in the absence of the Force Majeure, upon a schedule reasonably acceptable to both Parties, provided that this Agreement was not earlier terminated pursuant to this Section, Section 3.3, or applicable law, and provided, further, that make-up will be completed within 365 days of the end of the Force Majeure period or 365 days of the end of the Delivery Period, whichever is earlier.

Section 12.3 Limitation on Force Majeure Claims from Approved Production Sources.

(a) Each Confirmation will designate Seller's Approved Production Source(s) and, if there is more than one Approved Production Source, which of such Source(s) shall be Seller's Force Majeure Production Source. At least thirty (30) days, but not more than forty-five (45) days, prior to the beginning of each Contract Half-Year during the Term of each Confirmation, Seller may designate in writing one or more of such Approved Production Sources as the Force Majeure Production Sources for the next Contract Half-Year for such Confirmation. Seller's notice will include, for purposes of this Article XII, the quantity of Coal that Seller intends as of that time to deliver under the Confirmation from each Force Majeure Production Source during each month of the next Contract Half-Year, provided, however, that the total quantity of Coal for each month under that Confirmation from all Force Majeure Production Sources may not exceed the Seller's total tonnage obligation for the applicable month of the Contract Half-Year (based on ratable deliveries and receipts of the Contract Quantity of Coal during each month of the Contract Half-Year, together with any make-up tonnages that the Parties have agreed to deliver and receive during such period pursuant to Sections 3.3 or 12.2). Seller may not designate an Approved Production Source as a Force Majeure Production Source if at the time of such designation it is then being adversely impacted by an event of Force Majeure, or if Buyer has previously notified Seller that Seller's right to schedule and deliver Coal from that Approved Production Source is terminated pursuant to Sections 3.3 or 12.5. If Seller does not designate one or more Force Majeure Production Source(s) by the deadline set forth above for Seller's entire tonnage obligation for the next Contract Half-Year (as such obligation is described above) for a Confirmation, the previously designated Force Majeure Production Source for the Confirmation will be deemed the Force Majeure Production Source as to that portion of Seller's tonnage obligation for which a Force Majeure Production Source has not been designated. If there is no previously designated Force Majeure Production Source(s) for a Confirmation, then the tonnage

reduction due to Force Majeure will be proportioned among the Approved Production Sources, based upon the tonnage delivered from the Approved Production Sources from the commencement date of the then current Contract Half-Year to the commencement date of the Force Majeure.

(b) Seller will be excused from its obligation under a Confirmation to deliver Coal pursuant to Section 12.1 by Force Majeure affecting an Approved Production Source or an associated Designated Delivery Point only if the Approved Production Source is a Force Majeure Production Source for the Confirmation or if the Designated Delivery Point is a Designated Delivery Point associated with a Force Majeure Production Source, and the extent of Seller's excuse each month from its obligation to deliver Coal from the Force Majeure Production Source will not exceed tonnage specified in subsection (a) above for that Source for that month.

Section 12.4 Limitation on Force Majeure Claims from Plants.

(a) Each Confirmation will designate a Plant) and, if there is more than one destination generating plant, which Plant shall be Buyer's Force Majeure Destination Plant. If there is more than one destination generating plant, Buyer may not designate a Plant as a Force Majeure Destination Plant if at the time of such designation it is then being adversely impacted by an event of Force Majeure. Upon written notice to Seller, Buyer may modify the Force Majeure Destination Plant.

(b) Buyer will be excused from its obligation under a Confirmation to purchase Coal pursuant to Section 12.1 by Force Majeure affecting a Plant or other consigned destination only if the Plant or other consigned destination is a Force Majeure Destination Plant for the Confirmation, and the extent of Buyer's excuse each month from its obligation to receive Coal for ultimate delivery to such Force Majeure Destination Plant will not exceed tonnage specified in subsection (a) above for that Plant or other consigned destination for that month

Section 12.5 Pro Rata Obligations. If Seller claims Force Majeure under a Confirmation and has obligations to provide coal of a similar type and quality as the coal under other coal sales agreements from the Force Majeure Production Source, or if Buyer claims Force Majeure at a Plant and has obligations to purchase coal of a similar type and quality as the coal under other coal sales agreements for the Force Majeure Destination Plant, then any reductions in Seller's deliveries or Buyer's purchases (as applicable) shall be allocated by the Party claiming Force Majeure on a pro rata basis among the applicable Confirmation and such other coal purchase or sales agreements from the Force Majeure Production Source (if Seller is the Party claiming Force Majeure) or for the Force Majeure Destination Plant (if Buyer is the Party claiming Force Majeure) at a Plant involving coal of a similar type and quality as the Coal sold and purchased under such Confirmation, to the extent contractually permitted by such agreements. Without limiting the generality of the foregoing:

(a) in the event of a Force Majeure event which causes a partial curtailment of electrical generation from or electrical generating capacity at the Force Majeure Destination Plant or partial curtailment of transmission or distribution of electricity from the Force Majeure Destination Plant, any reductions in Buyer's purchases shall be allocated by Buyer on a pro rata basis among the affected Confirmation and such other coal purchase agreements for the Force Majeure Destination Plant involving coal of a similar type and quality as the coal sold and purchased under such affected Confirmation, to the extent contractually permitted by such agreements, based on such partial curtailment and based on Seller's coal scheduled for delivery under such affected Confirmation for the period during which such event or occurrence exists or existed; and

(b) in the event of a Force Majeure event which causes a total curtailment of electrical generation from or electrical generating capacity at the Force Majeure Destination Plant or total curtailment of transmission or distribution of electricity from the Force Majeure Destination Plant, Buyer shall be relieved under this Section from its obligation to accept up to the entire quantity of Seller's coal under such affected Confirmation scheduled for delivery for the period during which such event or occurrence exists or existed, provided that the Force Majeure Destination Plant is not, to the extent contractually permitted, accepting the delivery of any other coal (except to the extent contractually obligated to accept such other coal), of a similar type and quality as the Coal sold and purchased under such affected Confirmation, that was scheduled for delivery at the Force Majeure Destination Plant for such period.

ARTICLE XIII

Representations and Warranties/Limitation of Liability

In addition to all other representations and warranties made in this Agreement, Seller represents and warrants that it will not claim as justification for any failure to perform according to the terms of this Agreement and the Confirmation that (i) Seller, its Affiliates or subsidiaries, do not own or control sufficient reserves of Coal as to satisfy the quantity and quality provisions for this Agreement or any Confirmation; (ii) Seller is not in compliance, to the extent applicable, with the rules, practices, and standards issued by any and all governmental agency(ies) with respect to legislation, regulations, rules, or mandates which were in effect either by interim or final rules, or passed, adopted, or promulgated but to go into later effect, as of the time specified for the delivery of Coal pursuant to this Agreement and any Confirmation, including all laws and regulations regarding the mining and sale of Coal (notices and orders issued under the Federal Mine Health and Safety Act and State and Federal Reclamation Acts excepted); and (iii) Seller has not acquired all licenses, permits, certificates and other documents necessary for it to fulfill its obligations under the Confirmation.

EXCEPT AS EXPRESSLY STATED IN THIS AGREEMENT, NEITHER PARTY MAKES ANY WARRANTIES, WHETHER EXPRESS OR IMPLIED, WRITTEN OR ORAL, ARISING FROM A COURSE OF DEALING, USAGE OF TRADE, OR OTHERWISE, REGARDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Neither Party shall be liable for any punitive, special, incidental or consequential damages (including without limitation, loss of profits or overhead), based upon breach of warranty or of contract, negligence or any other theory of legal liability arising out of this Agreement or any Confirmation.

ARTICLE XIV

Guaranty

In order to secure all obligations of Seller hereunder, Seller shall cause its Credit Support Provider to execute and deliver to Buyer, and will cause its Credit Support Provider to maintain in full force and effect throughout the Term, the Guaranty Agreement which shall be substantially in the form attached hereto as Exhibit B, attached hereto and hereby made a part hereof.

ARTICLE XV

Title, Risk of Loss, and Indemnity

Section 15.1 Title and Risk of Loss. Seller represents and warrants that it has title to the Coal and will deliver the Coal to Buyer free and clear of all liens, encumbrances, and claims at the time of the transfer of title to Buyer. Title to and risk of loss of the Coal conforming to this Agreement shall pass to Buyer as follows:

- (a) For barge deliveries, as the loaded barges are pulled from the Designated Delivery Point.
- (b) For rail deliveries, as the loaded unit train or single car Shipment is pulled from the Designated Delivery Point.
- (c) For truck and belt deliveries, upon the Coal being delivered and dumped at the Plant or other consigned destination as instructed by Buyer

For all Non-Conforming Shipments (as hereinafter defined) title to and risk of loss of Coal shall revert back to Seller immediately upon any rejection or nonacceptance by Buyer as provided elsewhere in this Agreement.

Section 15.2 Indemnity.

(a) Seller and Buyer (as applicable, the "**Indemnitor**") shall each indemnify, defend, and save harmless the other Party and its Affiliates, their officers, directors, affiliates, agents, and employees (individually and collectively, the "**Indemnitees**") from and against any liabilities, expenses, losses, claims,

damages, penalties, causes of action, or suits and all other obligations whatsoever, including without limitation, all judgments rendered against and all fines and penalties imposed upon such Party (whether severally, or in combination with others) and any reasonable attorneys' fees and any other costs of litigation (all of which are hereinafter referred to as "**Liabilities**") arising out of injuries or death to any person(s), or damage to any property, caused by or related to any action or inaction by the Indemnitor, its employees, agents and representatives, sustained in connection with the performance of its rights or obligations in connection with this Agreement and each Confirmation, except to the extent caused by the negligence or willful misconduct of the Indemnitee.

(b) Seller shall indemnify, save harmless, and defend Buyer and its Affiliates and their officers, directors, agents, and employees (all referred to in this sentence as "**Buyer**"), from and against any Liabilities, arising out of injuries or death to any person(s), or damage to any property, caused by or related to, in whole or in part the railcars (or barges, if applicable) furnished by Buyer, between the time that such railcars (or barges, if applicable) are delivered to Seller or Seller's agent and the time that custody thereof is properly returned to Buyer (or to Buyer's agent carrier, if applicable). Any injury or death to person(s) or damage to property as hereinbefore described shall be reported to Buyer by Seller promptly upon the occurrence thereof, and confirmed in writing as soon as possible.

ARTICLE XVI

Netting and Setoff

If the Parties are required to pay any amounts in the same month, then such amounts with respect to each Party may be aggregated and the Parties may discharge their obligations to pay through netting, in which case the Party, if any, owing the greater aggregate amount shall pay to the Party owed the difference between the amounts owed. Each Party reserves to itself all rights, setoffs, counterclaims, combination of accounts, liens and other remedies and defenses which such Party has or may be entitled to (whether by operation of law or otherwise). The obligations to make payments under this Agreement or any Confirmations or any other agreements between the Parties may be offset against each other, set off, or recouped therefrom.

ARTICLE XVII

Calculation of Damages

Section 17.1 Unless excused by Force Majeure, by written agreement of Buyer and Seller, or Buyer's failure to perform, if Seller fails to deliver all or part of the Contract Quantity during a Contract Year, or the Term if the Term is less than a Contract Year, pursuant to a Confirmation (including any failure due to rejection or suspension of delivery obligations), Seller shall pay Buyer, in the first Contract Month following the Contract Year (or the first calendar month following the end of the Term, if applicable) and on the date payment would otherwise be due to Seller, an amount for each Ton of such deficiency equal to the positive difference, if any, obtained by subtracting the Contract Price from the Replacement Price. "Replacement Price" means the market price for such quantity at such consigned destination as determined by Buyer in a Commercially Reasonable manner.

Unless excused by Force Majeure, by written agreement of Buyer and Seller, or Seller's failure to perform, if Buyer fails to accept all or part of the Contract Quantity pursuant to a Confirmation, Buyer shall pay Seller, in the first Contract Month following the Contract Year (or the first calendar month following the end of the Term, if applicable) and on the date payment would otherwise be due to Seller, an amount for each Ton of such deficiency equal to the positive difference, if any, obtained by subtracting the Sales Price from the Contract Price. "Sales Price" means the market price for such quantity at such Designated Delivery Point as determined by Seller in a Commercially Reasonable manner.

Section 17.2 Payment of amounts, if any, determined under this Article shall be made in accordance with Article IV. The Non-Defaulting Party shall not be required to enter into any actual replacement transaction in order to determine the Replacement Price or Sales Price, as appropriate, provided, however, that the Non-Defaulting Party shall take all reasonable steps to mitigate its damages.

ARTICLE XVIII

Events of Default

Section 18.1 If an Event of Default (as hereafter defined) occurs with respect to a Party or its guarantor (the "**Defaulting Party**") at any time during the term of this Agreement and a Confirmation, the other Party (the "**Non-Defaulting Party**") may, in its sole discretion, do any or all of the following: (i) establish a date (which date shall be no earlier than the date that such notice is given to the Defaulting Party and no later than 20 days from notice) ("**Early Termination Date**") on which this Agreement and the Confirmation shall terminate, (ii) withhold any payments due in respect of this Agreement and the Confirmation, (iii) suspend performance under this Agreement and the Confirmation and/or (iv) exercise such other remedies as may be provided in this Agreement, the Confirmation, or at law or in equity.

An event of default ("**Event of Default**") with respect to the Defaulting Party shall mean any of the following:

(a) the failure of either Party or its guarantor to make when due, any payment required if such failure is not remedied within two (2) Business Days after notice of such failure is given to the Defaulting Party by the Non-Defaulting Party;

(b) the failure of either Party or its guarantor to comply with any or all of its other material respective obligations, including but not limited to Seller's failure to materially comply with the a Confirmation's Contract Quantity and Quality Specifications and such noncompliance is not cured within a Commercially Reasonable period after notice thereof to Defaulting Party.

(c) failure to timely provide Performance Assurance or other assurances satisfactory to the Non-Defaulting Party of its ability to perform its further obligations under this Agreement or any Confirmation when due;

(d) any representation or warranty made by a Party shall prove to be untrue in any material respect when made;

(e) either Party (i) filing a petition in bankruptcy, (ii) having such a petition filed against it, or (iii) becoming otherwise insolvent or unable to pay its debts as they become due;

(f) the failure of a Party's guarantor, if any, to perform any covenant set forth in its guaranty, or such guaranty shall expire or be terminated or shall cease to guarantee the obligations of such Party hereunder, or such guarantor shall become subject to any of the events specified in (e) (i), (ii) or (iii);

(g) failure by the Party providing Credit Support to make, within ten (10) Business Days prior to the expiration or termination of any Credit Support, adequate arrangements for new and equivalent (or a renewal of existing) Credit Support to become effective immediately upon the expiration of the existing Credit Support without the written consent of the other Party; or

(h) the occurrence of a Material Adverse Change with respect to the Defaulting Party; provided such Material Adverse Change shall not be considered an Event of Default if the Defaulting Party, within forty-eight (48) hours but at least one Business Day after the date of notice, provides to the Non-Defaulting Party for so long as the Material Adverse Change is continuing, Performance Assurance with the Non-Defaulting Party.

ARTICLE XIX

Remedies for Default

Section 19.1 If an Early Termination Date is established, the Non-Defaulting Party shall calculate, in a good faith Commercially Reasonable manner, the Settlement Amount as of the Early Termination Date as soon as is reasonably practicable and shall promptly notify the Defaulting Party of the amount thereof.

"**Settlement Amount**" shall mean the present value of the single net aggregate amount for the remaining Terms of the Confirmation in existence as of the Early Termination Date, including any exercised option period(s), of any Losses, Costs, and Gains, expressed in United States dollars, which the Non-

Defaulting Party incurs as a result of the early termination of the Confirmation in accordance with this Article, including, but not limited to, Losses or Gains based upon the then current replacement value of the Confirmation, the amounts of any unpaid invoices, and the amount for Coal delivered but not yet billed. In calculating the Settlement Amount, the Non-Defaulting Party shall set off all amounts that are due to the Defaulting Party against such Settlement Amount so that the Settlement Amount shall be netted to a single liquidated amount. Any collateral being held by the Non-Defaulting Party shall be setoff against the amount owed to the Non-Defaulting Party. If the Defaulting Party is holding collateral posted by the Non-Defaulting Party, then the Non-Defaulting Party will have the right to set off that amount against any payment to be made to the Defaulting Party.

The Non-Defaulting Party shall provide the Defaulting Party with an explanation of how it calculated the Settlement Amount, as well as supporting calculations and documentation reasonably requested by the Defaulting Party. The Non-Defaulting Party shall use good faith Commercially Reasonable efforts to mitigate any Costs or Losses it is entitled to hereunder. The Defaulting Party shall have the right to audit (through an Independent Accounting Firm) the calculation of all of the Non-Defaulting Party's Gains, Losses and Costs.

Section 19.2 If the present value of the Non-Defaulting Party's aggregate Losses and Costs (net of any amounts due to the Defaulting Party) exceed the present value of its aggregate Gains, all as finally determined in accordance with the preceding provisions of this Article XIX, the Defaulting Party shall, within five (5) Business Days of such final determination, pay the Settlement Amount to the Non-Defaulting Party, including interest thereon at the Interest Rate from the Early Termination Date until paid in full. If the Defaulting Party disputes the Non-Defaulting Party's calculation of the Settlement Amount, the Defaulting Party will provide its calculations to the Non-Defaulting Party within two (2) Business Days of receipt of calculation from the Non-Defaulting Party. The Defaulting Party shall nevertheless pay to the Non-Defaulting Party the undisputed portion of the Settlement Amount and provide Performance Assurance for the remaining amount.

Section 19.3 Notwithstanding any provision to the contrary contained in this Agreement, the Non-Defaulting Party shall not be required to pay the Defaulting Party any amount under this Article XIX, until the Non-Defaulting Party receives confirmation satisfactory to it, in its reasonable discretion (which may include an opinion of its counsel), that all other obligations of any kind whatsoever of the Defaulting Party to make any payments to the Non-Defaulting Party) have been fully and finally performed.

ARTICLE XX

Holding and Using of Performance Assurance

Each Party will be entitled to hold Performance Assurance so long as the credit rating of the senior unsecured debt obligation of the Party or its guarantor is rated at least BBB- by S&P's and Baa3 by Moody's and further provided that an Event of Default has not occurred or, if it has occurred, is not continuing with respect to the Party or its guarantor. If (i) an Event of Default has occurred, or (ii) an Event of Default has occurred and is continuing with respect to a Party or its guarantor (if any), then the Defaulting Party shall be required to immediately place all such Performance Assurance in an escrow account with an independent third party financial institution mutually acceptable to the Parties.

Until Seller delivers such Performance Assurance to Buyer, Buyer shall have the right, without limiting any other rights that may be available to Buyer, to refuse any additional Shipments. It is agreed that any Shipments refused by Buyer due to Seller's failure to provide Performance Assurance may only be made up at Buyer's request. If Buyer requests, unless otherwise mutually agreed upon by the Parties, the missed deliveries will be made up at the Contract Price in effect at the time of Seller's failure to provide Performance Assurance. All tonnage must be delivered within a time frame similar to the time frame the default was in effect, and begin no later than the last day of this Agreement.

ARTICLE XXI

Grant of Security Interest

Section 21.1 For the avoidance of doubt, the following grant of a security interest does not cover the general assets of either Party, but is limited solely to any Performance Assurance delivered by a Party under this Agreement, and is not intended... to be read as inconsistent with the lending arrangements of a Party hereunder as this is not a general grant of a security interest, but only a grant of security interest with respect to any Performance Assurance delivered hereunder. Accordingly, to secure its obligations under this Agreement and to the extent either or both Parties deliver Performance Assurance hereunder, each Party (a "Pledgor") hereby grants to the other Party (the "Secured Party") a present and continuing first priority secured interest in, and lien on (and right of recoupment and setoff against), and assignment of, all cash collateral and cash equivalent collateral and any and all proceeds resulting therefrom or the liquidation thereof, whether now or hereafter held by, on behalf of, or for the benefit of, such Secured Party, and each Party agrees to take such action as the other Party reasonably requires in order to perfect the Secured Party's first-priority security interest in, and lien on (and right of recoupment and/or setoff against), such collateral and any and all proceeds resulting therefrom or from the liquidation thereof.

Section 21.2 If the Pledgor has posted Performance Assurance with the Secured Party in the form of cash, and so long as an Event of Default with respect to the Pledgor or its guarantor (if any) has not occurred

and is not continuing, the Secured Party will pay interest to the Pledgor at the Federal Funds Effective Rate on the amount of cash held by the Secured Party as Performance Assurance, in lieu of any interest or other amounts paid or deemed to have been paid with respect to such cash. Federal Funds Effective Rate means the rate for the applicable day opposite the caption "Federal Funds (Effective)" as set forth in the weekly statistical release designated as H.15 (519), or any successor publication, published by the Board of Governors of the Federal Reserve System. The Pledgor shall invoice the Secured Party monthly for the amount of interest that accrued during the preceding month, and the Secured Party will pay that amount (subject the disputed payment provisions of this Agreement or a Confirmation) within ten Business Days of receipt of the Pledgor's invoice.

ARTICLE XXII

Successors, Assigns, and Assignment

Section 22.1 This Agreement and any Confirmation shall inure to the benefit of and be binding upon the Parties hereto and their respective successors and assigns and shall not be assigned or otherwise conveyed, in whole or in part, by either Party without the prior written consent of the other, except as provided in Sections 22.2 and 22.3 below.

Section 22.2 Neither Party may assign this Agreement or any Confirmation without the prior written consent of the other Party, which consent will not be unreasonably withheld, conditioned or delayed. Notwithstanding the foregoing, either Party may, without the need of consent from the other Party (and without relieving itself or its Credit Support Provider (if any) from liability hereunder), (a) transfer, sell, pledge, encumber, or assign this Agreement or any Confirmation or the accounts, revenues or proceeds hereof in connection with any financing or other financial arrangements; (b) transfer or assign this Agreement or any Confirmation to an Affiliate of such Party; or (c) transfer or assign this Agreement or any Confirmation to any person or entity succeeding to all or substantially all of the assets of such Party, provided that the creditworthiness of the surviving entity on the day following the day the transfer is made is equal to or greater than the creditworthiness of the assignor and its Credit Support Provider (if any) on the day preceding the day the transfer is made; provided, however, that in each such case any such assignee shall agree in writing to be bound by terms and conditions hereof.

Section 22.3 This Agreement or any Confirmation may be assigned to an Affiliate by either Party, without the prior written consent of the other, provided, that if this Agreement or any Confirmation is assigned or otherwise conveyed to an Affiliate, the assignor or conveying Party shall take all necessary actions, and shall require its Affiliate receiving entity, and any subsequent affiliated receiving entity(ies), to take all necessary actions to prevent a non-Affiliate from acquiring the assignor's or conveying Party's rights and obligations pursuant to this Agreement or any Confirmation without the prior written consent of the other Party. No assignment under this Article or conveyance of any interest in this Agreement or any Confirmation shall in any way relieve the assignor or the conveying Party from liability for full performance under this Agreement or any Confirmation. Any such affiliated assignee, or other entity to whom an interest is conveyed (which conveyance must be with the prior written consent of the other Party), shall assume and agree to be bound by the terms and conditions of this Agreement or any Confirmation.

Section 22.4 Written consent to one or more assignments shall not be construed as waiving the necessity of obtaining written consent to other and/or additional assignments.

ARTICLE XXIII

Government Contractor Compliance Certificate

Seller shall comply with all applicable laws, rules, regulations and orders of any governmental authority, and will obtain at its expense all permits and licenses, pertaining to its obligations under this Order. Unless exempted, **Seller shall abide by the requirements of 41 C.F.R. § 60-1.4(a)(7), 41 C.F.R. § 60-300.5(a), and 41 C.F.R. § 60-741.5(a). These regulations prohibit discrimination against minorities, females, qualified protected veterans, and qualified individuals on the basis of disability and require affirmative action by covered prime contractors and subcontractors to employ and advance in employment minorities, females, qualified protected veterans, and qualified individuals with disabilities.** Seller represents that it does not, and shall not for the term of this Agreement, provide or maintain for its employees facilities that are segregated on the basis of race, color, religion, sex, national origin, veteran status or disability status. Seller represents that it will not assign its employees to perform any work related to this Agreement at a location where facilities are segregated on the basis of race, color, religion, sex national origin, veteran status or disability status. Seller agrees that it will not enter into any agreement to obtain goods or services relating to this Agreement with any entity that provides, maintains or assigns its employees to work at locations where facilities are segregated on the basis of race, color, religion, sex or national origin. As used herein, "facility" means waiting rooms; work areas; restaurants and other eating areas; time clocks; locker rooms and other storage or sleeping areas, except as necessary to ensure privacy between male and female employees; parking lots, drinking fountains; recreation or entertainment areas; and transportation. If not otherwise exempted by Title 48 and to the extent applicable, Seller will comply with 48 CFR §52.219-8,

Utilization of Small, Small Disadvantaged, and Women-Owned Small Business Concerns, and 48 CFR §52.219-9, Small, Small Disadvantaged, and Women-Owned Small Business Subcontracting Plan. If not otherwise exempted by 41 CFR §60-1.5, Seller represents that it will file all reports or other required information specified in 41 CFR §60-1.7. Seller shall also abide by the requirements of 29 CFR Part 471, Appendix A to Subpart A, which is incorporated by reference, as applicable. Seller agrees to indemnify and save Owner harmless from and against any liability or damages, including attorneys' fees, for non-compliance therewith by Seller.

ARTICLE XXIV

Counterparts, Survival and Severability

Section 24.1 This Agreement may be executed in several counterparts, each of which is an original and all of which constitute one and the same instrument.

Section 24.2 Should any provision of this Agreement or any Confirmation for any reason be declared invalid or unenforceable by final and non-appealable order of any court or regulatory body having jurisdiction, such decision shall not affect the validity of the remaining portions, and the remaining portions shall remain in effect as if this Agreement or such Confirmation had been executed without the invalid portion. In the event any provision of this Agreement or any Confirmation is declared invalid, the Parties shall promptly renegotiate to restore this Agreement or such Confirmation as near as possible to its original intent and effect.

ARTICLE XXV

Expenses

In addition to the other indemnification rights set forth in this Agreement, the Defaulting Party will, on demand, defend, indemnify and hold harmless the Non-Defaulting Party for and against all reasonable out-of-pocket expenses, including legal costs, incurred by the Non-Defaulting Party by reason of the enforcement and protection of its rights under this Agreement and the Confirmation, including, but not limited to, costs of collection.

ARTICLE XXVI

Non-Waiver and Duty to Mitigate

Section 26.1 No waiver by any Party of any of its rights with respect to any other Party or with respect to any matter or default arising in connection with this Agreement or a Confirmation shall be construed as a waiver of any subsequent right, matter or default whether of a like-kind, or different nature. Any waiver shall be in writing signed by the waiving Party.

Section 26.2 Except as otherwise set forth in this Agreement, nothing contained in this Agreement shall be construed or constitute any Party as the employee, agent, partner, joint venturer or contractor of any other Party.

Section 26.3 This Agreement is made and entered into for the sole protection and legal benefit of the Parties, and their permitted successors and assigns, and no other person shall be a direct or indirect legal beneficiary of, or have any direct or indirect cause of action or claim in connection with, this Agreement.

ARTICLE XXVII

Addresses for Notices

Section 27.1 Notices provided for or required under this Agreement or any Confirmation may be exercised verbally, but shall be confirmed in writing as soon as practicable. The Parties shall be legally bound from the date the notification is exercised. Notices provided for or required in writing herein shall be delivered by hand or electronic means or sent by certified mail, postage prepaid, return receipt requested, or by overnight mail or courier to the addressee information as provided in this Article. All notices hand delivered or delivered by electronic means, shall be deemed delivered by the close of the Business Day on which it was hand delivered or delivered by electronic means (unless hand delivered or transmitted by electronic means after the close of the Business Day in which case it shall be deemed received by the close of the next Business Day). Notices provided by certified mail, postage prepaid, return receipt requested, or by overnight mail or courier, shall be deemed delivered upon mailing. A Party may change its address by providing notice thereof in accordance with this Article.

Section 27.2 Following each Shipment, Seller shall provide Buyer with a shipping notice that includes: (i) this Agreement's number and the applicable Confirmation Number; (ii) the Plant or other consigned destination; (iii) the short proximate (calorific value per pound, percent moisture, percent ash, and percent sulfur) average analytical results of each Shipment; (iv) if Seller is the Weighing Party, Seller's weight determination and the identifying number(s) of each Shipment; and (v) the date the Coal was loaded into the railcars, barges, or trucks, or onto the belt, with the starting and stopping times of the loading. If the Coal is to be sold FOB rail, then the notice shall also include the transportation agreement number, the origin station, and

the train number. If the Coal is to be sold FOB barge, then the notice shall also include the origin dock and the barge number. Such notice shall be provided within twenty-four (24) hours after the Coal is loaded for shipment, or within thirty-six (36) hours should the Shipment be loaded on a Saturday. Seller's analysis shall be reported to the recipients designated by and in the manner specified by Buyer.

Section 27.3 Unless Seller otherwise notifies Buyer in writing, notices to Seller shall be sent to the Seller as provided below.

(a) For shipments to a Plant, shipping notices shall be sent as set forth in the applicable Confirmation(s)

(b) For all notices, other than shipping notices, the following addressee information shall be used:

If to Buyer:

American Electric Power Service Corporation
Attn: Fuel Contract Administration
303 Marconi Blvd., Suite 300
Columbus, OH 43215

Email: Contracts_Notice@aep.com

With a copy to:

American Electric Power Service Corporation
Attn: General Counsel
1 Riverside Plaza, 29th Floor
Columbus, OH 43215

If to Seller:

[INSERT SELLER ADDRESS]

With a copy to:

[INSERT SELLER ADDITIONAL ADDRESS]

ARTICLE XXVIII

Confidentiality

The terms and conditions set forth in this Agreement and in a Confirmation and the information received by one Party from the other Party under this Agreement or under any Confirmation (collectively, "**Confidential Information**") are considered by both Buyer and Seller to be confidential and proprietary information. Neither Party shall disclose any such Confidential Information to any third party, nor make any press release or public utterances of any kind regarding the Confidential Information, without the advance written consent of the other Party (which consent shall not be unreasonably withheld) except where such disclosure is made to independent accounting firms or law firms retained by a Party in connection with its business that have agreed to keep such terms and conditions confidential on terms no less restrictive than those set forth herein. If a Party becomes legally compelled to disclose any of the Confidential Information, or if such disclosure is necessary in order to obtain or maintain regulatory or governmental approvals, applications or exemptions, the disclosing Party will provide the Party that provided the Confidential Information with as much advance notice as practicable to afford the opportunity to seek an appropriate protective order or other appropriate remedy to prevent the disclosure. If such protective order or other appropriate remedy is not obtained, the receiving Party shall furnish only that portion of the Confidential Information that is required or necessary in the opinion of its legal counsel and shall cooperate with the disclosing Party to enable the disclosing Party to obtain a protective order or other reliable assurance that confidential treatment will be accorded the same. Either Party shall be permitted to disclose Confidential Information to a prospective purchaser of this Agreement or the stock or assets of such Party, provided that any such prospective purchaser shall be bound by the provisions of this Section, and provided, further, that the disclosing Party will provide advance written notice to the other Party of the identity of the prospective purchaser and of the Confidential Information that will be disclosed, and receive written approval from the other Party for such disclosure, with such written approval not to be unreasonably withheld. For purposes of this Section, the term "third party" shall not include (i) a parent, subsidiary, Affiliate, or sister corporation of either Party, or (ii) the respective officers, directors or employees of either Party. If the Coal is to be mined by Seller in Wyoming, Buyer acknowledges that Seller may be obligated to provide a copy of this Agreement and any Confirmation(s), and amendments and modifications to any of them, to the Minerals Management Service of the U.S. Department of Interior, as well as a summary of each such agreement to the State of Wyoming. Buyer agrees that with respect to such disclosures, no further notice from Seller or consent from Buyer is required.

ARTICLE XXIX

Governing Law; Waiver of Jury Trial

This Agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to any laws that would require the application of the law of a different jurisdiction. Except as otherwise provided herein, the provisions of the Uniform Commercial Code ("**UCC**") of the State of New York shall govern this Agreement shall be deemed to apply to this Agreement and to each Confirmation, and any Coal supplied under any of them shall be deemed to be "goods" for purposes of the UCC. Each Party waives its respective right to a jury trial with respect to any litigation arising under or in connection with this Agreement and any Confirmation.

ARTICLE XXX

Venue

Each Party hereby submits to the non-exclusive jurisdiction of state or federal courts located in Franklin County, Ohio, and all appellate courts therefrom and waives any objection which it may have at any time to the laying of venue of any proceedings brought in such court, waives any claim that such proceedings have been brought in an inconvenient forum, and further waives the right to object, with respect to such proceedings, that such court does not have jurisdiction over such Party.

ARTICLE XXXI

Miscellaneous

Section 31.1 Entire Agreement. This Agreement and the Schedules and Exhibits attached hereto and made a part hereof, and the Confirmation constitute the entire agreement between the Parties relating to the subject matter contemplated by this Agreement and supersedes any prior or contemporaneous agreements or representations affecting the same subject matter. The Parties agree that parol or extrinsic evidence may not be used to vary or contradict the express terms of this Agreement.

Section 31.2 Amendments. No amendment, modification, or change to this Agreement or any Confirmation shall be enforceable unless reduced to a writing executed by the Party against whom such amendment, modification or change is sought to be enforced and shall reference this Agreement and such applicable Confirmation.

Section 31.3 Contract Construction. The Parties acknowledge that each Party and its counsel have reviewed this Agreement and that the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting Party shall not be used in interpretation of this Agreement.

Section 31.4 Headings. All headings for Articles and Sections herein are for convenience and reference purposes only. Any capitalized terms used herein and not defined in the Article or Section in which it appears shall have the meaning set forth herein under Definitions.

Section 31.5 Execution and Delivery of Agreement and Confirmation. This Agreement and each Confirmation may be executed in one or more counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument. The delivery of copies of this Agreement and any Confirmation and of the signature page(s) by electronic mail in "portable document format" ("**pdf**") form, or by any other electronic means intended to preserve the original graphic and pictorial appearance of a document, or by combination of such means, will constitute effective execution and delivery of this Agreement and any Confirmation and may be used in lieu of the original of such documents for all purposes. A Party's signature transmitted by such electronic means will be deemed to be its original signatures for all purposes.

IN WITNESS WHEREOF, each Party hereto has caused this Agreement to be executed on its behalf by its proper officer thereunder duly authorized and shall be effective as of the day and year first above written.

SELLER:

[INSERT SELLER ENTITY]

By: _____

Name: _____

Title: _____

BUYER:

[INSERT AEP ENTITY]

By: _____

Name: _____

Title: _____

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**SCHEDULE 2.4
TRANSPORTATION SPECIFICATIONS**

BARGE

Seller shall load Coal that is to be delivered hereunder into barges provided by Buyer, or its agent, at the Designated Delivery Point(s). Such barge Shipments shall be tendered by Seller loaded to each barge's normal draft capacity as directed by Buyer or its agent and as permitted by prevailing river conditions.

Between the time the barges are delivered to and the time the barges are picked up from a Designated Delivery Point(s), the loading, fleeting, and switching of barges shall be at Seller's risk. All charges for barge drop-off, loading, switching, fleeting, and pickup, other than those services provided by Buyer and/or its agent, shall be at Seller's expense.

Seller shall not move, nor permit the movement of, any barge(s) provided by Buyer, or its agent, to any other location once the barge(s) are delivered at the Designated Delivery Point(s), unless otherwise agreed to by Buyer. Any such movement of barges requested by Seller shall be subject to Buyer's approval. If approved, such movement shall be rearranged and directed by Buyer at Seller's expense.

Barge placement requests are to be made by Seller under this Agreement so as to provide for approximately equal weekly Shipments, or Shipments as otherwise agreed upon by the Parties, in fulfillment of Seller's Contract Quantity obligation pursuant to the applicable Confirmation(s). In the event that a Designated Delivery Point(s) is utilized by more than one (1) supplier of Coal to Buyer, Buyer or the barge company transporting the Coal shall arrange for the allocation and placement of barges on a weekly basis in response to the Seller's reasonable requests. Any request for an alteration to such allocation or placement shall be made to and, if approved, directed by Buyer or such barge company.

Seller shall not have the right to ship Coal to be delivered under any Confirmation from any shipping origin other than the Designated Delivery Point(s) unless Seller shall first have obtained Buyer's written approval of such proposed shipping origin. Such written approval shall be at Buyer's sole discretion, but shall be conditioned upon Seller's agreement to pay any increased barging cost differential that would be incurred by Buyer (any decreased barging cost differential shall be entirely to Buyer's benefit) for Shipments made from the proposed shipping origin as compared to the Designated Delivery Point.

It shall be Seller's obligation to provide and maintain adequate dock and harbor facilities at the Designated Delivery Point(s), to load barges in accord with Buyer's or its agent's request, and

to

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dispatch and otherwise comply with reasonable requirements of Buyer's or its agent's barging and operating schedule.

Seller shall be responsible for all loss of, or damage to, any barge provided hereunder and for the loss of any Coal in said barge (other than damage or loss due to normal wear and tear, latent or patent defects in the barge existing at the time of delivery) occurring after such barge has been delivered to Seller at the Designated Delivery Point(s) and while in the custody, control, and possession of Seller. Seller shall reimburse Buyer for the cost to Buyer of repairing or replacing any such barge in an amount not to exceed its replacement value at the time of its loss or damage. Said replacement value shall be defined as the remaining years of life of said barge, divided by the expected life of said barge when new, and multiplied by the current market value of a new barge having similar design and capacity at the time of loss or damage.

A barge shall be deemed to have been delivered to Seller and be in Seller's custody, control, and possession, when it has been secured by or on behalf of Buyer or its agent at a Designated Delivery Point(s) to await loading and shall be deemed to be picked up when untied for pick up by or on behalf of Buyer from such Designated Delivery Point(s). Seller shall have the right, but not the duty, to refuse to load any barges which Seller considers unseaworthy. In such event, Seller shall promptly notify Buyer.

Actual loading days for a barge shall commence concurrently with the commencement of the Free Loading Days and shall continue until the barge has been loaded and Buyer or the barge company transporting the Coal has been advised that the barge is loaded and available at the Designated Delivery Point(s) for pickup by Buyer or its agent.

If Seller fails to load a barge(s) within the Free Loading Period, Seller shall pay to Buyer an amount equal to the daily demurrage rate set forth in Buyer's applicable agreement with the third-party barge company multiplied by the number of days Seller's barge loading exceeds the Free Loading Period. Should Seller not originate shipments in accordance with this Schedule 2.4, Seller shall pay Buyer for any resulting charges incurred by Buyer which are assessed by the third party barge line in excess of the charges that would have been incurred by Buyer had Seller strictly complied herewith.

Should Buyer choose to re-consign any Non-Conforming Shipment (bargeload) of Coal under a Confirmation, then Seller shall pay all transportation costs associated with said Non-Conforming Shipment, including a daily barge demurrage as set forth in the applicable barging agreement for each such barge and all other costs incurred by Buyer with respect to said barge(s) until the barge(s) are unloaded and transported to a destination specified by Buyer for further utilization. Such daily barge usage rate shall be charged for each day or part of a day effective as of the first 7:00 a.m., following Buyer's re-consignment and continuing through the date such barge reaches the destination specified by Buyer.

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Should Buyer reject any bargeload Shipment of Coal because the Coal in such barge does not conform to the requirements set forth in this Agreement hereof, then Seller shall pay all transportation costs associated with said Shipment, including a daily barge demurrage as set forth in the applicable barging agreement for each such barge and all other costs incurred by Buyer with respect to said barge(s) until the barge(s) are unloaded and transported to a destination specified by Buyer for further utilization. Such daily barge usage rate shall be charged for each day or part of a day effective as of the first 7:00 a.m., following Buyer's rejection and continuing through the date such barge reaches the destination specified by Buyer.

RAIL

Seller shall load Coal that is to be delivered hereunder into railcars provided by Buyer, or its agent, at the Designated Delivery Point(s) listed on the Confirmation. Requests for any additional rail shipping origin(s) shall be proposed by Seller in writing and shall be subject to Buyer's written approval. Such approval shall be subject to Buyer's reasonable discretion.

Except when in conflict with provisions of this Agreement or a Confirmation, (in which case, such provisions shall control), the loading at the shipping origin(s) shall be accomplished according to the standard tariff or contract agreements governing such operations between the Buyer and railroad, including but not limited to free time and demurrage charges. Buyer shall not be responsible for any charges assessed at the shipping origin(s) by railroad due to the fault of Seller including, but not limited to, charges for detention, overloading, underloading, or hot Coal (as determined by the railroad).

Seller shall not have the right to ship Coal to be delivered under this Agreement or a Confirmation from any rail shipping origin(s) other than the Designated Delivery Point(s) unless Seller shall first have obtained Buyer's written approval of such additional shipping origin. Such written approval shall be subject to Buyer's sole discretion, and upon Seller's agreement to pay any increased transportation cost differential (based on railroad-provided cars) that would be incurred by Buyer (any decreased transportation cost differential shall be to Buyer's benefit) if Shipments were made from such proposed rail shipping origin as compared to the Designated Delivery Point..

Seller shall cause the loadings hereunder to be tendered in unit trainload lot Shipments of not less than ninety (90) railcars each, shall be loaded to a minimum weight equal to ninety-eight percent (98%) of the total of the marked load limit of all the cars in the unit train, and shall be loaded in not more than four (4) hours from the Designated Delivery Point(s); provided, however, that subject to the provisions hereinafter, Seller may tender trainload lot Shipments of less than ninety (90) railcars from a

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Designated Delivery Point(s) that is otherwise not capable of loading trainload lot Shipments of ninety (90) railcars. Seller shall add the following notation on each bill of lading or mine card documents: "Subject to Confirmation No. _____", with such Confirmation number being as designated on the applicable Confirmation.

Seller shall cause deliveries to be loaded on any day of the week. Seller shall cause loadings to commence at any hour of the day that scheduled railcars are made available for loading, and loading time for each unit train shipped hereunder shall not exceed four (4) hours from the time the unit train is placed for loading at the origin by the rail carrier. The Parties shall use the then current NCTA process to nominate monthly tonnage deliveries with the Union Pacific Railroad Company and the BNSF Railway Company, and shall use the applicable website to nominate tonnage deliveries with CSX Transportation.

If at any time Seller ships Coal that results in Buyer being charged for improper consignment or otherwise results in Buyer being charged a transportation charge for delivering such Coal (including but not limited to any demurrage charge) which exceeds the minimum transportation charge then in effect for Shipments of not less than ninety (90) railcars loaded in not more than four (4) hours and meeting all other railroad requirements necessary for the minimum transportation rate set forth in the contract for shipping Coal from the loadout specified in the Confirmation in railroad-provided cars, then any such improper consignment charge or excess transportation charge shall be credited to Buyer.

Should Seller not originate Shipments in accordance with these Transportation Specifications, Seller shall pay Buyer for any resulting charges incurred by Buyer which are assessed by the railroad in excess of the charges that would have been incurred by Buyer had Seller strictly complied herewith.

Should Buyer reject any railcar of Coal in a Shipment, Seller shall arrange for the removal of such rejected railcar(s). All costs invoiced by the railroad and paid by Buyer, including but not limited to reconsignment charges, transportation charges, and demurrage charges, shall be to the account of Seller. In addition, if the rejected railcar(s) of Coal are Buyer-provided railcar(s), then Seller shall also pay the per diem and mileage charges as defined in the Car Hire Tables of the Official Railway Equipment Register, as amended. Such per diem charges shall be effective as of the first 7:00 a.m. following Buyer's rejection until the railcar(s) are unloaded at a destination specified by Seller and then returned to a destination specified by Buyer (or by the railroad, if applicable) for further utilization. Such mileage charges shall be based on the loaded and empty miles traveled by the rejected railcar(s) from the point of rejection to such specified return destination.

TRUCK

Seller warrants that it and its trucking contractor, if any, is in compliance with the Federal and State Motor Carrier Safety Acts (Financial Responsibility is USDOT 387.9).

The Coal to be delivered hereunder (unless and until otherwise directed by Buyer as hereinafter provided) shall be properly consigned by Seller to the Plant. Except as otherwise provided by this Agreement, all Coal shall be delivered hereunder FOB Plant in trucks provided by, or on behalf of, Seller. Seller shall accordingly deliver and dump such Coal at the Plant at such time of day and at such plant location as Buyer may reasonably direct, at which time title and risk of loss to Coal so delivered shall pass to Buyer (all references to "Seller" in these Transportation Specifications, shall apply additionally to Seller's trucking contractor[s], if any, that deliver Coal on Seller's behalf under this Agreement).

Seller, at its expense, shall have coverage of the insurance specified below, which shall be placed with insurance carrier(s) acceptable to Buyer, and shall maintain this insurance at all times during performance of this Agreement:

- (i) Workers' compensation insurance with statutory limits in accordance with all jurisdictions where Seller's operations, including the Approved Production Source(s) and Designated Delivery Point(s), are located;
- (ii) Employer's liability insurance in an amount not less than \$2,000,000.00 for each accident;
- (iii) Commercial general liability insurance with limits of not less than \$2,000,000.00 for each occurrence;
- (iv) Commercial automobile liability insurance with a limit for bodily injury and property damage of not less than \$2,000,000.00 each accident;
- (v) Seller shall obtain waivers of subrogation on all their insurance, whether required by this Agreement or in excess of the Agreement requirements. Such waivers shall be for the benefit of Buyer.

Buyer may prohibit Seller's trucks from entering the premises of the consigned destination hereunder until Buyer receives from Seller, from time to time upon reasonable demand by Buyer, one copy each of acceptable certificates of the insurance coverages stated above. Buyer's failure to demand copies of such certificates shall not relieve Seller of the obligation to continually have in force the insurance coverage stated above. Such certificates, which shall specifically reference the applicable Confirmation, shall state that the insurance carrier has issued the policies providing for the insurance

specified herein, that such policies are in force, and that the insurance carrier will give Buyer thirty days prior written notice of any material change in, or cancellation of, such policies. If such insurance policies are subject to any exceptions to the terms specified herein, such exception shall be explained in full in such certificates.

Buyer may also prohibit any truck from entering the premises of the consigned destination unless the driver of such truck receives and agrees to abide by Buyer's written instructions (or has evidence of such receipt and agreement obtained within the prior twelve-month period) as to Buyer's safety and other requirements for the operation of such trucks on such premises.

SCHEDULE 7 QUALITY ADJUSTMENTS

In order for the Selling Price to accommodate variations in calorific value, sulfur dioxide value, and ash value of the Coal delivered to each consigned destination under an applicable Confirmation(s), there shall be an amount(s) added to or subtracted from the Contract Prices as provided for in Article VII of this Agreement for Coal delivered to each consigned destination. These price adjustments shall be in addition to any rights which Buyer may have as provided or referenced under Article II of this Agreement.

- (a) If the weighted average calorific value of the Coal shipped and taken into account hereunder in an Applicable Contract Month is not equal to the Applicable Contracted Period Weighted Average Btu Specification, then there shall be an amount added to the Contract Price (if the calculated number is positive) or subtracted from the Contract Price (if such number is negative), as determined by the following formula, to arrive at the adjusted price for such Coal:

$$\text{Amount Per Ton of Increase or Decrease for Calorific Value} = \frac{(\text{Actual Btu} - \text{Applicable Contracted Period Weighted Average Btu Specification})}{\text{Applicable Contracted Period Weighted Average Btu Specification}} \times \text{Contract Price}$$

provided, however, no premium will be paid for Calorific Value which exceeds the Applicable Contracted Period Weighted Average Btu Specification by 500 Btu per pound.

- (b) If the weighted average SO₂ content of all Coal unloaded and taken into account hereunder in the Applicable Contracted Period is tested to have an SO₂ content greater than the SO₂ Contracted Specification for the Applicable Contracted Period, the Contract Price for such Coal will be reduced by an amount per Ton of Coal determined in accordance with the following formula:

$$\frac{((\text{Contracted SO}_2 - \text{Actual lbs. SO}_2/\text{mmBtu}) \times \text{Actual Btu/lb.} \times \text{SC})}{1,000,000}$$

SC = The actual variable cost, including limestone and sorbent costs but not including normal operating costs such as power or capital costs, for the prior year for Buyer to remove one ton of SO₂ from the applicable Plant's emissions (the "Scrubbing Cost"). The Scrubbing Cost shall be provided to Seller by March 1 of the current Year and shall be applicable for all SO₂ adjustments in the current Contract Year. Upon request of Seller, detailed data for the Scrubbing Cost will be provided to Seller by Buyer.

In addition, an amount of three dollars (\$3.000) per ton shall be deducted from the Contract Price for each Shipment of Coal having an SO₂ value greater than the Shipment Rejection Limit.

- (c) If the weighted average value of the Coal shipped and taken into account hereunder in an Applicable Contracted Period has an ash content greater than the applicable ash Quality

Specification, the Contract Price for Coal in the Applicable Contracted Period will be decreased by \$0.15 for each 0.5% ash increment, or portion thereof, by which the Shipment's ash content is tested to be above the Applicable Contracted Period Quality Specification. (For example, if the Applicable Contracted Period Quality Specification is 6.50% and the weighted average value of the Coal shipped and taken into account has a percent ash value of 7.20%, then the Contract Price decrease shall be \$0.30 per Ton.)

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SCHEDULE 8
WEIGHING, SAMPLING AND ANALYSIS

GENERAL

Each Party has the right to have a representative present, at such Party's expense, at the Designated Delivery Point during the loading, weighing and sampling of the Coal.

WEIGHING

FOR DELIVERIES BY BARGE:

Weights taken in accordance with this Schedule 8 shall be deemed accepted as correct (absent manifest error) and shall govern all invoicing and payments hereunder.

(a) Except as provided in (e) below, the weight of the Coal delivered by barge hereunder shall be determined by the Weighing Party at its expense on the Weighing Party's certified belt scale at Weighing Party's facility(ies). If there is no certified belt scale at such facility(ies), and if the Parties specifically agree that weights shall be determined by draft survey taken at such facility(ies), then all such draft surveys shall be conducted by an independent surveyor experienced in the conduct of draft surveys selected by mutual agreement of the Parties.

(b) Scales shall be calibrated once every six (6) months to maintain them to within plus or minus one-quarter of one percent ($\pm 0.25\%$) accuracy. At the Non-Weighing Party's request, which the Non-Weighing Party may make from time to time, the Weighing Party shall inform the Non-Weighing Party of the results of such testing and calibration. The testing and calibration of such scales shall be accomplished in accordance with the guidelines outlined in the National Institute of Standards and Technology Handbook #44, or other procedures which shall be mutually acceptable to Seller and Buyer.

(c) The Weighing Party shall give prompt notice by telephone or facsimile and confirm such notice in writing to the Non-Weighing Party if and when any scales are discovered to be in error beyond the limits established above. If at any time the scales are determined to be in error beyond the limits established in (a) supra, an adjustment of the payment to Seller shall be made based on the assumption that the condition causing the scales to be in error beyond such limits shall have existed with respect to all Coal unloaded on and after 30 calendar days prior to such discovery, or the date of the previous scale calibration, whichever is later. Such adjustment shall be in an amount equal to the difference in the weights as specified in the applicable invoices and the weights that would have been obtained had the scales been accurate (without applying a $\pm 0.25\%$ tolerance), multiplied by the price per Ton as stated in said invoices.

(d) The Non-Weighing Party shall have the right, but not the duty, to have a representative present at any and all times to observe the determination of weights; however, the Weighing Party shall not be obligated to notify the Non-Weighing Party to be present. If the Non-Weighing Party should at any time question the accuracy of the weights thus determined, the Non-Weighing Party shall so advise the Weighing Party and confirm the same in writing, and Weighing Party shall arrange to test the scales. If such test shows the scales to be in error, they shall be adjusted to the required accuracy established above. If such test requested by the Non-Weighing Party shows the scales to be within the applicable limits established above for the respective scale, then the Non-Weighing Party shall pay all costs of such test, otherwise the Weighing Party shall pay all such cost.

(d) Any payments due by either Party to the other, as a result of adjustment and/or payment of costs made pursuant to this Schedule 8, shall be paid in accordance with Article IV.

(e) During any period when Seller's scales are inoperable, determination of the quantities of Coal delivered shall be made by a 10-point draft survey.

FOR DELIVERIES BY RAIL:

(a) Unless otherwise specified in the relevant Confirmation, weights of Coal delivered by rail shall be determined by the Weighing Party by use of a scale system located at the Designated Delivery Point (as set forth in the relevant Confirmation) and certified no less frequently than every six months by an appropriate testing agency. The Weighing Party shall provide evidence of the certification to the Non-Weighing Party upon the Non-Weighing Party's request. The weight of deliveries shall be consistent with the applicable rail freight tariff or identified provisions of an applicable transportation contract. If there is no certified scale system at the Designated Delivery Point, railway weights shall govern all settlements hereunder with respect to rail deliveries. As to all deliveries by rail when no railway weights are available, weights shall be taken at the destination by the Non-Weighing Party.

(b) The calibration of the Weighing Party's scales to maintain their accuracy shall be accomplished in accordance with the guidelines outlined in the National Institute of Standards and Technology Handbook #44. If the scales are discovered to be outside of acceptable tolerance ranges ($\pm 0.2\%$ for rail scales), then an appropriate adjustment will be made to the tonnage and invoices retroactively to the date of the most recent calibration or thirty (30) calendar days prior to the date when the calibration was found in error, whichever is later. The weights shall be reported to the recipients designated by and in the manner specified by the Non-Weighing Party.

(c) Weights taken in accordance with this Schedule 8 shall be deemed accepted as correct (absent manifest error) and shall govern all invoicing and payments hereunder. Unless otherwise specified, the costs of weighing shall be for the Weighing Party's account.

SAMPLING AND ANALYSIS

(a) The Sampling Party shall sample the Coal or shall provide for the Coal to be sampled as it is loaded into each barge or unit train and analyze the sample(s) so obtained for calorific value per pound, percent moisture, percent ash, and percent sulfur. Sampling and weighing shall be done at the same location. The Sampling Party shall notify the Non-Sampling Party and the consigned destination of the short proximate (Btu per pound, percent moisture, percent ash, and percent sulfur content) analytical results of each barge. The Sampling Party's notification shall include its weight determination and the identifying number of each barge or unit train shipped, and shall be provided within 24 hours after the Coal is loaded into barges or railcar for shipment, or within 36 hours should the barge or railcar be loaded on a Saturday. The Sampling Party's analysis shall be reported to the recipients designated by and in the manner specified by the Non-Sampling Party.

(b) All Coal delivered hereunder shall be sampled by the Sampling Party using a mechanical sampling system approximately at the time it is weighed by the Weighing Party on the Weighing Party's or railroad's scales. The Sampling Party shall determine, through itself or an independent laboratory, or if

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the Sampling Party is Seller through an independent laboratory, by proper analyses made in its laboratory and at Sampling Party's expense, the "As-Received" quality and characteristics of the Coal. All sampling and analyses hereunder shall be performed in accordance with methods approved by the American Society for Testing and Materials (ASTM), or such other method as may be mutually acceptable. For purposes of determining moisture hereunder, the two-stage procedures as defined in ASTM 3302 shall be used.

(c) Except as otherwise provided in this Schedule, the results of the sampling by the Sampling Party and analyses by the Sampling Party or its agent shall be accepted as the quality and characteristics of the Coal unloaded hereunder at each respective consigned destination. Each coal sample collected by the Sampling Party shall be properly divided into two, or if the Non-Sampling Party requests a sample split, three subsamples. One subsample shall be immediately analyzed by the applicable laboratory for the governing contractual analysis. The second sample is to be sealed in an airtight container held by the Sampling Party for a period of at least thirty (30) days (hereinafter the "**Referee Sample**"). Upon the Non-Sampling Party's request, the third subsample is to be sealed in an airtight container and sent to the Non-Sampling Party.

The Non-Sampling Party may request analysis of the Referee Sample by an independent laboratory mutually agreed upon by the Parties. If the results of the Referee Sample analysis and the governing contractual analysis are within ASTM Reproducibility Limits, the original governing analysis shall control and the cost of analyzing the Referee Sample shall be borne by the Non-Sampling Party requesting the Referee Sample analysis. If the results are outside such ASTM Reproducibility Limits, then the results of the Referee Sample analysis shall be used for payment, and the cost of analyzing the Referee Sample shall be borne by the Sampling Party.

(d) Unless the Non-Sampling Party challenges the accuracy of either the sampling made by the Sampling Party or analyses made by the Sampling Party's agent by written notice to the Sampling Party by the 15th day of the calendar month following the calendar month in which the Shipment(s) of Coal represented by such sample(s) and/or analysis (analyses) was (were) taken into account by the Sampling Party, the Non-Sampling Party shall be deemed to have waived all claims with respect to such sampling and analyses.

(e) It is the Parties' intention that each barge or unit train hereunder shall be sampled; however, in the event Coal is received, unloaded, and taken into account but is not sampled, it shall be taken into account as outlined below. All Coal samples shall be analyzed. If there is reason to believe that the sample is suspect or is known to be non-representative of the sample lot from which it was extracted, then the Parties shall mutually decide whether to include such sample in the weighted average analytical results. If the Parties do not make such a mutual decision, then the sample shall be excluded from such results. If during any Applicable Contract Period sixty percent (60%) or more (by weight) of Coal delivered at a respective consigned destination during such period has been sampled, then the weighted average analytical results of such samples shall be applicable to all Coal delivered to such consigned destination during such Applicable Contract Period. If less than sixty percent (60%) (by weight) of Coal delivered at a consigned destination during any such Applicable Contract Period has been sampled, then the weighted average analytical result of the last preceding Applicable Contract Period in which at least sixty percent (60%) (by weight) of the Coal delivered to such consigned destination was sampled by Buyer shall be applicable to such portion of the Coal delivered which was not sampled for such Applicable Contract Period

EXHIBIT A
 "SAMPLE CONFIRMATION"

Confirmation Number:
Effective Date:
Master Agreement Number:

Seller:

Attn:
 Phone:
 Cell Phone:
 Email:

Buyer:

_____ Power Company
 1 Riverside Plaza, 14th Floor
 Columbus, OH 43215
 Attn:
 Phone:
 Cell Phone:
 Email:

Primary Plant:
Email:
Force Majeure Destination Plant:

**Term & Delivery
 Period:**

_____ through _____.

Commodity:

Crushed, bituminous Coal, partially washed, containing no synthetic fuels, substantially free from any extraneous material, with no intermediate sizes to be added or removed and otherwise meeting the specifications of this Confirmation.

Contract Quantity:

Contract Price:

\$_____ per Ton FOB _____ at the Designated Delivery Point, except as provided for under Schedule 7, Quality Adjustments, of the Agreement.

**Quality
 Specifications:**

As received basis, in accordance with applicable ASTM standards for each Shipment, as follows:

<u>Characteristic:</u>	<u>Applicable Contracted Period:</u>	<u>Applicable Contracted Period Suspension Limit:</u>	<u>Shipment Rejection Limit:</u>
Heating Value (Btu/lb.):		minimum	minimum
SO ₂ (lbs. SO ₂ /mmBtu):		maximum	maximum
Sulfur (%):		maximum	maximum
Moisture (%):		maximum	maximum
Ash (%):		maximum	maximum
Volatile Matter (%):		Not Applicable	minimum
Na ₂ O in Ash (%):		maximum	maximum
Hardgrove Grindability:		Not Applicable	minimum
Chlorine (%):		Maximum	maximum
Ash Fusion Temperature (H=1/2w) °F Red. Atm.:		Not Applicable	minimum

Sizing: 2 X 0 inches topsize, nominal, with maximum 55% passing one-quarter inch square wire cloth sieve to be determined on the basis of the primary cutter of the mechanical sampling system.

**Applicable
 Contract Period:**

["Half-Month", which means, with respect to any calendar month, either (a) the period from and including the first day of such month through and including the fifteenth day of such month or (b) the period from and including the sixteenth day of such month through and including the last day of such month.]

Or: ["Month", which means a calendar month]

Approved Production Source(s), Force Majeure Production Source(s):

MSHA ID:

Designated Delivery Point(s):

Weighing Party: _____ shall be the weighing party. The weighing party shall weigh the Coal in accordance with Schedule 8 of the Agreement.

Sampling & Analysis Party: _____ shall be the sampling party. The sampling party shall sample and analyze the Coal in accordance with Schedule 8 of the Agreement.

Quality Adjustments: Btu, SO2 and Ash adjustments as per Schedule 7 of the Agreement.

Certification Date:

Other Terms: This Confirmation supplements, forms part of , and is subject to, the Master Coal Purchase and Sale Agreement dated _____, as it has or may be amended and supplemented from time to time (the "Agreement"), between the Seller and Buyer. All provisions contained in the Agreement shall govern this Confirmation. Any inconsistency or conflict between provisions of this Confirmation and provisions of the Agreement shall be resolved in favor of any provisions of this Confirmation. Terms used but not defined herein shall have the meanings ascribed to them in the Agreement.

Please confirm that the foregoing correctly sets forth the terms of this Confirmation by returning an executed copy of this Confirmation by electronic mail to the addresses specified in Article XXVII of the Agreement. This Confirmation shall not be effective until it has been signed by Buyer and Seller.

Accepted:

Seller:
[Vendor Name]

Buyer:
[INSERT]

Signature

Signature

Name (Print)

Name (Print)

Title

Title

Date: _____

Date: _____

EXHIBIT B

CORPORATE GUARANTY

TO: [INSERT AEP ENTITY], its successors and assigns, and any of its subsidiaries ("Beneficiary").

FOR GOOD AND VALUABLE CONSIDERATION, the receipt and sufficiency of which are hereby acknowledged, and to induce Beneficiary to enter into one or more transactions for the purchase and sale of physical coal (the "Agreement") with _____, a _____ (insert name of Seller and state of incorporation) company and an affiliate of the Guarantor ("Debtor"), the undersigned _____ ("Guarantor"), hereby unconditionally and absolutely guarantees the full and prompt payment of all present and future obligations of Debtor to Beneficiary, arising from Beneficiary's sales and or purchases of coal and related services with Debtor, whether such obligations are due or to become due, secured or unsecured, absolute or contingent, joint or several (collectively, the "Obligations"). GUARANTOR SHALL HAVE NO OBLIGATION TO PERFORM UNDER THE AGREEMENT. GUARANTOR'S OBLIGATION UNDER THIS CORPORATE GUARANTY ("GUARANTY") IS A GUARANTY OF PAYMENT AND NOT OF COLLECTION. SHOULD ANY PRESENT OR FUTURE OBLIGATIONS INCURRED BY DEBTOR NOT BE PAID WHEN DUE, BENEFICIARY MAY PROCEED AGAINST THE GUARANTOR FOR SUCH OBLIGATIONS AT ANY TIME, WITHOUT NOTICE AND WITHOUT ANY PROCEEDING OR ACTION AGAINST DEBTOR, AND GUARANTOR HEREBY WAIVES ANY DEMAND FOR PAYMENT. This Guaranty is a primary obligation of Guarantor and shall be construed as an unconditional, absolute and continuing guaranty, irrespective of the validity or enforceability of the underlying agreements between Beneficiary and Debtor or any other guaranteed amount, the absence of any action to enforce the same or any circumstances which might otherwise constitute a legal or equitable discharge or defense of a guarantor.

Guarantor hereby waives notice of acceptance of this Guaranty, of the creation or existence of any of the guaranteed Obligations and of any action by Beneficiary in reliance hereon or in connection herewith; notice of the transactions between Beneficiary and Debtor, notice of the execution and delivery, amendment, extension or renewal of any present or future instrument pertaining to Obligations, diligence, presentment, demand for payment, protest, notice of default by Debtor, and any other notice not expressly required by this Guaranty. Guarantor further consents, without further notice, to any extension or extensions of the time or times of payment of said Obligations, or any portion thereof, and to any change in form or amount, or renewal at any time, of such Obligations, or any portion thereof.

This Guaranty shall remain in full force and effect with respect to the Obligations until finally and irrevocably paid in full. No termination of this Guaranty shall affect any Obligations outstanding or contracted or committed for at the time of termination, and this Guaranty shall remain in full force and effect with respect to such Obligations until finally and irrevocably paid in full. In the event that any payment by Debtor in respect of the Obligations is rescinded or must otherwise be returned or rejected for any reason whatsoever, Guarantor shall remain liable hereunder in respect of such Obligations as if such payment had not been made. Guarantor reserves the right to assert defenses that Debtor may have with respect to any Obligation other than defenses arising from the bankruptcy or insolvency of Debtor or similar proceedings affecting Debtor and other defenses expressly waived hereby.

Guarantor's obligations hereunder with respect to the Obligations shall not be affected by the existence, validity, enforceability, perfection or extent of any collateral for such Obligations covered hereunder, nor by any extension, or the acceptance of any sum or sums on account of Debtor, or of any note or draft of Debtor and/or any third party, or security from Debtor. Beneficiary shall not be obligated to file any claim relating to the Obligations owing to it in the event that Debtor becomes subject to bankruptcy, insolvency, reorganization, liquidation, dissolution, or similar proceedings affecting Debtor (whether voluntary or involuntary), and the failure of Beneficiary to so file shall not affect Guarantor's obligations hereunder.

MASTER COAL PURCHASE AND SALE AGREEMENT

Should any present or future Obligations incurred by Debtor not be paid when due or at the time to which the same may be extended, Beneficiary may proceed against Guarantor for such Obligations at any time, without notice and without any proceeding or action against Debtor. Guarantor agrees that Beneficiary may resort to Guarantor for payment of any of the Obligations, whether or not Beneficiary shall have resorted to any collateral security, or shall have proceeded against any other debtor principally or secondarily obligated with respect to any of the Obligations or any other guarantor thereof.

Guarantor shall be subrogated to all rights of Beneficiary against Debtor in respect of any amounts paid by Guarantor to Beneficiary pursuant to this Guaranty, provided that Guarantor shall not exercise any rights which it may have or acquire by way of subrogation until all of the Obligations are fulfilled or compensation is otherwise provided in full to Beneficiary. If any amounts are paid to Guarantor in violation of the foregoing limitation, then such amounts shall be held in trust for the benefit of Beneficiary and shall forthwith be paid to Beneficiary by Guarantor to reduce the amount due to outstanding Obligations, whether matured or unmatured. Subject to the foregoing, upon all of the Obligations to Beneficiary being fulfilled, Guarantor shall be subrogated to the rights of Beneficiary against Debtor, and Beneficiary agrees, to take at Guarantor's expense such actions as Guarantor may reasonably require to implement such subrogation. The obligations of Guarantor hereunder shall not be subject to any counterclaim, setoff, deduction, or abatement upon any claim Guarantor or the Debtor may have against Beneficiary.

The obligations of Guarantor hereunder shall not be affected by (a) any lack of validity or enforceability of or defect or deficiency in any agreement or any other documents executed in connection with any agreement; (b) any modification, extension or waiver of any of the terms of any agreement; (c) any change in the time, manner, terms or place of payment of or in any other term of, all or any of the Obligations, or any other amendment or waiver of or any consent to departure from any agreement or any other agreement or instrument executed in connection therewith; (d) any sale, exchange, release or non-perfection of any property standing as security for the liabilities hereby guaranteed or any liabilities incurred directly or indirectly hereunder or any setoff against any of said liabilities, or any release or amendment or waiver of or consent to departure from this Guaranty or any other guaranty, for all or any of the Obligations; (e) except as to applicable statutes of limitation, failure, omission, delay, waiver or refusal by Beneficiary to exercise, in whole or in part, any right or remedy held by Beneficiary with respect to any Agreement or any transaction under any Agreement; or (f) any change in the existence, structure or ownership of Guarantor or any Debtor, or any insolvency, bankruptcy, reorganization or other similar proceeding affecting any Debtor or its assets.; or (g) except as otherwise provided in this Guaranty, any other circumstance that might otherwise constitute a defense available to, or a discharge of, any Debtor or any other individual, partnership, joint venture, corporation, association, trust or other enterprise that is a party to any agreement, or any other agreement or instrument (including any guarantor) in respect of the Obligations, other than payment in full of the Obligations.

This Guaranty shall not be affected by any change in the entity status or business structure of Debtor.

This Guaranty shall inure to and be binding upon the parties, their representatives, successors and assigns, provided that Guarantor may not assign or otherwise transfer any of its obligations under this Guaranty, whether by operation of law or otherwise, without the prior written consent of Beneficiary, which consent may be arbitrarily withheld. Beneficiary may assign this Guaranty in its sole discretion. This Guaranty shall not be deemed to benefit any person except Beneficiary. No provision of this Guaranty may be amended or waived except by a written instrument executed by Guarantor and Beneficiary.

Any demand, notice, request, instruction, correspondence, or other document to be given hereunder by either party to another (herein collectively called "Notice") shall be in writing and delivered personally or mailed by certified mail, postage prepaid and return receipt requested, or by electronic mail, as follows:

To Guarantor:

To Beneficiary:

American Electric Power Service Corporation
One Riverside Plaza, 14th Floor
Columbus, Oh 43215

Fax:
Email:

Fax:
Email:

With a copy to:

American Electric Power Service Corporation
303 Marconi Blvd., Suite 300
Columbus, Ohio 43215
Attn: Credit Risk Management

Notice given by personal delivery or mail shall be effective upon actual receipt. Notice given by electronic mail shall be effective upon actual receipt if received during the recipient's normal business hours, or at the beginning of the recipient's next business day after receipt if not received during the recipient's normal business hours. Either Party may change any address to which Notice is to be given to it by giving notice as provided above of such change of address.

In the event Beneficiary engages in litigation to enforce this Guaranty, Guarantor agrees to pay, in addition to any amounts due to Debtor's nonpayment which Guarantor has otherwise guaranteed to pay hereunder, any and all costs and expenses incurred by Beneficiary (including reasonable attorneys' fees) in enforcing this Guaranty.

Guarantor represents and warrants that, at the time of execution and delivery of the Guaranty, nothing (whether financial condition or any other condition or situation) exists to impair in any way the obligations and liabilities of Guarantor to Beneficiary under this Guaranty. Guarantor further represents and warrants to Beneficiary that: (a) it is a corporation duly organized, validly existing and in good standing in its jurisdiction of incorporation, with full power and authority to make and deliver this Guaranty; (b) that the execution, delivery and performance of this Guaranty by Guarantor have been duly authorized by all requisite corporate action of Guarantor, and does not and will not violate provisions of any applicable law or Guarantor's certificate of incorporation or bylaws; and (c) that the person signing this Guaranty on Guarantor's behalf has been properly authorized by corporate action to do so.

This Guaranty constitutes the entire agreement among the parties and supersedes and cancels any prior agreements, undertakings, declarations and representations, whether written or oral, regarding the subject matter of this Guaranty. If any provision of this Guaranty is found by a court of competent jurisdiction to be void, illegal or otherwise unenforceable in that jurisdiction, such provision, to the extent of its invalidity, shall be severed from this Guaranty and be ineffective in that jurisdiction; provided, however, that such finding shall not affect the validity, legality or enforceability of such provision in any other jurisdiction or the validity, legality or enforceability of any other provision of this Guaranty.

This Guaranty shall be governed by and construed in accordance with the laws of the State of New York without giving effect to conflict of law principles. Guarantor consents to the jurisdiction and venue of any local, state, or federal court located within the State of New York upon service of process made in accordance with the statutes of the State of New York and the United States.

[Signature page follows.]

IN WITNESS WHEREOF, the Guarantor has duly executed this Guaranty on this ____ day of _____.

[INSERT GUARANTOR]

By: _____

Name: _____

Title: _____

Date of Solicitation	August 21, 2019
Quantities Solicited	Q1 2020 - 350,000 tons CY 2021 - 750,000 tons CY 2022 - 750,000 tons
Type of Solicitation	Spot & Contract
Coal Heat Content (BTU/lb)	12,000
Moisture (%)	10.00%
Ash (%)	12.00%
Sulfur (%)	1.00
Time Period Over Which Deliveries Were Requested	Q1 2020; CY 2021 through CY 2022
Applicable Generating Units	Mitchell Plant
Number of Vendors Solicitation was Sent To	52
Number of Vendors that Responded to Solicitation	Q1 2020 - 6; CY 2021 - 4; CY 2022 - 3
Selected Vendor(s)	Javelin Global Commodities (2021) Contura Coal Sales, LLC (2022)

Date of Solicitation	August 21, 2019
Quantities Solicited	NAPP: CY 2020 - 250,000 tons NAPP: CY 2021 - 250,000 tons NAPP: CY 2022 - 1,500,000 tons
Type of Solicitation	Contract
Coal Heat Content (BTU/lb)	11,500
Moisture (%)	8.00%
Ash (%)	9.50%
Sulfur (%)	4.26%
Time Period Over Which Deliveries Were Requested	CY 2020 through CY 2022
Applicable Generating Units	Mitchell Plant
Number of Vendors Solicitation was Sent To	52
Number of Vendors that Responded to Solicitation	CY 2020 - 3; CY 2021 - 3; CY 2022 - 3
Selected Vendor(s)	None

Mitchell Low Sulfur - 2020 CAPP

Offer / Plant / Year	Mine	Quantity		Coal Price	Transportation			Offered Quality				Quality Adjusted Delivered Pricing			Comments	
		Tons	BTU	Coal Price	River / Rail	MP / District	Rate	Btu	lbs. SO ₂	Sulfur %	Ash %	Quality Adj.	Quality Adjusted Delivered Cost	Delivered \$MMBTU		
Mitchell Low Sulfur 2020																
Mitchell																
FGD Removal Efficiency		98.00%														
SO ₂ Allowance Cost		\$1.50														
Removal Cost \$/Ton		\$113.68														

Mitchell Low Sulfur - 2021 CAPP

Offer / Plant / Year	Mine	Quantity		Coal Price	Transportation			Offered Quality				Quality Adjusted Delivered Pricing			Comments								
		Tons	BTU	Coal Price	River / Rail	MP / District	Rate	Btu	lbs. SO ₂	Sulfur %	Ash %	Quality Adj.	Quality Adjusted Delivered Cost	Delivered \$MMBTU									
Javelin Global Commodities	Point Lick Mine	360,000	8,640,000	\$50.50	Barge	Quincy LO, WV	\$6.50	12,000	1.67	1.00%	12.50%	\$2.23	\$59.23	\$2.47	120k								
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Mitchell</th> </tr> </thead> <tbody> <tr> <td>FGD Removal Efficiency</td> <td style="text-align: right;">98.00%</td> </tr> <tr> <td>SO₂ Allowance Cost</td> <td style="text-align: right;">\$1.50</td> </tr> <tr> <td>Removal Cost \$/Ton</td> <td style="text-align: right;">\$113.68</td> </tr> </tbody> </table>																Mitchell		FGD Removal Efficiency	98.00%	SO ₂ Allowance Cost	\$1.50	Removal Cost \$/Ton	\$113.68
Mitchell																							
FGD Removal Efficiency	98.00%																						
SO ₂ Allowance Cost	\$1.50																						
Removal Cost \$/Ton	\$113.68																						

Mitchell Low Sulfur - 2022 CAPP

Offer / Plant / Year	Mine	Quantity		Coal Price	Transportation			Offered Quality				Quality Adjusted Delivered Pricing		Comments	
Mitchell Low Sulfur 2022		Tons	BTU	Coal Price	River / Rail	MP / District	Rate	Btu	lbs. SO ₂	Sulfur %	Ash %	Quality Adj.	Quality Adjusted Delivered Cost		Delivered \$MMBTU
Contura Coal Sales Co., LLC	Mammoth (Slab Camp)	750,000	18,000,000	\$56.00	Barge	Marmet Dock LO, WV	\$6.70	12,000	1.60	0.96%	12.00%	\$2.14	\$64.84	\$2.70	250k
Mitchell															
FGD Removal Efficiency		98.00%													
SO ₂ Allowance Cost		\$1.50													
Removal Cost \$/Ton		\$113.68													

Mitchell High Sulfur - 2020 NAPP

Offer / Plant / Year	Mine	Quantity		Coal Price	Transportation			Offered Quality				Quality Adjusted Delivered Pricing			Comments
Mitchell High Sulfur 2020		Tons	BTU	Coal Price	River / Rail	MP / District	Rate	Btu	lbs. SO ₂	Sulfur %	Ash %	Quality Adj.	Quality Adjusted Delivered Cost	Delivered \$MMBTU	
Mitchell															
FGD Removal Efficiency		98.00%													
SO ₂ Allowance Cost		\$1.50													
Removal Cost \$/Ton		\$113.68													

Mitchell High Sulfur - 2022 NAPP

Offer / Plant / Year	Mine	Quantity		Coal Price	Transportation			Offered Quality			Quality Adjusted Delivered Pricing			Comments	
		Tons	BTU	Coal Price	River / Rail	MP / District	Rate	Btu	lbs. SO ₂	Sulfur %	Ash %	Quality Adj.	Quality Adjusted Delivered Cost		Delivered \$MMBTU
Mitchell High Sulfur 2022															
Mitchell															
FGD Removal Efficiency		98.00%													
SO ₂ Allowance Cost		\$1.50													
Removal Cost \$/Ton		\$113.68													

Kentucky Power Company
KPSC Case No. 2020-00004
Commission Staff's First Set of Data Requests
Dated February 11, 2020

DATA REQUEST

- KPSC 1_5** List each oral coal-supply solicitation issued during the period under review.
- a. For each solicitation, state why the solicitation was not written, the date(s) of the solicitation, the quantities solicited, a general description of the quality of coal solicited, the time period over which deliveries were requested , and the generating unit(s) for which the coal was intended.
 - b. For each solicitation, identify all vendors solicited and the vendor selected. Provide the tabulation sheet or other document that ranks the proposals. (This document should identify all vendors who made offers.) State the reasons for each selection. For each lowest-cost bid not selected, explain why the bid was not selected.

RESPONSE

There were no oral coal-supply solicitations during the period under review.

Witness: Amy E. Jeffries

Kentucky Power Company
KPSC Case No. 2020-00004
Commission Staff's First Set of Data Requests
Dated February 11, 2020

DATA REQUEST

KPSC 1_6 For the period under review, list each vendor from whom natural gas was purchased for generation and the quantities and the nature of each purchase (i.e., spot or contract).

RESPONSE

Please see KPCO_R_PSC_1_06_Attachment_1 for the requested information.

Witness: Clinton M. Stutler

Natural Gas Purchases
May 1, 2019 - October 31, 2019

Counterparty	Type of Purchase	Gross MMBTUs
Elevation Energy Group, LLC	Spot	1,300
Macquarie Energy LLC	Spot	3,585,300
Mercuria Energy American, Inc.	Spot	269,600
NextEra Energy Power Marketing, LLC	Spot	5,000
Sequent Energy Management, L.P.	Spot	1,495,400
Snyder Brothers, Inc.	Spot	210,000
SPOTLIGHT Energy, LLC	Spot	415,000
TEXLA Energy Management, Inc.	Spot	325,000

Grand Total	6,306,600
--------------------	------------------

Total Contract	0%
Total Spot	100%

Kentucky Power Company
KPSC Case No. 2020-00004
Commission Staff's First Set of Data Requests
Dated February 11, 2020

DATA REQUEST

KPSC 1_7 For the period under review, state whether there were any instances in which a natural gas generating unit could not be operated when it otherwise would have run due to pipeline constraints or natural gas being unavailable.

RESPONSE

Kentucky Power Company did not encounter any instances in which a natural gas generating unit could not be operated when it otherwise would have run, due to pipeline constraints or natural gas being unavailable, during the period under review.

Witness: Clinton M. Stutler

Kentucky Power Company
KPSC Case No. 2020-00004
Commission Staff's First Set of Data Requests
Dated February 11, 2020

DATA REQUEST

KPSC 1_8 State whether there have been any changes to hedging activities for coal or natural gas purchases used for generation since the previous FAC review proceeding. If so, describe the changes in detail.

RESPONSE

There have been no changes to hedging activities for coal or natural gas purchases since the prior FAC review proceeding.

Witness: Clinton M. Stutler (natural gas)

Witness: Amy E. Jeffries (coal)

Kentucky Power Company
KPSC Case No. 2020-00004
Commission Staff's First Set of Data Requests
Dated February 11, 2020

DATA REQUEST

- KPSC 1_9**
- a. State whether Kentucky Power has audited any of its fuel or transportation contracts during the period under review.
 - b. If so, for each audited contract:
 - (1) Identify the contract;
 - (2) Identify the auditor; and
 - (3) State the results of the audit, and describe the actions that Kentucky Power took as a result of the audit.

RESPONSE

Kentucky Power did not audit any fuel or transportation contracts during the review period.

Witness: Clinton M. Stutler (natural gas)

Witness: Amy E. Jeffries (coal)

Kentucky Power Company
KPSC Case No. 2020-00004
Commission Staff's First Set of Data Requests
Dated February 11, 2020

DATA REQUEST

- KPSC 1_10** a. State whether Kentucky Power is currently involved in any litigation with its current or former fuel suppliers or transportation vendors.
- b. If yes, for each litigation:
- (1) Identify the supplier or vendor;
 - (2) Identify the contract involved;
 - (3) State the potential liability or recovery to Kentucky Power;
 - (4) List the issues presented; and
 - (5) Provide a copy of the complaint or other legal pleading that initiated the litigation and any answers or counterclaims. If a copy has previously been filed with the Commission, provide the date on which it was filed and the case in which it was filed .
- c. State the current status of all litigation with suppliers or vendors.

RESPONSE

Kentucky Power is not currently involved in any litigation with current or former fuel or transportation suppliers.

Witness: Clinton M. Stutler (natural gas)

Witness: Amy E. Jeffries (coal)

Kentucky Power Company
KPSC Case No. 2020-00004
Commission Staff's First Set of Data Requests
Dated February 11, 2020

DATA REQUEST

- KPSC 1_11**
- a. For the period under review, state whether there have been any changes to Kentucky Power's written policies and procedures regarding its fuel procurement.
 - b. If yes:
 - (1) Describe the changes;
 - (2) Provide the written policies and procedures as changed;
 - (3) State the date(s) the changes were made; and
 - (4) Explain why the changes were made.
 - c. If no, provide the date Kentucky Power's current fuel procurement policies and procedures were last changed, provide the date when they were last provided to the Commission, and identify the proceeding in which they were provided.

RESPONSE

- a. The Company's Regulated Fuel Procurement Policy and Procedures document has not been modified during the period under review.
- b. Not applicable.
- c. The current fuel procurement policy was last modified in May 2018 and the corresponding changes were provided to the Commission in Case No. 2019-00002 on February 25, 2019.

Witness: Clinton M. Stutler (natural gas)

Witness: Amy E. Jeffries (coal)

Kentucky Power Company
KPSC Case No. 2020-00004
Commission Staff's First Set of Data Requests
Dated February 11, 2020

DATA REQUEST

KPSC 1_12 For the period under review, list all firm power commitments for (a) purchases and (b) sales. This list shall identify the electric utility, the amount of commitment in megawatts, and the purpose of the commitment (i.e., peaking, emergency).

RESPONSE

a. During the period under review, Kentucky Power Company was committed to purchase 30% of AEG's 50% share of each Rockport unit, which aggregates to 393 MW for Kentucky Power.

b. Firm Power sales: Commitments for Kentucky Power Company, other than retail jurisdictional customers, are the Cities of Olive Hill and Vanceburg Kentucky, as shown below. The numbers listed below represent each customer's peak load during the period under review. The cities use the power for load-following service to their citizens.

	May 2019 - October 2019
City of Olive Hill (MW)	4.8
City of Vanceburg (MW)	10.9

Witness: Brian K. West

Kentucky Power Company
KPSC Case No. 2020-00004
Commission Staff's First Set of Data Requests
Dated February 11, 2020

DATA REQUEST

KPSC 1_13 Provide a monthly billing summary of sales to all electric utilities for the period under review.

RESPONSE

Please see KPCO_R_KPSC_1_13_Attachment_1 for this response.

Witness: Brian K. West

Tracking Code	Description
AECI2	Allegheny Electric Cooperative
ALTE2	Altre, LLC
AMRX2	Amerex Power, Ltd
APBE2	ICAP Energy LLC
BGCF2	BGC Financial LP
CARB2	Carbon Solutions Group
CECA2	Commonwealth Edison Company
CEI	Citigroup Energy Inc.
DEOI2	Duke Energy Ohio, Inc.
DLPM	Duquesne Light Company
DPLG	The Dayton Power and Light Co.
ECOP2	Ecogy Pennsylvania Systems LLC
EOXH2	EOH Holdings, LLC
EVOF2	Evolution Markets Futures, LLC
EVOL2	Evolution Markets Inc.
FESC	FirstEnergy Trading Services
ICET2	ICE Trade Vault LLC
IVGE2	IVG Energy, LTD
KNOL2	Knollwood Energy
MRETS	Midwest Renewable Energy
MSCG	Morgan Stanley Capital Group
MSUI2	Mizuho Securities USA Inc.
NASIA	Systems Integration Agreement
OHPA2	Ohio Power Company (Auction)
PJM	PJM Interconnection
PJME2	PJM Environmental Info Sys Inc
PPLT2	PPL Electric Utilities Corporation
PREE2	Tullett Prebon Americas Corp.
PVMF2	PVM Futures, Inc.
RBCC2	RBC Capital Market, LLC
SPSR2	Marex Spectron
TEDL2	Tirreme Energy Development LLC
TFS2	TFS Energy
TFSF2	TFS Energy Futures, LLC
TRED2	Trident Brokerage Services LLC
TVAM	TVA Bulk Power Trading
WELF2	Wells Fargo Securities, LLC
WMRE2	WM Renewable Energy LLC
WVPA	Wabash Valley Power Assn, Inc.

Pd	Year	Unit	Ref	Trkg Cd	Account	Revenue	KWH Metered
5	2019	117		PJM	4470006	0.84	0
5	2019	117	NEQT	DEOI2	4470006	86,788.09	1,775,000
5	2019	117	PHRT	APBE2	4470006	(5.66)	0
5	2019	117	PHRT	PREE2	4470006	(22.56)	0
5	2019	117	PICT	AMRX2	4470006	(1,006.15)	0
5	2019	117	PICT	APBE2	4470006	(162.43)	0
5	2019	117	PICT	DLPM	4470006	116,339.38	2,136,000
5	2019	117	PICT	DPLG	4470006	10,954.53	225,000
5	2019	117	PICT	EVOF2	4470006	(97.16)	0
5	2019	117	PICT	FESC	4470006	214,942.93	4,582,000
5	2019	117	PICT	IVGE2	4470006	(16.60)	0
5	2019	117	PICT	PPLT2	4470006	30,049.51	594,000
5	2019	117	PICT	PREE2	4470006	(442.47)	0
5	2019	117	PICT	PVMF2	4470006	(28.10)	0
5	2019	117	PICT	SPSR2	4470006	(2.72)	0
5	2019	117	PICT	TF SF2	4470006	(12.99)	0
5	2019	117	PICT	TRED2	4470006	(5.54)	0
5	2019	117	PSHD	AMRX2	4470006	(12.07)	0
5	2019	117	PSHD	DLPM	4470006	1,091.82	0
5	2019	117	PSHD	PREE2	4470006	(33.19)	0
					4470006 Total	458,319.46	9,312,000
5	2019	117		ICET2	4470010	(700.25)	0
5	2019	117		PJM	4470010	(10,947.82)	(233,367)
5	2019	117		PJM	4470010	(78,846.85)	(1,768,633)
5	2019	117		PJM	4470010	(81,379.83)	(1,636,746)
5	2019	117		PJM	4470010	(19,942.44)	(462,693)
5	2019	117		PJM	4470010	(24,205.28)	(591,835)
5	2019	117		PJM	4470010	(217,473.29)	(4,701,610)
5	2019	117		PJM	4470010	(114.94)	0
5	2019	117		PJM	4470010	(58.19)	0
5	2019	117		PJM	4470010	(95,837.36)	(2,086,048)
5	2019	117	PHRT	APBE2	4470010	(15.09)	0
5	2019	117	PHRT	ICET2	4470010	(34.23)	0
5	2019	117	PHRT	TF SF2	4470010	(3.32)	0
5	2019	117	PICT	AMRX2	4470010	(1,019.77)	0
5	2019	117	PICT	APBE2	4470010	(197.45)	0
5	2019	117	PICT	EVOF2	4470010	(202.15)	0
5	2019	117	PICT	PREE2	4470010	(658.63)	0
5	2019	117	PICT	PVMF2	4470010	(48.28)	0
5	2019	117	PICT	SPSR2	4470010	(2.72)	0
5	2019	117	PICT	TF SF2	4470010	(62.09)	0
5	2019	117	PICT	TRED2	4470010	(25.46)	0
5	2019	117	PSHD	AMRX2	4470010	(12.07)	0
5	2019	117	PSHD	EVOF2	4470010	(32.44)	0
5	2019	117	PSHD	PREE2	4470010	(33.19)	0
5	2019	117	PSHD	TF SF2	4470010	(60.35)	0
					4470010 Total	(531,913.49)	(11,480,932)
5	2019	117	KSHD	RBCC2	4470081	(558.73)	0
					4470081 Total	(558.73)	0
5	2019	117	PEQT	MSUI2	4470082	(3,814.81)	0
5	2019	117	PEQT	WELF2	4470082	2,969.15	0
5	2019	117	PHRT	RBCC2	4470082	(6,391.40)	0
5	2019	117	PHRT	WELF2	4470082	9,620.80	0
5	2019	117	PICT	MSUI2	4470082	(89,739.27)	0
5	2019	117	PICT	RBCC2	4470082	23,553.07	0
5	2019	117	PICT	WELF2	4470082	112,059.26	0
5	2019	117	PMCB	WELF2	4470082	110.10	0
5	2019	117	PSHD	MSUI2	4470082	8,635.45	0
5	2019	117	PSHD	RBCC2	4470082	(8,271.77)	0
5	2019	117	PSHD	WELF2	4470082	65,160.73	0
					4470082 Total	113,891.31	0
5	2019	117		PJM	4470089	(42,243.05)	0
					4470089 Total	(42,243.05)	0

Pd	Year	Unit	Ref	Trkg Cd	Account	Revenue	KWH Metered
5	2019	117		PJM	4470098	(15.10)	0
5	2019	117		PJM	4470098	19,456.11	0
					4470098 Total	19,441.01	0
5	2019	117		PJM	4470099	95,803.02	0
					4470099 Total	95,803.02	0
5	2019	117		PJM	4470100	65,070.86	0
					4470100 Total	65,070.86	0
5	2019	117		PJM	4470103	1,333,076.04	49,653,636
					4470103 Total	1,333,076.04	49,653,636
5	2019	117		PJM	4470107	0.21	0
					4470107 Total	0.21	0
5	2019	117	PHHS	DLPM	4470112	18,377.54	374,000
					4470112 Total	18,377.54	374,000
5	2019	117		PJM	4470115	1,872.96	0
					4470115 Total	1,872.96	0
5	2019	117		PJM	4470126	(6,984.39)	0
					4470126 Total	(6,984.39)	0
5	2019	117		PJM	4470127	15,810.42	0
					4470127 Total	15,810.42	0
5	2019	117		PJM	4470131	(11,661.68)	(235,130)
5	2019	117		PJM	4470131	(5,769.03)	(132,772)
5	2019	117		PJM	4470131	(0.51)	0
5	2019	117		PJM	4470131	(1.94)	0
					4470131 Total	(17,433.16)	(367,902)
5	2019	117	PHHS	AMRX2	4470143	(37.65)	0
5	2019	117	PHHS	APBE2	4470143	(55.92)	0
5	2019	117	PHHS	IVGE2	4470143	(265.46)	0
5	2019	117	PHHS	MSUI2	4470143	(4,312.07)	0
5	2019	117	PHHS	RBCC2	4470143	20,620.26	0
5	2019	117	PHHS	WELF2	4470143	8,646.41	0
					4470143 Total	24,595.57	0
5	2019	117		OHPA2	4470151	96,924.65	1,955,285
					4470151 Total	96,924.65	1,955,285
5	2019	117	Physical	NASIA	4470175	(260,401.75)	0
5	2019	117	Trading	NASIA	4470175	(84,731.93)	0
					4470175 Total	(345,133.68)	0
5	2019	117	Physical	NASIA	4470176	260,401.75	0
5	2019	117	Trading	NASIA	4470176	84,731.93	0
					4470176 Total	345,133.68	0
5	2019	117		PJM	4470206	5,478.80	0
					4470206 Total	5,478.80	0
5	2019	117		PJM	4470209	(38,498.93)	0
					4470209 Total	(38,498.93)	0
5	2019	117		PJM	4470214	380.45	0
					4470214 Total	380.45	0
5	2019	117		PJM	4470215	(223.83)	0
					4470215 Total	(223.83)	0
5	2019	117		PJM	4470220	81,353.03	0
					4470220 Total	81,353.03	0
5	2019	117		PJM	4470221	2,317.77	0
					4470221 Total	2,317.77	0
5	2019	117		PJM	5550039	17.83	0
					5550039 Total	17.83	0
5	2019	110		ALTE2	5570007	(2,036.88)	(8,487)
5	2019	110		AMRX2	5570007	(40.74)	(8,488)
5	2019	110		EVOL2	5570007	(195.39)	(349)
5	2019	110		PJME2	5570007	(17.56)	(4,390)
5	2019	110		TEDL2	5570007	(46,546.48)	(7,544)
5	2019	110		TFS2	5570007	(930.93)	(7,544)
					5570007 Total	(49,767.98)	(36,802)
5	2019	117		PJM	5614000	0.00	0
5	2019	117		PJM	5614000	(7,654.27)	0
					5614000 Total	(7,654.27)	0

Pd	Year	Unit	Ref	Trkg Cd	Account	Revenue	KWH Metered
5	2019	117		PJM	5614008	(61.05)	0
5	2019	117		PJM	5614008	(36.82)	0
5	2019	117		PJM	5614008	(194.14)	0
5	2019	117		PJM	5614008	(200.74)	0
5	2019	117		PJM	5614008	(41.78)	0
5	2019	117		PJM	5614008	(20.15)	0
5	2019	117		PJM	5614008	(18.79)	0
5	2019	117		PJM	5614008	(84.54)	0
5	2019	117		PJM	5614008	(0.04)	0
5	2019	117		PJM	5614008	(0.02)	0
5	2019	117		PJM	5614008	(1,135.08)	0
5	2019	117		PJM	5614008	(67.56)	0
5	2019	117		PJM	5614008	(39.77)	0
5	2019	117		PJM	5614008	(3.92)	0
5	2019	117		PJM	5614008	(40.22)	0
5	2019	180		PJM	5614008	0.00	0
					5614008 Total	(1,944.62)	0
5	2019	117		PJM	5618000	0.00	0
5	2019	117		PJM	5618000	(2,052.28)	0
5	2019	117		PJM	5618000	(15.98)	0
					5618000 Total	(2,068.26)	0
5	2019	117		PJM	5757000	0.00	0
5	2019	117		PJM	5757000	(6,758.09)	0
5	2019	117		PJM	5757000	(383.35)	0
					5757000 Total	(7,141.44)	0

Pd	Year	Unit	Ref	Trkg Cd	Account	Revenue	KWH Metered
6	2019	117		PJM	4470006	(444.86)	0
6	2019	117	NEQT	DEOI2	4470006	74,055.42	1,423,000
6	2019	117	PHRT	EVOF2	4470006	(15.09)	0
6	2019	117	PHRT	PREE2	4470006	(35.08)	0
6	2019	117	PICT	AMRX2	4470006	(245.09)	0
6	2019	117	PICT	APBE2	4470006	(140.05)	0
6	2019	117	PICT	DLPM	4470006	137,896.80	2,529,000
6	2019	117	PICT	DPLG	4470006	14,913.88	306,000
6	2019	117	PICT	EVOF2	4470006	(137.30)	0
6	2019	117	PICT	FESC	4470006	355,456.52	6,563,000
6	2019	117	PICT	IVGE2	4470006	(213.50)	0
6	2019	117	PICT	PPLT2	4470006	418,814.77	9,291,000
6	2019	117	PICT	PREE2	4470006	(622.64)	0
6	2019	117	PSHD	DLPM	4470006	16,557.21	0
6	2019	117	PSHD	EVOF2	4470006	(85.81)	0
6	2019	117	PSHD	IVGE2	4470006	(18.86)	0
6	2019	117	PSHD	PREE2	4470006	(22.25)	0
6	2019	117	PSHD	TFSF2	4470006	(21.58)	0
					4470006 Total	1,015,692.49	20,112,000
6	2019	117		ICET2	4470010	(620.21)	0
6	2019	117		PJM	4470010	26.33	0
6	2019	117		PJM	4470010	110.20	0
6	2019	117		PJM	4470010	85.71	0
6	2019	117		PJM	4470010	104.70	0
6	2019	117		PJM	4470010	(10,284.10)	(298,247)
6	2019	117		PJM	4470010	52.27	0
6	2019	117		PJM	4470010	(42,462.17)	(1,430,454)
6	2019	117		PJM	4470010	(72,637.92)	(2,047,184)
6	2019	117		PJM	4470010	(16,838.09)	(518,592)
6	2019	117		PJM	4470010	(121,777.41)	(3,944,088)
6	2019	117		PJM	4470010	(215,788.67)	(6,416,946)
6	2019	117		PJM	4470010	(189.06)	0
6	2019	117		PJM	4470010	(94.17)	0
6	2019	117		PJM	4470010	(126,252.59)	(3,702,271)
6	2019	117		PJM	4470010	71.88	0
6	2019	117		PJM	4470010	24.55	0
6	2019	117		PJM	4470010	(171,791.28)	(5,348,826)
6	2019	117		PJM	4470010	23.27	0
6	2019	117		PJM	4470010	(4.65)	0
6	2019	117		PJM	4470010	3.29	0
6	2019	117	PHRT	EVOF2	4470010	(15.09)	0
6	2019	117	PHRT	ICET2	4470010	(22.07)	0
6	2019	117	PICT	AMRX2	4470010	(204.74)	0
6	2019	117	PICT	APBE2	4470010	(137.68)	0
6	2019	117	PICT	EOXH2	4470010	(7.92)	0
6	2019	117	PICT	EVOF2	4470010	(158.48)	0
6	2019	117	PICT	ICET2	4470010	(17.68)	0
6	2019	117	PICT	IVGE2	4470010	(27.91)	0
6	2019	117	PICT	PREE2	4470010	(150.69)	0
6	2019	117	PMCB	EVOF2	4470010	(8.30)	0
6	2019	117	PSHD	EVOF2	4470010	(82.80)	0
6	2019	117	PSHD	IVGE2	4470010	(18.86)	0
6	2019	117	PSHD	TFSF2	4470010	(84.87)	0
					4470010 Total	(779,175.21)	(23,706,608)
6	2019	117	KSHD	RBCC2	4470081	(7,445.96)	0
					4470081 Total	(7,445.96)	0
6	2019	117		WELF2	4470082	33,048.00	0
6	2019	117	PEQT	MSUI2	4470082	(2,232.87)	0
6	2019	117	PEQT	WELF2	4470082	(21.17)	0
6	2019	117	PHRT	MSUI2	4470082	(348.31)	0
6	2019	117	PHRT	RBCC2	4470082	(7,991.13)	0
6	2019	117	PHRT	WELF2	4470082	5,766.04	0
6	2019	117	PICT	CEI	4470082	(9,470.62)	0

Pd	Year	Unit	Ref	Trkg Cd	Account	Revenue	KWH Metered
6	2019	117	PICT	MSCG	4470082	(6,920.47)	0
6	2019	117	PICT	MSUI2	4470082	(77,724.12)	0
6	2019	117	PICT	RBCC2	4470082	(64,281.89)	0
6	2019	117	PICT	WELF2	4470082	(108,360.11)	0
6	2019	117	PMCB	WELF2	4470082	586.19	0
6	2019	117	PSHD	MSUI2	4470082	11,781.90	0
6	2019	117	PSHD	RBCC2	4470082	(23,005.56)	0
6	2019	117	PSHD	WELF2	4470082	4,145.45	0
					4470082 Total	(245,028.67)	0
6	2019	117		PJM	4470089	14,643.32	0
					4470089 Total	14,643.32	0
6	2019	117		PJM	4470098	(2,423.69)	0
					4470098 Total	(2,423.69)	0
6	2019	117		PJM	4470099	227,890.58	0
					4470099 Total	227,890.58	0
6	2019	117		PJM	4470100	58,114.94	0
					4470100 Total	58,114.94	0
6	2019	117		PJM	4470103	1,204,891.44	46,924,422
					4470103 Total	1,204,891.44	46,924,422
6	2019	117		PJM	4470107	0.22	0
					4470107 Total	0.22	0
6	2019	117		PJM	4470110	0.01	0
					4470110 Total	0.01	0
6	2019	117	PHHS	DLPM	4470112	27,372.63	699,000
					4470112 Total	27,372.63	699,000
6	2019	117		PJM	4470115	(17.39)	0
					4470115 Total	(17.39)	0
6	2019	117		PJM	4470126	8,340.69	0
					4470126 Total	8,340.69	0
6	2019	117		PJM	4470127	41,775.26	0
					4470127 Total	41,775.26	0
6	2019	117		PJM	4470131	(16,244.21)	(468,287)
6	2019	117		PJM	4470131	(7,815.05)	(237,180)
6	2019	117		PJM	4470131	(0.01)	0
6	2019	117		PJM	4470131	(0.03)	0
					4470131 Total	(24,059.30)	(705,467)
6	2019	117	PHHS	AMRX2	4470143	(8.83)	0
6	2019	117	PHHS	ICET2	4470143	(5.07)	0
6	2019	117	PHHS	IVGE2	4470143	(10.39)	0
6	2019	117	PHHS	MSUI2	4470143	(87.90)	0
6	2019	117	PHHS	PREE2	4470143	(3.12)	0
6	2019	117	PHHS	RBCC2	4470143	67,295.23	0
6	2019	117	PHHS	WELF2	4470143	57,264.60	0
					4470143 Total	124,444.52	0
6	2019	117		OHPA2	4470151	180,920.02	3,833,088
					4470151 Total	180,920.02	3,833,088
6	2019	117	Physical	NASIA	4470175	(109,463.23)	0
6	2019	117	Trading	NASIA	4470175	(9,723.97)	0
					4470175 Total	(119,187.20)	0
6	2019	117	Physical	NASIA	4470176	109,463.23	0
6	2019	117	Trading	NASIA	4470176	9,723.97	0
					4470176 Total	119,187.20	0
6	2019	117		PJM	4470206	3,741.23	0
					4470206 Total	3,741.23	0
6	2019	117		PJM	4470209	(30,764.55)	0
					4470209 Total	(30,764.55)	0
6	2019	117		PJM	4470214	701.86	0
					4470214 Total	701.86	0
6	2019	117		PJM	4470215	(386.93)	0
					4470215 Total	(386.93)	0
6	2019	117		PJM	4470220	15,085.81	0
					4470220 Total	15,085.81	0
6	2019	117		PJM	4470221	423.07	0

Pd	Year	Unit	Ref	Trkg Cd	Account	Revenue	KWH Metered
					4470221 Total	423.07	0
6	2019	117		PJM	5550039	(122.94)	0
					5550039 Total	(122.94)	0
6	2019	117		PJM	5550099	26.33	0
6	2019	117		PJM	5550099	2.84	0
6	2019	117		PJM	5550099	44.60	0
6	2019	117		PJM	5550099	6.27	0
6	2019	117		PJM	5550099	5.17	0
6	2019	117		PJM	5550099	1.79	0
6	2019	117		PJM	5550099	5.79	0
6	2019	117		PJM	5550099	33.38	0
					5550099 Total	126.17	0
6	2019	110		PJME2	5570007	(14.14)	(3,535)
6	2019	110		TFS2	5570007	(197.52)	(1,463)
					5570007 Total	(211.66)	(4,998)
6	2019	117		PJM	5614000	0.00	0
6	2019	117		PJM	5614000	(5,145.03)	0
					5614000 Total	(5,145.03)	0
6	2019	117		PJM	5614008	(37.76)	0
6	2019	117		PJM	5614008	(22.77)	0
6	2019	117		PJM	5614008	(120.09)	0
6	2019	117		PJM	5614008	(28.55)	0
6	2019	117		PJM	5614008	(5.94)	0
6	2019	117		PJM	5614008	(2.87)	0
6	2019	117		PJM	5614008	(11.62)	0
6	2019	117		PJM	5614008	(52.30)	0
6	2019	117		PJM	5614008	(0.03)	0
6	2019	117		PJM	5614008	(0.01)	0
6	2019	117		PJM	5614008	(702.11)	0
6	2019	117		PJM	5614008	(9.61)	0
6	2019	117		PJM	5614008	(24.60)	0
6	2019	117		PJM	5614008	(1.42)	0
6	2019	117		PJM	5614008	(24.88)	0
6	2019	180		PJM	5614008	0.00	0
					5614008 Total	(1,044.56)	0
6	2019	117		PJM	5618000	0.00	0
6	2019	117		PJM	5618000	(1,378.23)	0
6	2019	117		PJM	5618000	(38.26)	0
					5618000 Total	(1,416.49)	0
6	2019	117		PJM	5757000	0.00	0
6	2019	117		PJM	5757000	(4,429.72)	0
6	2019	117		PJM	5757000	(918.61)	0
					5757000 Total	(5,348.33)	0

Pd	Year	Unit	Ref	Trkg Cd	Account	Revenue	KWH Metered
7	2019	117		NASIA	4470006	0.00	0
7	2019	117		PJM	4470006	(21,788.03)	(602,115)
7	2019	117	NEQT	DEOI2	4470006	102,109.92	1,964,000
7	2019	117	PHRT	AMRX2	4470006	(20.07)	0
7	2019	117	PHRT	EVOF2	4470006	(19.12)	0
7	2019	117	PHRT	PREE2	4470006	(37.65)	0
7	2019	117	PICT	AMRX2	4470006	(153.06)	0
7	2019	117	PICT	APBE2	4470006	(174.37)	0
7	2019	117	PICT	BGCF2	4470006	(4.99)	0
7	2019	117	PICT	CECA2	4470006	30,789.09	858,352
7	2019	117	PICT	DLPM	4470006	199,471.18	3,650,000
7	2019	117	PICT	DPLG	4470006	18,438.57	379,000
7	2019	117	PICT	EVOF2	4470006	(95.04)	0
7	2019	117	PICT	FESC	4470006	473,295.63	8,691,000
7	2019	117	PICT	IVGE2	4470006	(34.33)	0
7	2019	117	PICT	PPLT2	4470006	567,975.78	12,579,000
7	2019	117	PICT	PREE2	4470006	(275.77)	0
7	2019	117	PICT	TFSF2	4470006	(16.97)	0
7	2019	117	PSHD	AMRX2	4470006	(79.20)	0
7	2019	117	PSHD	DLPM	4470006	12,227.88	0
7	2019	117	PSHD	EVOF2	4470006	(37.85)	0
7	2019	117	PSHD	IVGE2	4470006	(72.57)	0
7	2019	117	PSHD	PREE2	4470006	(111.59)	0
7	2019	117	PSHD	SPSR2	4470006	(7.80)	0
7	2019	117	PSHD	TFSF2	4470006	(65.16)	0
					4470006 Total	1,381,314.48	27,519,237
7	2019	117		ICET2	4470010	(632.54)	0
7	2019	117		PJM	4470010	(15,164.02)	(385,375)
7	2019	117		PJM	4470010	(77,435.51)	(1,964,240)
7	2019	117		PJM	4470010	(117,617.41)	(2,976,833)
7	2019	117		PJM	4470010	(24,279.07)	(630,734)
7	2019	117		PJM	4470010	(177,224.60)	(4,969,834)
7	2019	117		PJM	4470010	(340,629.37)	(8,812,232)
7	2019	117		PJM	4470010	(175.83)	0
7	2019	117		PJM	4470010	(83.69)	0
7	2019	117		PJM	4470010	(211,422.73)	(5,417,069)
7	2019	117		PJM	4470010	(272,996.05)	(7,607,999)
7	2019	117		PJM	4470010	(196.79)	0
7	2019	117	PHRD	TVAM	4470010	(7,541.50)	(742,182)
7	2019	117	PHRT	AMRX2	4470010	(20.07)	0
7	2019	117	PHRT	EVOF2	4470010	(19.12)	0
7	2019	117	PHRT	ICET2	4470010	(27.51)	0
7	2019	117	PICT	AMRX2	4470010	(91.35)	0
7	2019	117	PICT	APBE2	4470010	(190.28)	0
7	2019	117	PICT	EVOF2	4470010	(128.48)	0
7	2019	117	PICT	ICET2	4470010	(18.29)	0
7	2019	117	PICT	IVGE2	4470010	(34.33)	0
7	2019	117	PICT	PREE2	4470010	(33.48)	0
7	2019	117	PICT	TFSF2	4470010	(26.57)	0
7	2019	117	PICT	TRED2	4470010	(57.77)	0
7	2019	117	PSHD	AMRX2	4470010	(70.62)	0
7	2019	117	PSHD	EVOF2	4470010	(21.65)	0
7	2019	117	PSHD	IVGE2	4470010	(72.57)	0
7	2019	117	PSHD	PREE2	4470010	(115.49)	0
7	2019	117	PSHD	SPSR2	4470010	(8.58)	0
7	2019	117	PSHD	TFSF2	4470010	(152.10)	0
					4470010 Total	(1,246,487.37)	(33,506,498)
7	2019	117	PEQT	MSUI2	4470082	(956.33)	0
7	2019	117	PEQT	RBCC2	4470082	(4.65)	0
7	2019	117	PEQT	WELF2	4470082	(1,065.71)	0
7	2019	117	PHRT	MSUI2	4470082	127.73	0
7	2019	117	PHRT	RBCC2	4470082	6,336.05	0
7	2019	117	PHRT	WELF2	4470082	(7,262.34)	0

Pd	Year	Unit	Ref	Trkg Cd	Account	Revenue	KWH Metered
7	2019	117	PICT	CEI	4470082	(11,515.62)	0
7	2019	117	PICT	MSCG	4470082	(2,559.23)	0
7	2019	117	PICT	MSUI2	4470082	(40,043.73)	0
7	2019	117	PICT	RBCC2	4470082	37,593.02	0
7	2019	117	PICT	WELF2	4470082	(107,295.07)	0
7	2019	117	PMCB	WELF2	4470082	(3,849.66)	0
7	2019	117	PSHD	MSUI2	4470082	(55,222.25)	0
7	2019	117	PSHD	RBCC2	4470082	25,635.47	0
7	2019	117	PSHD	WELF2	4470082	34,455.65	0
					4470082 Total	(125,626.67)	0
7	2019	117		NASIA	4470089	0.00	0
7	2019	117		PJM	4470089	1,735,230.23	0
					4470089 Total	1,735,230.23	0
7	2019	117		NASIA	4470098	0.00	0
7	2019	117		PJM	4470098	(11,726.77)	0
					4470098 Total	(11,726.77)	0
7	2019	117		NASIA	4470099	0.00	0
7	2019	117		PJM	4470099	278,532.82	0
					4470099 Total	278,532.82	0
7	2019	117		NASIA	4470100	0.00	0
7	2019	117		PJM	4470100	52,896.02	0
					4470100 Total	52,896.02	0
7	2019	117		NASIA	4470103	0.00	0
7	2019	117		PJM	4470103	4,584,462.12	199,781,662
					4470103 Total	4,584,462.12	199,781,662
7	2019	117		PJM	4470107	0.22	0
					4470107 Total	0.22	0
7	2019	117		NASIA	4470112	0.00	0
7	2019	117	PHHS	DLPM	4470112	154,967.82	3,483,000
					4470112 Total	154,967.82	3,483,000
7	2019	117		NASIA	4470115	0.00	0
7	2019	117		PJM	4470115	1,041.66	0
					4470115 Total	1,041.66	0
7	2019	117		PJM	4470126	(163,210.55)	0
					4470126 Total	(163,210.55)	0
7	2019	117		PJM	4470127	43,167.77	0
					4470127 Total	43,167.77	0
7	2019	117		PJM	4470131	(95,515.75)	(2,413,410)
7	2019	117		PJM	4470131	(39,337.99)	(1,021,035)
					4470131 Total	(134,853.74)	(3,434,445)
7	2019	117	PHHS	AMRX2	4470143	(7.80)	0
7	2019	117	PHHS	EVOF2	4470143	(3.90)	0
7	2019	117	PHHS	ICET2	4470143	(8.31)	0
7	2019	117	PHHS	MSUI2	4470143	21,334.09	0
7	2019	117	PHHS	RBCC2	4470143	122,830.04	0
7	2019	117	PHHS	WELF2	4470143	58,877.92	0
					4470143 Total	203,022.04	0
7	2019	117		OHPA2	4470151	256,892.71	5,430,922
					4470151 Total	256,892.71	5,430,922
7	2019	117	Physical	NASIA	4470175	991,203.07	0
7	2019	117	Trading	NASIA	4470175	142,100.22	0
					4470175 Total	1,133,303.29	0
7	2019	117	Physical	NASIA	4470176	(991,203.07)	0
7	2019	117	Trading	NASIA	4470176	(142,100.22)	0
					4470176 Total	(1,133,303.29)	0
7	2019	117		PJM	4470206	39,070.01	0
					4470206 Total	39,070.01	0
7	2019	117		PJM	4470209	(228,530.23)	0
					4470209 Total	(228,530.23)	0
7	2019	117		NASIA	4470214	0.00	0
7	2019	117		PJM	4470214	17,812.43	0
					4470214 Total	17,812.43	0
7	2019	117		NASIA	4470215	0.00	0

Pd	Year	Unit	Ref	Trkg Cd	Account	Revenue	KWH Metered
7	2019	117		PJM	4470215	(10,416.45)	0
					4470215 Total	(10,416.45)	0
7	2019	117		NASIA	4470220	0.00	0
7	2019	117		PJM	4470220	46,905.95	0
					4470220 Total	46,905.95	0
7	2019	117		NASIA	4470221	0.00	0
7	2019	117		PJM	4470221	3,708.88	0
					4470221 Total	3,708.88	0
7	2019	117		PJM	4470222	8,919.81	0
					4470222 Total	8,919.81	0
7	2019	117		PJM	5550039	(78.23)	0
					5550039 Total	(78.23)	0
7	2019	110		PJME2	5570007	(16.44)	(4,110)
					5570007 Total	(16.44)	(4,110)
7	2019	117		PJM	5614000	0.00	0
7	2019	117		PJM	5614000	(30,504.99)	0
					5614000 Total	(30,504.99)	0
7	2019	117		PJM	5614008	(45.98)	0
7	2019	117		PJM	5614008	(28.68)	0
7	2019	117		PJM	5614008	(151.25)	0
7	2019	117		PJM	5614008	(56.94)	0
7	2019	117		PJM	5614008	(11.85)	0
7	2019	117		PJM	5614008	(5.71)	0
7	2019	117		PJM	5614008	(14.64)	0
7	2019	117		PJM	5614008	(65.87)	0
7	2019	117		PJM	5614008	(0.04)	0
7	2019	117		PJM	5614008	(0.02)	0
7	2019	117		PJM	5614008	(854.92)	0
7	2019	117		PJM	5614008	(19.16)	0
7	2019	117		PJM	5614008	(30.98)	0
7	2019	117		PJM	5614008	(10.92)	0
7	2019	117		PJM	5614008	(31.33)	0
7	2019	180		PJM	5614008	0.00	0
					5614008 Total	(1,328.29)	0
7	2019	117		PJM	5618000	0.00	0
7	2019	117		PJM	5618000	(7,619.67)	0
7	2019	117		PJM	5618000	(51.41)	0
					5618000 Total	(7,671.08)	0
7	2019	117		PJM	5757000	0.00	0
7	2019	117		PJM	5757000	(28,219.24)	0
7	2019	117		PJM	5757000	(1,233.87)	0
					5757000 Total	(29,453.11)	0

Pd	Year	Unit	Ref	Trkg Cd	Account	Revenue	KWH Metered
8	2019	117		PJM	4470006	(22,002.04)	337,482
8	2019	117	NEQT	DEOI2	4470006	95,793.21	1,842,000
8	2019	117	PHRT	EVOF2	4470006	(19.12)	0
8	2019	117	PHRT	IVGE2	4470006	(53.45)	0
8	2019	117	PHRT	PREE2	4470006	(8.58)	0
8	2019	117	PICT	AMRX2	4470006	(120.56)	0
8	2019	117	PICT	APBE2	4470006	(259.71)	0
8	2019	117	PICT	CECA2	4470006	30,789.09	858,352
8	2019	117	PICT	DLPM	4470006	172,284.12	3,155,000
8	2019	117	PICT	DPLG	4470006	15,218.19	313,000
8	2019	117	PICT	EVOF2	4470006	(133.01)	0
8	2019	117	PICT	FESC	4470006	444,971.26	8,208,000
8	2019	117	PICT	IVGE2	4470006	(26.30)	0
8	2019	117	PICT	PPLT2	4470006	506,310.97	11,225,000
8	2019	117	PICT	PREE2	4470006	(302.47)	0
8	2019	117	PICT	TFSF2	4470006	(162.89)	0
8	2019	117	PSHD	AMRX2	4470006	(30.12)	0
8	2019	117	PSHD	APBE2	4470006	(25.75)	0
8	2019	117	PSHD	DLPM	4470006	15,667.07	0
8	2019	117	PSHD	EVOF2	4470006	(50.72)	0
8	2019	117	PSHD	IVGE2	4470006	(38.08)	0
8	2019	117	PSHD	PREE2	4470006	(15.61)	0
8	2019	117	PSHD	TFSF2	4470006	(31.99)	0
					4470006 Total	1,257,753.51	25,938,834
8	2019	117		ICET2	4470010	(615.45)	0
8	2019	117		PJM	4470010	(11,529.55)	(317,514)
8	2019	117		PJM	4470010	(64,608.71)	(1,841,606)
8	2019	117		PJM	4470010	(94,855.55)	(2,551,295)
8	2019	117		PJM	4470010	(20,751.57)	(588,764)
8	2019	117		PJM	4470010	(151,369.46)	(4,679,330)
8	2019	117		PJM	4470010	(287,960.36)	(8,053,073)
8	2019	117		PJM	4470010	(181.83)	0
8	2019	117		PJM	4470010	(83.99)	0
8	2019	117		PJM	4470010	(170,956.35)	(4,793,813)
8	2019	117		PJM	4470010	(217,562.42)	(6,577,881)
8	2019	117		PJM	4470010	(67.88)	0
8	2019	117	PHRD	TVAM	4470010	0.00	0
8	2019	117	PHRT	EVOF2	4470010	(19.12)	0
8	2019	117	PHRT	ICET2	4470010	(34.82)	0
8	2019	117	PHRT	IVGE2	4470010	(53.45)	0
8	2019	117	PICT	AMRX2	4470010	(264.33)	0
8	2019	117	PICT	APBE2	4470010	(124.89)	0
8	2019	117	PICT	EVOF2	4470010	(172.29)	0
8	2019	117	PICT	ICET2	4470010	(18.29)	0
8	2019	117	PICT	IVGE2	4470010	(9.91)	0
8	2019	117	PICT	PREE2	4470010	(29.89)	0
8	2019	117	PICT	TFSF2	4470010	(38.51)	0
8	2019	117	PMCB	EVOF2	4470010	(3.28)	0
8	2019	117	PSHD	AMRX2	4470010	(68.75)	0
8	2019	117	PSHD	APBE2	4470010	(17.17)	0
8	2019	117	PSHD	EVOF2	4470010	(17.95)	0
8	2019	117	PSHD	IVGE2	4470010	(15.06)	0
8	2019	117	PSHD	PREE2	4470010	(158.41)	0
8	2019	117	PSHD	TFSF2	4470010	(81.15)	0
					4470010 Total	(1,021,670.39)	(29,403,276)
8	2019	117	PEQT	MSUI2	4470082	(2,016.50)	0
8	2019	117	PEQT	RBCC2	4470082	299.64	0
8	2019	117	PEQT	WELF2	4470082	4,819.39	0
8	2019	117	PHRT	MSUI2	4470082	(412.00)	0
8	2019	117	PHRT	RBCC2	4470082	(33,503.88)	0
8	2019	117	PHRT	WELF2	4470082	28,862.01	0
8	2019	117	PICT	CEI	4470082	(9,761.07)	0
8	2019	117	PICT	MSCG	4470082	(5,966.93)	0

Pd	Year	Unit	Ref	Trkg Cd	Account	Revenue	KWH Metered
8	2019	117	PICT	MSUI2	4470082	(111,541.60)	0
8	2019	117	PICT	RBCC2	4470082	44,423.50	0
8	2019	117	PICT	WELF2	4470082	(150,618.54)	0
8	2019	117	PMCB	WELF2	4470082	(6,280.09)	0
8	2019	117	PSHD	MSUI2	4470082	(97,472.55)	0
8	2019	117	PSHD	RBCC2	4470082	49,965.88	0
8	2019	117	PSHD	WELF2	4470082	49,518.04	0
					4470082 Total	(239,684.70)	0
8	2019	117		PJM	4470089	325,498.58	0
					4470089 Total	325,498.58	0
8	2019	117		PJM	4470098	(7,401.35)	0
					4470098 Total	(7,401.35)	0
8	2019	117		PJM	4470099	314,877.41	0
					4470099 Total	314,877.41	0
8	2019	117		PJM	4470100	27,750.66	0
					4470100 Total	27,750.66	0
8	2019	117		PJM	4470103	2,230,188.59	94,302,759
					4470103 Total	2,230,188.59	94,302,759
8	2019	117		PJM	4470107	0.22	0
					4470107 Total	0.22	0
8	2019	117		PJM	4470110	0.01	0
					4470110 Total	0.01	0
8	2019	117	PHHS	DLPM	4470112	136,508.25	3,270,000
					4470112 Total	136,508.25	3,270,000
8	2019	117		PJM	4470115	(8,200.68)	0
					4470115 Total	(8,200.68)	0
8	2019	117		PJM	4470126	34,130.01	0
					4470126 Total	34,130.01	0
8	2019	117		PJM	4470127	4,315.97	0
					4470127 Total	4,315.97	0
8	2019	117		PJM	4470131	(82,877.86)	(2,225,727)
8	2019	117		PJM	4470131	(36,174.40)	(1,026,178)
8	2019	117		PJM	4470131	1.84	0
8	2019	117		PJM	4470131	5.63	0
					4470131 Total	(119,044.79)	(3,251,905)
8	2019	117	PHHS	AMRX2	4470143	(108.83)	0
8	2019	117	PHHS	APBE2	4470143	(72.76)	0
8	2019	117	PHHS	EVOF2	4470143	(2.53)	0
8	2019	117	PHHS	ICET2	4470143	(29.66)	0
8	2019	117	PHHS	MSUI2	4470143	54,618.10	0
8	2019	117	PHHS	RBCC2	4470143	292,629.61	0
8	2019	117	PHHS	WELF2	4470143	120,873.77	0
					4470143 Total	467,907.70	0
8	2019	117		OHPA2	4470151	228,251.97	4,825,972
					4470151 Total	228,251.97	4,825,972
8	2019	117	Physical	NASIA	4470175	277,175.09	0
8	2019	117	Trading	NASIA	4470175	95,804.41	0
					4470175 Total	372,979.50	0
8	2019	117	Physical	NASIA	4470176	(277,175.09)	0
8	2019	117	Trading	NASIA	4470176	(95,804.41)	0
					4470176 Total	(372,979.50)	0
8	2019	117		PJM	4470206	13,837.08	0
					4470206 Total	13,837.08	0
8	2019	117		PJM	4470209	(72,212.96)	0
					4470209 Total	(72,212.96)	0
8	2019	117		PJM	4470214	41,912.68	0
					4470214 Total	41,912.68	0
8	2019	117		PJM	4470215	(20,550.33)	0
					4470215 Total	(20,550.33)	0
8	2019	117		PJM	4470220	61,013.75	0
					4470220 Total	61,013.75	0
8	2019	117		PJM	4470221	1,465.01	0
					4470221 Total	1,465.01	0

Pd	Year	Unit	Ref	Trkg Cd	Account	Revenue	KWH Metered
8	2019	117		PJM	4470222	66,548.10	0
					4470222 Total	66,548.10	0
8	2019	117		PJM	5550039	712.17	0
					5550039 Total	712.17	0
8	2019	110		PJME2	5570007	(53.12)	(13,280)
					5570007 Total	(53.12)	(13,280)
8	2019	117		PJM	5614000	0.00	0
8	2019	117		PJM	5614000	(15,349.26)	0
					5614000 Total	(15,349.26)	0
8	2019	117		PJM	5614008	(26.32)	0
8	2019	117		PJM	5614008	(16.42)	0
8	2019	117		PJM	5614008	(86.58)	0
8	2019	117		PJM	5614008	(157.35)	0
8	2019	117		PJM	5614008	(31.33)	0
8	2019	117		PJM	5614008	(11.68)	0
8	2019	117		PJM	5614008	(8.38)	0
8	2019	117		PJM	5614008	(37.70)	0
8	2019	117		PJM	5614008	(0.02)	0
8	2019	117		PJM	5614008	(0.01)	0
8	2019	117		PJM	5614008	(489.37)	0
8	2019	117		PJM	5614008	(39.15)	0
8	2019	117		PJM	5614008	(17.73)	0
8	2019	117		PJM	5614008	(0.99)	0
8	2019	117		PJM	5614008	(17.94)	0
8	2019	180		PJM	5614008	0.00	0
					5614008 Total	(940.97)	0
8	2019	117		PJM	5618000	0.00	0
8	2019	117		PJM	5618000	(3,775.28)	0
8	2019	117		PJM	5618000	(51.45)	0
					5618000 Total	(3,826.73)	0
8	2019	117		PJM	5757000	0.00	0
8	2019	117		PJM	5757000	(13,455.10)	0
8	2019	117		PJM	5757000	(1,235.03)	0
					5757000 Total	(14,690.13)	0

Pd	Year	Unit	Ref	Trkg Cd	Account	Revenue	KWH Metered
9	2019	117		PJM	4470006	0.43	(711,645)
9	2019	117	NEQT	DEOI2	4470006	103,681.70	1,994,000
9	2019	117	PEQT	EVOF2	4470006	(16.39)	0
9	2019	117	PHRT	AMRX2	4470006	(28.09)	0
9	2019	117	PHRT	EVOF2	4470006	(7.80)	0
9	2019	117	PHRT	IVGE2	4470006	(21.85)	0
9	2019	117	PHRT	SPSR2	4470006	(7.80)	0
9	2019	117	PICT	AMRX2	4470006	(137.12)	0
9	2019	117	PICT	APBE2	4470006	(253.59)	0
9	2019	117	PICT	CECA2	4470006	0.00	0
9	2019	117	PICT	DLPM	4470006	146,931.74	2,693,000
9	2019	117	PICT	DPLG	4470006	13,836.46	284,000
9	2019	117	PICT	EVOF2	4470006	(327.80)	0
9	2019	117	PICT	FESC	4470006	385,660.66	4,625,000
9	2019	117	PICT	IVGE2	4470006	(185.35)	0
9	2019	117	PICT	PPLT2	4470006	403,608.21	8,963,000
9	2019	117	PICT	PREE2	4470006	(273.90)	0
9	2019	117	PICT	PVMF2	4470006	(19.82)	0
9	2019	117	PICT	SPSR2	4470006	(19.51)	0
9	2019	117	PICT	TFSF2	4470006	(5.77)	0
9	2019	117	PSHD	AMRX2	4470006	(77.06)	0
9	2019	117	PSHD	APBE2	4470006	(70.23)	0
9	2019	117	PSHD	DLPM	4470006	12,058.22	0
9	2019	117	PSHD	EVOF2	4470006	(117.83)	0
9	2019	117	PSHD	IVGE2	4470006	(83.49)	0
9	2019	117	PSHD	PREE2	4470006	(108.85)	0
9	2019	117	PSHD	TFSF2	4470006	(64.18)	0
					4470006 Total	1,063,950.99	17,847,355
9	2019	117		ICET2	4470010	(631.05)	0
9	2019	117		PJM	4470010	(11,590.21)	(273,137)
9	2019	117		PJM	4470010	(76,071.26)	(2,006,011)
9	2019	117		PJM	4470010	(92,627.89)	(2,216,721)
9	2019	117		PJM	4470010	(21,120.96)	(533,581)
9	2019	117		PJM	4470010	(129,400.97)	(3,930,697)
9	2019	117		PJM	4470010	(277,203.18)	(7,174,200)
9	2019	117		PJM	4470010	(193.56)	0
9	2019	117		PJM	4470010	(92.78)	0
9	2019	117		PJM	4470010	(186,337.82)	(4,598,273)
9	2019	117		PJM	4470010	(172,216.80)	(5,001,569)
9	2019	117	PEQT	EVOF2	4470010	(16.39)	0
9	2019	117	PHRT	AMRX2	4470010	(28.09)	0
9	2019	117	PHRT	EVOF2	4470010	(7.80)	0
9	2019	117	PHRT	ICET2	4470010	(40.38)	0
9	2019	117	PHRT	IVGE2	4470010	(21.85)	0
9	2019	117	PHRT	SPSR2	4470010	(7.80)	0
9	2019	117	PICT	AMRX2	4470010	(173.75)	0
9	2019	117	PICT	APBE2	4470010	(225.14)	0
9	2019	117	PICT	EVOF2	4470010	(313.14)	0
9	2019	117	PICT	ICET2	4470010	(18.29)	0
9	2019	117	PICT	IVGE2	4470010	(71.42)	0
9	2019	117	PICT	PREE2	4470010	(57.28)	0
9	2019	117	PICT	PVMF2	4470010	(12.68)	0
9	2019	117	PICT	SPSR2	4470010	(19.51)	0
9	2019	117	PICT	TFSF2	4470010	(20.05)	0
9	2019	117	PMCB	APBE2	4470010	(8.19)	0
9	2019	117	PMCB	EVOF2	4470010	(3.28)	0
9	2019	117	PSHD	AMRX2	4470010	(3.90)	0
9	2019	117	PSHD	APBE2	4470010	(92.86)	0
9	2019	117	PSHD	EVOF2	4470010	(230.78)	0
9	2019	117	PSHD	IVGE2	4470010	(131.87)	0
9	2019	117	PSHD	PREE2	4470010	(178.80)	0
9	2019	117	PSHD	SPSR2	4470010	(35.11)	0
9	2019	117	PSHD	TFSF2	4470010	(71.95)	0

Pd	Year	Unit	Ref	Trkg Cd	Account	Revenue	KWH Metered
					4470010 Total	(969,276.79)	(25,734,189)
9	2019	117	PEQT	MSUI2	4470082	(1,893.53)	0
9	2019	117	PEQT	RBCC2	4470082	19.10	0
9	2019	117	PEQT	WELF2	4470082	(13,335.63)	0
9	2019	117	PHRT	MSUI2	4470082	(2,855.21)	0
9	2019	117	PHRT	RBCC2	4470082	23,017.52	0
9	2019	117	PHRT	WELF2	4470082	(21,566.78)	0
9	2019	117	PICT	CEI	4470082	(10,597.37)	0
9	2019	117	PICT	MSCG	4470082	(34,614.57)	0
9	2019	117	PICT	MSUI2	4470082	(48,054.72)	0
9	2019	117	PICT	RBCC2	4470082	(23,580.27)	0
9	2019	117	PICT	WELF2	4470082	(62,269.97)	0
9	2019	117	PMCB	WELF2	4470082	(152.35)	0
9	2019	117	PSHD	MSUI2	4470082	1,911.42	0
9	2019	117	PSHD	RBCC2	4470082	(11,005.32)	0
9	2019	117	PSHD	WELF2	4470082	40,654.54	0
					4470082 Total	(164,323.14)	0
9	2019	117		PJM	4470089	366,514.26	0
					4470089 Total	366,514.26	0
9	2019	117		PJM	4470098	(14,889.13)	0
					4470098 Total	(14,889.13)	0
9	2019	117		PJM	4470099	304,515.75	0
					4470099 Total	304,515.75	0
9	2019	117		PJM	4470100	69,299.18	0
					4470100 Total	69,299.18	0
9	2019	117		PJM	4470103	2,949,230.13	115,498,010
					4470103 Total	2,949,230.13	115,498,010
9	2019	117		PJM	4470107	0.22	0
					4470107 Total	0.22	0
9	2019	117		PJM	4470110	(0.61)	0
					4470110 Total	(0.61)	0
9	2019	117	PHHS	DLPM	4470112	105,890.96	2,488,000
					4470112 Total	105,890.96	2,488,000
9	2019	117		PJM	4470115	(4,005.61)	0
					4470115 Total	(4,005.61)	0
9	2019	117		PJM	4470126	98,990.88	0
					4470126 Total	98,990.88	0
9	2019	117		PJM	4470127	29,753.00	0
					4470127 Total	29,753.00	0
9	2019	117		PJM	4470131	319.04	0
9	2019	117		PJM	4470131	(66,217.60)	(1,669,993)
9	2019	117		PJM	4470131	(31,428.60)	(802,389)
					4470131 Total	(97,327.16)	(2,472,382)
9	2019	117	PHHS	AMRX2	4470143	(45.94)	0
9	2019	117	PHHS	APBE2	4470143	(29.24)	0
9	2019	117	PHHS	ICET2	4470143	(32.63)	0
9	2019	117	PHHS	MSUI2	4470143	1,404.98	0
9	2019	117	PHHS	PREE2	4470143	(58.47)	0
9	2019	117	PHHS	RBCC2	4470143	31,112.51	0
9	2019	117	PHHS	WELF2	4470143	2,023.69	0
					4470143 Total	34,374.90	0
9	2019	117		OHPA2	4470151	215,382.71	4,552,259
					4470151 Total	215,382.71	4,552,259
9	2019	117	Physical	NASIA	4470175	121,119.66	0
9	2019	117	Trading	NASIA	4470175	40,418.53	0
					4470175 Total	161,538.19	0
9	2019	117	Physical	NASIA	4470176	(121,119.66)	0
9	2019	117	Trading	NASIA	4470176	(40,418.53)	0
					4470176 Total	(161,538.19)	0
9	2019	117		PJM	4470206	9,241.03	0
					4470206 Total	9,241.03	0
9	2019	117		PJM	4470209	(65,938.09)	0
					4470209 Total	(65,938.09)	0

Pd	Year	Unit	Ref	Trkg Cd	Account	Revenue	KWH Metered
9	2019	117		PJM	4470214	698.33	0
					4470214 Total	698.33	0
9	2019	117		PJM	4470215	(528.72)	0
					4470215 Total	(528.72)	0
9	2019	117		PJM	4470220	55,375.98	0
					4470220 Total	55,375.98	0
9	2019	117		PJM	4470221	3,596.35	0
					4470221 Total	3,596.35	0
9	2019	117		PJM	4470222	278.71	0
					4470222 Total	278.71	0
9	2019	117		PJM	5550039	597.30	0
					5550039 Total	597.30	0
9	2019	110		PJME2	5570007	(73.23)	(18,308)
					5570007 Total	(73.23)	(18,308)
9	2019	117		PJM	5614000	0.00	0
9	2019	117		PJM	5614000	(17,519.70)	0
					5614000 Total	(17,519.70)	0
9	2019	117		PJM	5614008	(26.60)	0
9	2019	117		PJM	5614008	(16.59)	0
9	2019	117		PJM	5614008	(87.48)	0
9	2019	117		PJM	5614008	(170.95)	0
9	2019	117		PJM	5614008	(34.04)	0
9	2019	117		PJM	5614008	(12.69)	0
9	2019	117		PJM	5614008	(8.47)	0
9	2019	117		PJM	5614008	(38.10)	0
9	2019	117		PJM	5614008	(0.02)	0
9	2019	117		PJM	5614008	(0.01)	0
9	2019	117		PJM	5614008	(494.47)	0
9	2019	117		PJM	5614008	(42.54)	0
9	2019	117		PJM	5614008	(17.92)	0
9	2019	117		PJM	5614008	(1.00)	0
9	2019	117		PJM	5614008	(18.12)	0
9	2019	180		PJM	5614008	0.00	0
					5614008 Total	(969.00)	0
9	2019	117		PJM	5618000	0.00	0
9	2019	117		PJM	5618000	(4,317.15)	0
9	2019	117		PJM	5618000	(54.11)	0
					5618000 Total	(4,371.26)	0
9	2019	117		PJM	5757000	0.00	0
9	2019	117		PJM	5757000	(15,265.15)	0
9	2019	117		PJM	5757000	(1,299.04)	0
					5757000 Total	(16,564.19)	0

Pd	Year	Unit	Ref	Trkg Cd	Account	Revenue	KWH Metered
10	2019	117		NASIA	4470006	0.00	0
10	2019	117		PJM	4470006	1,333.33	0
10	2019	117	NEQT	DEOI2	4470006	82,834.05	1,701,000
10	2019	117	PHRT	EVOF2	4470006	(286.44)	0
10	2019	117	PHRT	IVGE2	4470006	(21.89)	0
10	2019	117	PHRT	PREE2	4470006	(44.87)	0
10	2019	117	PICT	AMRX2	4470006	(104.56)	0
10	2019	117	PICT	APBE2	4470006	(54.62)	0
10	2019	117	PICT	DLPM	4470006	115,866.70	2,127,000
10	2019	117	PICT	DPLG	4470006	11,305.12	232,000
10	2019	117	PICT	EVOF2	4470006	(101.58)	0
10	2019	117	PICT	FESC	4470006	235,322.29	8,671,000
10	2019	117	PICT	IVGE2	4470006	(127.63)	0
10	2019	117	PICT	PPLT2	4470006	385,758.14	8,589,000
10	2019	117	PICT	PREE2	4470006	(1,248.00)	0
10	2019	117	PICT	PVMF2	4470006	(32.77)	0
10	2019	117	PICT	TFSF2	4470006	(54.89)	0
10	2019	117	PSHD	AMRX2	4470006	(37.46)	0
10	2019	117	PSHD	APBE2	4470006	(13.66)	0
10	2019	117	PSHD	DLPM	4470006	11,968.83	0
10	2019	117	PSHD	EVOF2	4470006	(85.05)	0
10	2019	117	PSHD	IVGE2	4470006	(230.58)	0
10	2019	117	PSHD	PREE2	4470006	(187.28)	0
10	2019	117	PSHD	TFSF2	4470006	(148.46)	0
					4470006 Total	841,608.72	21,320,000
10	2019	117		ICET2	4470010	(645.61)	0
10	2019	117		PJM	4470010	(10,154.18)	(243,736)
10	2019	117		PJM	4470010	(56,231.52)	(1,383,074)
10	2019	117		PJM	4470010	(72,831.39)	(1,620,455)
10	2019	117		PJM	4470010	(18,129.38)	(451,043)
10	2019	117		PJM	4470010	(124,345.86)	(3,768,655)
10	2019	117		PJM	4470010	(251,282.72)	(6,388,167)
10	2019	117		PJM	4470010	(195.93)	0
10	2019	117		PJM	4470010	(98.03)	0
10	2019	117		PJM	4470010	(150,415.86)	(3,507,100)
10	2019	117		PJM	4470010	(166,833.27)	(4,796,276)
10	2019	117		PJM	4470010	(5.79)	0
10	2019	117	PHRT	EVOF2	4470010	(286.44)	0
10	2019	117	PHRT	ICET2	4470010	(41.84)	0
10	2019	117	PHRT	IVGE2	4470010	(21.89)	0
10	2019	117	PICT	AMRX2	4470010	(72.57)	0
10	2019	117	PICT	APBE2	4470010	(19.85)	0
10	2019	117	PICT	EVOF2	4470010	(71.07)	0
10	2019	117	PICT	ICET2	4470010	(18.29)	0
10	2019	117	PICT	IVGE2	4470010	(107.73)	0
10	2019	117	PICT	PREE2	4470010	(141.86)	0
10	2019	117	PICT	PVMF2	4470010	(76.08)	0
10	2019	117	PICT	TFSF2	4470010	(9.17)	0
10	2019	117	PSHD	AMRX2	4470010	(37.46)	0
10	2019	117	PSHD	APBE2	4470010	(7.80)	0
10	2019	117	PSHD	EVOF2	4470010	(78.03)	0
10	2019	117	PSHD	IVGE2	4470010	(230.58)	0
10	2019	117	PSHD	PREE2	4470010	(117.05)	0
10	2019	117	PSHD	TFSF2	4470010	(43.31)	0
10	2019	117	PSHD	TRED2	4470010	(32.77)	0
					4470010 Total	(852,583.33)	(22,158,506)
10	2019	117	PEQT	MSUI2	4470082	(2,333.78)	0
10	2019	117	PEQT	WELF2	4470082	(13,507.10)	0
10	2019	117	PHRT	MSUI2	4470082	101.12	0
10	2019	117	PHRT	RBCC2	4470082	13,674.82	0
10	2019	117	PHRT	WELF2	4470082	(13,901.55)	0
10	2019	117	PICT	CEI	4470082	0.00	0
10	2019	117	PICT	MSCG	4470082	0.00	0

Pd	Year	Unit	Ref	Trkg Cd	Account	Revenue	KWH Metered
10	2019	117	PICT	MSUI2	4470082	(43,723.63)	0
10	2019	117	PICT	RBCC2	4470082	(60,557.10)	0
10	2019	117	PICT	WELF2	4470082	(71,303.69)	0
10	2019	117	PMCB	WELF2	4470082	2,005.26	0
10	2019	117	PSHD	MSUI2	4470082	7,710.81	0
10	2019	117	PSHD	RBCC2	4470082	(7,943.78)	0
10	2019	117	PSHD	WELF2	4470082	17,854.36	0
					4470082 Total	(171,924.26)	0
10	2019	117		NASIA	4470089	0.00	0
10	2019	117		PJM	4470089	132,578.15	0
					4470089 Total	132,578.15	0
10	2019	117		NASIA	4470098	0.00	0
10	2019	117		PJM	4470098	(2,143.75)	0
					4470098 Total	(2,143.75)	0
10	2019	117		NASIA	4470099	0.00	0
10	2019	117		PJM	4470099	267,604.75	0
					4470099 Total	267,604.75	0
10	2019	117		NASIA	4470100	0.00	0
10	2019	117		PJM	4470100	51,189.81	0
					4470100 Total	51,189.81	0
10	2019	117		NASIA	4470103	0.00	0
10	2019	117		PJM	4470103	734,807.02	30,089,980
					4470103 Total	734,807.02	30,089,980
10	2019	117		PJM	4470107	0.22	0
					4470107 Total	0.22	0
10	2019	117		PJM	4470110	(0.05)	0
					4470110 Total	(0.05)	0
10	2019	117		NASIA	4470112	0.00	0
10	2019	117	PHHS	DLPM	4470112	533,829.06	13,111,000
					4470112 Total	533,829.06	13,111,000
10	2019	117		NASIA	4470115	0.00	0
10	2019	117		PJM	4470115	2,001.38	0
					4470115 Total	2,001.38	0
10	2019	117		PJM	4470126	40,577.04	0
					4470126 Total	40,577.04	0
10	2019	117		PJM	4470127	29,753.00	0
					4470127 Total	29,753.00	0
10	2019	117		PJM	4470131	(369,526.02)	(8,224,601)
10	2019	117		PJM	4470131	(183,052.95)	(4,573,021)
					4470131 Total	(552,578.97)	(12,797,622)
10	2019	117	PHHS	AMRX2	4470143	(35.15)	0
10	2019	117	PHHS	APBE2	4470143	(144.10)	0
10	2019	117	PHHS	EVOF2	4470143	(12.30)	0
10	2019	117	PHHS	ICET2	4470143	(27.46)	0
10	2019	117	PHHS	MSUI2	4470143	(640.82)	0
10	2019	117	PHHS	PREE2	4470143	(14.76)	0
10	2019	117	PHHS	RBCC2	4470143	244,446.26	0
10	2019	117	PHHS	WELF2	4470143	(1,958.27)	0
					4470143 Total	241,613.40	0
10	2019	117		OHPA2	4470151	167,048.12	3,532,473
					4470151 Total	167,048.12	3,532,473
10	2019	117	Physical	NASIA	4470175	(46,990.78)	0
10	2019	117	Trading	NASIA	4470175	(1,687.84)	0
					4470175 Total	(48,678.62)	0
10	2019	117	Physical	NASIA	4470176	46,990.78	0
10	2019	117	Trading	NASIA	4470176	1,687.84	0
					4470176 Total	48,678.62	0
10	2019	117		PJM	4470206	3,501.53	0
					4470206 Total	3,501.53	0
10	2019	117		PJM	4470209	(20,019.40)	0
					4470209 Total	(20,019.40)	0
10	2019	117		NASIA	4470214	0.00	0
10	2019	117		PJM	4470214	580.95	0

Pd	Year	Unit	Ref	Trkg Cd	Account	Revenue	KWH Metered
					4470214 Total	580.95	0
10	2019	117		NASIA	4470215	0.00	0
10	2019	117		PJM	4470215	(459.96)	0
					4470215 Total	(459.96)	0
10	2019	117		NASIA	4470220	0.00	0
10	2019	117		PJM	4470220	58,381.00	0
					4470220 Total	58,381.00	0
10	2019	117		NASIA	4470221	0.00	0
10	2019	117		PJM	4470221	0.00	0
					4470221 Total	0.00	0
10	2019	117		NASIA	4470222	0.00	0
					4470222 Total	0.00	0
10	2019	117		PJM	5550039	33.75	0
					5550039 Total	33.75	0
10	2019	110		ECOP2	5570007	(1,523.57)	(69)
10	2019	110		PJME2	5570007	(64.78)	(16,195)
10	2019	110		WMRE2	5570007	(13,948.22)	(1,951)
					5570007 Total	(15,536.57)	(18,215)
10	2019	117		PJM	5614000	0.00	0
10	2019	117		PJM	5614000	(4,719.50)	0
					5614000 Total	(4,719.50)	0
10	2019	117		PJM	5614008	(36.82)	0
10	2019	117		PJM	5614008	(22.97)	0
10	2019	117		PJM	5614008	(121.12)	0
10	2019	117		PJM	5614008	(203.79)	0
10	2019	117		PJM	5614008	(40.58)	0
10	2019	117		PJM	5614008	(15.12)	0
10	2019	117		PJM	5614008	(11.72)	0
10	2019	117		PJM	5614008	(52.75)	0
10	2019	117		PJM	5614008	(0.03)	0
10	2019	117		PJM	5614008	(0.01)	0
10	2019	117		PJM	5614008	(684.63)	0
10	2019	117		PJM	5614008	(50.71)	0
10	2019	117		PJM	5614008	(24.81)	0
10	2019	117		PJM	5614008	(1.38)	0
10	2019	117		PJM	5614008	(25.09)	0
10	2019	180		PJM	5614008	0.00	0
					5614008 Total	(1,291.53)	0
10	2019	117		PJM	5618000	0.00	0
10	2019	117		PJM	5618000	(1,356.15)	0
10	2019	117		PJM	5618000	(36.91)	0
					5618000 Total	(1,393.06)	0
10	2019	117		PJM	5757000	0.00	0
10	2019	117		PJM	5757000	(4,501.59)	0
10	2019	117		PJM	5757000	(885.77)	0
					5757000 Total	(5,387.36)	0
					Grand Total	19,383,933.85	536,739,449

Kentucky Power Company
KPSC Case No. 2020-00004
Commission Staff's First Set of Data Requests
Dated February 11, 2020

DATA REQUEST

- KPSC 1_14** Describe the effect on the FAC calculation of line losses related to:
- a. Intersystem sales when using a third-party transmission system and
 - b. Intersystem sales when not using a third-party transmission system.

RESPONSE

a. Beginning on June 1, 2007, based on FERC Order EL06-055, PJM modified the Locational Marginal Pricing (LMP) approach to calculate transmission line loss costs on a marginal basis. The new LMP calculation reflects the full marginal cost of serving an increment of load at each bus from each resource associated with an eligible energy offer. The LMP price will be the sum of three separate components: System Energy Price, Congestion Price, and Loss Price. Therefore, each spot market energy customer pays an energy price that includes the full marginal cost of energy for delivering an increment of energy to the purchaser's location. Market buyers are assessed for their incremental impact on transmission line losses resulting from total load scheduled to be served from the PJM Spot Energy Market in the day-ahead energy market at the same day-ahead loss price applicable at the relevant load bus.

Market sellers are assessed for their incremental impact on transmission line losses resulting from energy scheduled for delivery in the day-ahead market at the day-ahead loss prices applicable to the relevant resource bus.

Transactions are balanced in the real-time market using the same calculation, but are based on deviation at each bus from the day-ahead using the real time loss price.

b. Kentucky Power conducts intersystem sales through its participation in the PJM wholesale markets. Please refer to part (a) for a description of the effect of losses on intersystem sales on the FAC calculation.

Witness: Brian K. West

Kentucky Power Company
KPSC Case No. 2020-00004
Commission Staff's First Set of Data Requests
Dated February 11, 2020

DATA REQUEST

KPSC 1_15 Provide a list, in chronological order, showing by unit any scheduled, actual, and forced outages for the period under review.

RESPONSE

For a list of the Company's generating units' outages during the period under review, please see KPCO_R_KPSC_1_15_Attachment_1.

Witness: Douglas J. Rosenberger (Mitchell)

Witness: David L. Mell (Big Sandy)

Kentucky Power Company Fuel Adjustment Case No. 2020-00004 Generating Unit Outages May 1, 2019-October 31, 2019				
Unit Name	Event Type *	Event Start	Event End	Event Description
Big Sandy 1	MO	5/8/19 11:45 PM	5/12/19 7:00 AM	Boiler inspect/repair (i/r)
Big Sandy 1	MO	5/13/19 7:00 AM	5/18/19 8:07 AM	Inspection and repair of the: main turbine high pressure steam line inlet flange leak, cooling tower, auxiliary boiler feedpump check valve, and boiler.
Big Sandy 1	MO	6/2/19 1:21 AM	6/10/19 12:40 PM	Boiler i/r
Big Sandy 1	MO	6/20/19 12:03 AM	6/23/19 11:20 PM	Boiler i/r
Big Sandy 1	FO	8/4/19 12:25 PM	8/6/19 4:33 AM	Transmission outage 138 kv disconnect
Big Sandy 1	MO	10/5/19 1:27 AM	10/6/19 11:01 PM	Pre-planned outage work.
Big Sandy 1	PO	10/6/19 11:01 PM	11/16/19 7:00 AM	Planned outage - cooling tower, boiler repairs
Mitchell 1	PO	3/9/19 12:33 AM	6/10/19 11:00 PM	Precipitator upgrade, economizer partition wall replacement, stack breaching modification, generator field-in-place inspection, main turbine valve repairs, and Circular Letter inspections.
Mitchell 1	FO	6/13/19 2:26 AM	6/13/19 8:00 PM	Removed unit from service due to an electrohydraulic control fluid leak associated with the turbines.
Mitchell 1	MO	6/14/19 9:00 AM	6/14/19 9:20 PM	Repair rupture diaphragms on the main condenser.
Mitchell 1	MO	6/30/19 12:54 AM	7/7/19 10:59 PM	Inspection and repair of the following equipment: 24-inch river water makeup line, boiler, induced draft fan, high pressure turbine valve, intercept valve, and voltage regulator.
Mitchell 1	FO	7/7/19 11:00 PM	7/8/19 2:10 AM	PJM market rules dictated the unit to go forced after time period for maintenance outage was exceeded. Continued the inspection and repair of the following maintenance outage items: 24-inch river water makeup line, boiler, induced draft fan, high pressure turbine valve, intercept valve, and voltage regulator, and performed a boiler hydro.
Mitchell 1	MO	8/22/19 11:21 PM	8/27/19 11:00 PM	Repairs to the 1st reheat left side stop/intercept valve, electrohydraulic (EHC) fluid leaks on the #5 governor valve, #1 EHC pump discharge, and boiler feedpump right side governor valve, and boiler i/r.

Unit Name	Event Type *	Event Start	Event End	Event Description
Mitchell 1	MO	8/27/19 11:00 PM	9/1/19 1:49 AM	Condenser leak repairs, hydrogen valve repairs, precipitator i/r, air heater i/r, non-destructive examination of circulating water pumps, clinker grinder replacement, burner line slip joint replacement, and induced draft fan i/r.
Mitchell 1	FO	9/9/19 8:55 PM	9/11/19 5:18 AM	Unit trip due to high vibration on the #9 turbine bearing.
Mitchell 1	FO	9/11/19 7:38 AM	9/13/19 9:45 AM	Unit removed from service due to a blown hydraulic o-ring on the boiler feedpump left side stop valve. Repairs made to the hydraulic cylinder.
Mitchell 1	FO	9/20/19 3:42 AM	9/26/19 8:20 AM	Unit removed from service due to a waterwall tube leak.
Mitchell 2	MO	6/11/19 11:10 PM	6/23/19 7:13 PM	Inspect and repair: the boiler, stator water leak, boiler feedpump stop valve, precipitator, and "2C" absorber recirculation pump suction valve.
Mitchell 2	MO	6/28/19 11:54 PM	7/6/19 12:30 AM	Inspect and repair: 24-inch river water makeup line. Boiler, induced draft fan, precipitator, hydrolyzer rupture discs, and crack in the shell of the #24 low pressure heater. Also repaired a steam leak on a urea injection valve and performed a boiler hydro.
Mitchell 2	FO	7/24/19 11:12 AM	7/24/19 8:15 PM	Unit removed from service due to a failed linear variable differential transformer (LVDT) on the #1 main turbine control valve.
Mitchell 2	FO	7/24/19 9:03 PM	7/25/19 1:30 PM	Unit trip due to high vibration on the #4 main turbine bearing.
Mitchell 2	MO	7/31/19 12:22 AM	8/7/19 5:10 PM	Inspection and repair of the following: boiler tube leak, boiler casing leaks, precipitator, coal leaks, induced draft fan, boiler feedpump shims, and boiler drain and vent valves.
Mitchell 2	MO	10/3/19 11:51 PM	10/6/19 11:00 PM	Pre-planned outage work.
Mitchell 2	PO	10/6/19 11:01 PM	11/29/19 5:10 PM	Planned outage.

LEGEND:	
FO	Forced Outage
PO	Planned Outage
MO	Maintenance Outage
i/r	Inspection and Repair

Kentucky Power Company
KPSC Case No. 2020-00004
Commission Staff's First Set of Data Requests
Dated February 11, 2020

DATA REQUEST

KPSC 1_16 For the period under review, provide the monthly capacity factor at which each generating unit operated.

RESPONSE

For the period under review, please see KPCO_R_KPSC_1_16_Attachment_1 for the monthly capacity factor of each of the Company's generating units.

Witness: Douglas J. Rosenberger (Mitchell)

Witness: David L. Mell (Big Sandy)

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Net Capacity Factor (%)

	19-May	19-Jun	19-Jul	19-Aug	19-Sep	19-Oct
Big Sandy 1	42.76	26.23	73.37	65.87	72.25	11.51
Mitchell 1	0.00	34.69	53.32	49.54	24.35	67.79
Mitchell 2	63.31	32.32	48.54	48.05	65.02	5.93

Kentucky Power Company
KPSC Case No. 2020-00004
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Dated February 11, 2020

DATA REQUEST

- KPSC 1_17** a. For the period under review, explain whether Kentucky Power made any changes to its maintenance and operation practices or completed any specific generation efficiency improvements that affect fuel usage at Kentucky Power's generation facilities.
b. Describe the impact of these changes on Kentucky Power's fuel usage.

RESPONSE

For the period under review, the Company did not make any changes to its maintenance and operations practices and did not complete any specific generation efficiency improvements that affect fuel usage at its generation facilities.

Witness: Douglas J. Rosenberger (Mitchell)

Witness: David L. Mell (Big Sandy)

Kentucky Power Company
KPSC Case No. 2020-00004
Commission Staff's First Set of Data Requests
Dated February 11, 2020

DATA REQUEST

KPSC 1_18 State whether Kentucky Power is aware of any violations of its policies and procedures regarding fuel procurement that occurred prior to or during the period under review.

RESPONSE

Kentucky Power is not aware of any violations of its policies and procedures regarding fuel procurement that occurred prior to or during the review period.

Witness: Clinton M. Stutler (natural gas)

Witness: Amy E. Jeffries (Coal)

Kentucky Power Company
KPSC Case No. 2020-00004
Commission Staff's First Set of Data Requests
Dated February 11, 2020

DATA REQUEST

KPSC 1_19 State whether Kentucky Power is aware of any violations of 807 KAR 5:056 that occurred prior to or during the period under review.

RESPONSE

The Company is not aware of any violations of 807 KAR 5:056 during the review period. Any known deviations from the regulation arising prior to the review period previously were reported to or addressed by the Commission.

Witness: Brian K. West

Kentucky Power Company
KPSC Case No. 2020-00004
Commission Staff's First Set of Data Requests
Dated February 11, 2020

DATA REQUEST

KPSC 1_20 State whether all fuel contracts related to commodity and transportation have been filed with the Commission. If any contracts have not been filed, explain why they have not been filed, and provide a copy.

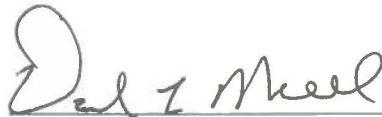
RESPONSE

All contracts have been filed with the Commission.

Witness: Brian K. West

VERIFICATION

The undersigned, David L. Mell, being duly sworn, deposes and says he is Energy Production Superintendent – Big Sandy for Kentucky Power Company, that he has personal knowledge of the matters set forth in the foregoing responses and the information contained therein is true and correct to the best of his information, knowledge, and belief.



David L. Mell

Commonwealth of Kentucky)
)
County of Boyd)

Case No. 2020-00004

Subscribed and sworn before me, a Notary Public, by David L. Mell this 17th day of February, 2020.



Notary Public

My Commission Expires 03-21-2021



VERIFICATION

The undersigned, Douglas J. Rosenberger, being duly sworn, deposes and says he is the Plant Manager – Mitchell for Kentucky Power Company, that he has personal knowledge of the matters set forth in the foregoing responses and the information contained therein is true and correct to the best of his information, knowledge, and belief.

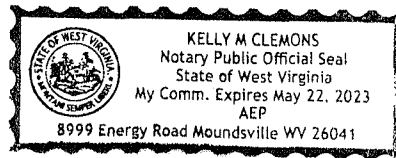
Douglas J. Rosenberger
Douglas J. Rosenberger

State of West Virginia)
)
County of Marshall) Case No. 2020-00004

Subscribed and sworn before me, a Notary Public, by Douglas J. Rosenberger this 19th day of February, 2020.

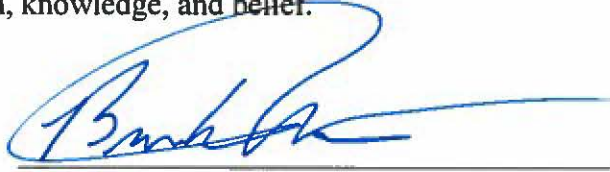
Kelly M. Clemons
Notary Public

My Commission Expires May 22, 2023



VERIFICATION

The undersigned, Brian K. West, being duly sworn, deposes and says he is the Director of Regulatory Services for Kentucky Power, that he has personal knowledge of the matters set forth in the foregoing responses and the information contained therein is true and correct to the best of his information, knowledge, and belief.



Brian K. West

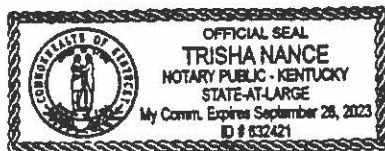
Commonwealth of Kentucky)
)
County of Boyd) Case No. 2020-00004

Subscribed and sworn before me, a Notary Public, by Brian K. West this
18th day of February, 2020.



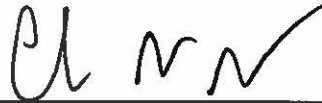
Notary Public

My Commission Expires 9-26-2023



VERIFICATION

The undersigned, Clinton M. Stutler, being duly sworn, deposes and says he is the Natural Gas & Fuel Oil Manager for American Electric Power Service Corporation, that he has personal knowledge of the matters set forth in the foregoing responses and the information contained therein is true and correct to the best of his information, knowledge, and belief.



Clinton M. Stutler

State of Ohio)
)
County of Franklin)

Case No. 2020-00004

Subscribed and sworn before me, a Notary Public, by Clinton M. Stutler this
 17 day of February, 2020.


Notary Public

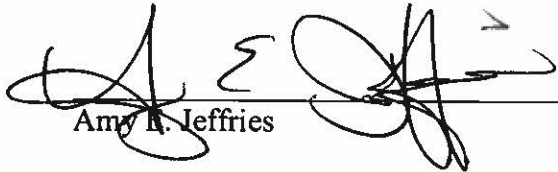
My Commission Expires 07-01-2021



Gina L. Beyer
Notary Public, State of Ohio
My Commission Expires 07-01-2021

VERIFICATION

The undersigned, Amy E. Jeffries, being duly sworn, deposes and says she is the Coal Procurement Manager for American Electric Power Service Corporation, that he has personal knowledge of the matters set forth in the foregoing responses and the information contained therein is true and correct to the best of his information, knowledge, and belief.



Amy E. Jeffries

State of Ohio)
) Case No. 2020-00004
County of Franklin)

Subscribed and sworn before me, a Notary Public, by Amy E. Jeffries this
18 day of February, 2020.



Notary Public

My Commission Expires 07-01-2021



Gina L. Beyer
Notary Public, State of Ohio
My Commission Expires 07-01-2021