

## Decision Regarding Revision of 80% Practice for Determining Production Cost of "East" Economic Purchase Power Transactions March 26, 2009

### Background

A discussion was held on 3/16/2008 among several eastern AEP state rate directors and other interested parties regarding revising the practice of using 80% to determine and record purchase power cost subject to purchased power economic adjustment clauses. The purpose of the meeting was to determine if the practice should be changed to include 100% of the cost of economic purchases versus 80%, the current practice.

Craig Baker provided historical perspective on the 80/20 practice. It was developed and instituted in the 1980's. Transactions at that time were more typically bilateral transactions. The historical practice had been for bilateral parties to exchange actual fuel costs to support the recording of fuel and other costs. With the development of markets and competitive generation, the practice of exchanging fuel cost became less desirable and the transparency of fuel cost for a specific transaction was not straightforward. To simplify processes and recordings, AEP adopted the practice of 80% production and a 20% non-production cost split. The practice was adopted when it was uncommon for a purchase transaction to be assigned to serve internal load. The practice was considered reasonable based on transaction knowledge and market and operating conditions at that time.

Currently, AEP is encountering market and operating conditions where AEP units are being designated as DNR (Down Not Required) because market prices are lower than the true cost offer market prices (where true cost is defined by market protocols) and AEP is choosing based on economics to make market purchases compared to the true cost offer submitted to PJM. Unlike the past, it is now not uncommon for a purchase transaction to be assigned to serve internal load. In these situations it is appropriate that AEP recognize the full cost of the purchase for fuel cost recovery purposes since these are economic power purchases to serve internal load customers.

Use of the 100% appears consistent with FERC guidelines for economic power purchases:

(ii) *Total cost of the purchase* is all charges incurred in buying economic power and having such power delivered to the buyer's system. The total cost includes, but is not limited to, capacity or reservation charges, **energy charges**, adders, and any transmission or wheeling charges associated with the purchase.

(iii) *Total avoided variable cost* is all identified and documented variable costs that would have been incurred by the buyer had a particular purchase not been made. Such costs include, but are not limited to, those associated with fuel, start-up, shut-down or any purchases that would have been made in lieu of the purchase made.

### Decision

Effective January 1, 2009 AEP will change to recording 100% of the purchase power cost as recoverable production cost for transactions deemed to be economic purchases. By default, market transactions are economic from an AEP perspective, because PJM acts

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as the clearinghouse for AEP's generation. AEP will continue to use our internal allocation tool (ECR) to ensure the lowest cost generation or purchase resources are used to serve internal load. State rate directors will request exceptions to the effective date if appropriate.

### Scope

Applies to purchases for 12 months or less, therefore, the current OVEC and Mone plant purchases are not in scope. These purchases have not been subject to the 80% practice as the seller provides details of fuel costs and other costs and AEP records cost based on the details provided.

### Estimate of January and February 2009 Adjustments by Operating Company

For January and February 2009 the following Table summarizes the 20% that was allocated to LSE and was not included in fuel recovery mechanisms, but should have been based on this interpretation. These amounts will be reclassified to sub-accounts with the major purchase power account series (555xxxx) unless a state director requests that the change have a different effective date than January 1, 2009.

2009	Operating	Allocated to Off-System Sales			Allocated Internally			Reclass
	Co	MWH	Energy Cost	Prod Cost	MWH	Energy Cost	Prod Cost	Other (Energy - Prod)
January	APCO	258,999	\$15,316,830	\$12,163,380	128,097	\$5,834,568	\$4,641,474	\$1,193,094
January	KPCO	55,776	\$3,274,991	\$2,600,725	27,201	\$1,247,527	\$992,427	\$255,100
January	I&M	140,368	\$8,322,271	\$6,608,869	69,411	\$3,170,170	\$2,521,910	\$648,260
January	OPCO	179,463	\$10,652,245	\$8,459,156	88,744	\$4,057,726	\$3,227,969	\$829,757
January	CSP	145,503	\$8,599,266	\$6,828,835	71,930	\$3,275,685	\$2,605,849	\$669,836
<b>Subtotal</b>		<b>780,109</b>	<b>\$46,165,602</b>	<b>\$36,660,964</b>	<b>385,383</b>	<b>\$17,585,676</b>	<b>\$13,989,628</b>	<b>\$3,596,048</b>
February	APCO	\$173,358	\$7,756,205	\$6,276,522	52,188	\$2,001,825	\$1,601,554	\$400,271
February	KPCO	35,444	\$1,562,808	\$1,264,668	10,358	\$403,354	\$322,697	\$80,657
February	I&M	89,522	\$3,980,969	\$3,221,497	26,802	\$1,027,462	\$822,019	\$205,442
February	OPCO	113,998	\$5,095,619	\$4,123,526	34,319	\$1,315,144	\$1,052,166	\$262,978
February	CSP	91,988	\$4,113,549	\$3,328,789	27,718	\$1,061,684	\$849,396	\$212,288
<b>Subtotal</b>		<b>504,310</b>	<b>\$22,509,151</b>	<b>\$18,215,002</b>	<b>151,385</b>	<b>\$5,809,469</b>	<b>\$4,647,833</b>	<b>\$1,161,636</b>
Total	APCO	432,357	\$23,073,035	\$18,439,901	180,285	\$7,836,393	\$6,243,028	\$1,593,366
Total	KPCO	91,220	\$4,837,799	\$3,865,392	37,559	\$1,650,882	\$1,315,125	\$335,757
Total	I&M	229,890	\$12,303,241	\$9,830,367	96,213	\$4,197,632	\$3,343,929	\$853,703
Total	OPCO	293,461	\$15,747,864	\$12,582,681	123,063	\$5,372,870	\$4,280,135	\$1,092,735
Total	CSP	237,491	\$12,712,815	\$10,157,624	99,648	\$4,337,369	\$3,455,245	\$882,124
<b>Total</b>		<b>1,284,419</b>	<b>\$68,674,753</b>	<b>\$54,875,965</b>	<b>536,768</b>	<b>\$23,395,146</b>	<b>\$18,637,461</b>	<b>\$4,757,684</b>
	<b>Notes</b>							
	1) Ratio of Production and other cost to total is not 80/20 because of explicit congestion and losses are included in purchase dollars.							
	2) February is estimate cycle results							

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**Discussion Points**

Following is a list of points that were shared and discussed at the meeting including references to **Title 18: Conservation of Power and Water Resources – Part 35 Filing of Rate Schedules and Tariffs – Subpart C Other Filing Requirements**

**35.14 Fuel cost and purchased economic power adjustment clauses.**

- There is no current quantitative data that supports the historic practice of using 80% of purchase power cost to determine production cost (Out of Pocket Cost – OPC) related to purchase power transactions.
- A FERC auditor observed that 100% was more common practice based on his experience.
- AEP West entities use 100% of purchase power cost to determine production cost.
- Ohio Operating companies are requesting an expanded interpretation of production costs for their fuel clause recovery.
- Exceptions to the 80% practice: OVEC/IKEC and Mone plant – in both cases we are provided production cost data and agreements are long standing. OPC and capacity related costs are recorded separately based on information provided. Detailed purchase information from affiliate AEG is also provided.
- AEP East Purchases are mainly from PJM Spot Market Energy and OVEC/IKEC.
- In 2008 90% of purchases were assigned to serve off-system sales (This percentage has likely been closer to 95% in more recent prior years).
- In December 2008 60% of purchases were assigned to off-system sales.
- In January 2009 50% of purchases were assigned to off-system sales.
- Using the historical percentage – approximately 5% of the 20% non-production cost may be in based rates.
- If the purchase percentage assigned to serve internal load remains high then AEP may be subject to a period of under recovery.
- PJM spot power purchases are priced at the Spot Market Energy (SME) component of the LMP. The SME is the same price across all nodes in the market.

**Federal Guideline**

(ii) *Total cost of the purchase* is all charges incurred in buying economic power and having such power delivered to the buyer's system. The total cost includes, but is not limited to, capacity or reservation charges, **energy charges**, adders, and any transmission or wheeling charges associated with the purchase.

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(iii) *Total avoided variable cost* is all identified and documented variable costs that would have been incurred by the buyer had a particular purchase not been made. Such costs include, but are not limited to, those associated with fuel, start-up, shut-down or any purchases that would have been made in lieu of the purchase made.

### Title 18: Conservation of Power and Water Resources

#### PART 35—FILING OF RATE SCHEDULES AND TARIFFS

#### Subpart C—Other Filing Requirements

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### § 35.14 Fuel cost and purchased economic power adjustment clauses.

(a) Fuel adjustment clauses which are not in conformity with the principles set out below are not in the public interest. These regulations contemplate that the filing of proposed rate schedules which embody fuel clauses failing to conform to the following principles may result in suspension of those parts of such rate schedules:

(1) The fuel clause shall be of the form that provides for periodic adjustments per kWh of sales equal to the difference between the fuel and purchased economic power costs per kWh of sales in the base period and in the current period:

$$\text{Adjustment Factor} = \frac{Fm}{Sm - Fb/Sb}$$

Where:  $F$  is the expense of fossil and nuclear fuel and purchased economic power in the base ( $b$ ) and current ( $m$ ) periods; and  $S$  is the kWh sales in the base and current periods, all as defined below.

(2) Fuel and purchased economic power costs ( $F$ ) shall be the cost of:

(i) Fossil and nuclear fuel consumed in the utility's own plants, and the utility's share of fossil and nuclear fuel consumed in jointly owned or leased plants.

(ii) The actual identifiable fossil and nuclear fuel costs associated with energy purchased for reasons other than identified in paragraph (a)(2)(iii) of this section.

(iii) The total cost of the purchase of economic power, as defined in paragraph (a)(11) of this section, if the reserve capacity of the buyer is adequate independent of all other purchases where non-fuel charges are included in either  $F$  or  $Fm$ ;

(iv) Energy charges for any purchase if the total amount of energy charges incurred for the purchase is less than the buyer's total avoided variable cost;

(v) *And less* the cost of fossil and nuclear fuel recovered through all inter-system sales.

(3) Sales ( $S$ ) must be all kWh's sold, excluding inter-system sales. Where for any reason, billed system sales cannot be coordinated with fuel costs for the billing period, sales may be equated to the sum of: (i) Generation, (ii) purchases, (iii) exchange received, less (iv) energy associated with pumped storage operations, less (v) inter-system sales referred to in paragraph (a)(2)(iv) of this section, less (vi) total system losses.

(4) The adjustment factor developed according to this procedure shall be modified to properly allow for losses (estimated if necessary) associated only with wholesale sales for resale.

(5) The adjustment factor developed according to this procedure may be further modified to allow the recovery of gross receipts and other similar revenue based tax charges occasioned by the fuel adjustment revenues.

(6) The cost of fossil fuel shall include no items other than those listed in Account 151 of the Commission's Uniform System of Accounts for Public Utilities and Licensees. The cost of nuclear fuel shall be that as shown in Account 518, except that if Account 518 also contains any expense for fossil fuel which has already been included in the cost of fossil fuel, it shall be deducted from this account. (Paragraph C of Account 518 includes the cost of other fuels used for ancillary steam facilities.)

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(7) Where the cost of fuel includes fuel from company-owned or controlled<sup>1</sup> sources, that fact shall be noted and described as part of any filing. Where the utility purchases fuel from a company-owned or controlled source, the price of which is subject to the jurisdiction of a regulatory body, and where the price of such fuel has been approved by that regulatory body, such costs shall be presumed, subject to rebuttal, to be reasonable and includable in the adjustment clause. If the current price, however, is in litigation and is being collected subject to refund, the utility shall so advise the Commission and shall keep a separate account of such amounts paid which are subject to refund, and shall advise the Commission of the final disposition of such matter by the regulatory body having jurisdiction. With respect to the price of fuel purchases from company-owned or controlled sources pursuant to contracts which are not subject to regulatory authority, the utility company shall file such contracts and amendments thereto with the Commission for its acceptance at the time it files its fuel clause or modification thereof. Any subsequent amendment to such contracts shall likewise be filed with the Commission as a rate schedule change and may be subject to suspension under section 205 of the Federal Power Act. Fuel charges by affiliated companies which do not appear to be reasonable may result in the suspension of the fuel adjustment clause or cause an investigation thereof to be made by the Commission on its own motion under section 206 of the Federal Power Act.

<sup>1</sup> As defined in the Commission's Uniform System of Accounts 18 CFR part 101, Definitions 5B.

(8) All rate filings which contain a proposed new fuel clause or a change in an existing fuel clause shall conform such clauses with the regulations. Within one year of the effectiveness of this rulemaking, all public utilities with rate schedules that contain a fuel clause should conform such clauses with the regulations. Recognizing that individual public utilities may have special operating characteristics that may warrant granting temporary delays in the implementation of the regulations, the Commission may, upon showing of good cause, waive the requirements of this section of the regulations for an additional one-year period so as to permit the public utilities sufficient time to adjust to the requirements.

(9) All rate filings containing a proposed new fuel clause or change in an existing fuel clause shall include:

(i) A description of the fuel clause with detailed cost support for the base cost of fuel and purchased economic power or energy.

(ii) Full cost of service data unless the utility has had the rate approved by the Commission within a year, provided that such cost of service may not be required when an existing fuel cost adjustment clause is being modified to conform to the Commission's regulations.

(10) Whenever particular circumstances prevent the use of the standards provided for herein, or the use thereof would result in an undue burden, the Commission may, upon application under §385.207 of this chapter and for good cause shown, permit deviation from these regulations.

(11) For the purpose of paragraph (a)(2)(iii) of this section, the following definitions apply:

(i) *Economic power* is power or energy purchased over a period of twelve months or less where the total cost of the purchase is less than the buyer's total avoided variable cost.

(ii) *Total cost of the purchase* is all charges incurred in buying economic power and having such power delivered to the buyer's system. The total cost includes, but is not limited to, capacity or reservation charges, energy charges, adders, and any transmission or wheeling charges associated with the purchase.

(iii) *Total avoided variable cost* is all identified and documented variable costs that would have been incurred by the buyer had a particular purchase not been made. Such costs include, but are not limited to, those associated with fuel, start-up, shut-down or any purchases that would have been made in lieu of the purchase made.

(12) For the purpose of paragraph (a)(2)(iii) of this section, the following procedures and instructions apply:

(i) A utility proposing to include purchase charges other than those for fuel or energy in fuel and purchased economic power costs ( *F* ) under paragraph (a)(2)(iii) of this section shall amend its fuel cost adjustment clause so that it is consistent with paragraphs (a)(1) and (a)(2)(iii) of this section. Such amendment shall state the system reserve capacity criteria by which the system operator decides whether a reliability purchase is required. Where the utility filing the statement is required by a State or local regulatory body (including a plant site licensing board) to file a capacity criteria statement with that body, the system reserve capacity criteria in the statement filed with the

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Commission shall be identical to those contained in the statement filed with the State or local regulatory body. Any utility that changes its reserve capacity criteria shall, within 45 days of such change, file an amended fuel cost and purchased economic power adjustment clause to incorporate the new criteria.

(ii) Reserve capacity shall be deemed adequate if, at the time a purchase was initiated, the buyer's system reserve capacity criteria were projected to be satisfied for the duration of the purchase without the purchase at issue.

(iii) The total cost of the purchase must be projected to be less than total avoided variable cost, at the time a purchase was initiated, before any non-fuel purchase charge may be included in *F m*.

(iv) The purchasing utility shall make a credit to *F m* after a purchase terminates if the total cost of the purchase exceeds the total avoided variable cost. The amount of the credit shall be the difference between the total cost of the purchase and the total avoided variable cost. This credit shall be made in the first adjustment period after the end of the purchase. If a utility fails to make the credit in the first adjustment period after the end of the purchase, it shall, when making the credit, also include in *F m* interest on the amount of the credit. Interest shall be calculated at the rate required by §35.19a(a)(2)(iii) of this chapter, and shall accrue from the date the credit should have been made under this paragraph until the date the credit is made.

(v) If a purchase is made of more capacity than is needed to satisfy the buyer's system reserve capacity criteria because the total costs of the extra capacity and associated energy are less than the buyer's total avoided variable costs for the duration of the purchase, the charges associated with the non-reliability portion of the purchase may be included in *F*.

(Approved by the Office of Management and Budget under control number 1902-0096)

(Federal Power Act, 16 U.S.C. 824d, 824e and 825h (1976 & Supp. IV 1980); Department of Energy Organization Act, 42 U.S.C. 7171, 7172 and 7173(c) (Supp. IV 1980); E.O. 12009, 3 CFR part 142 (1978); 5 U.S.C. 553 (1976))

[Order 271, 28 FR 10573, Oct. 2, 1963, as amended by Order 421, 36 FR 3047, Feb. 17, 1971; 39 FR 40583, Nov. 19, 1974; Order 225, 47 FR 19056, May 3, 1982; Order 352, 48 FR 55436, Dec. 13, 1983; 49 FR 5073, Feb. 10, 1984; Order 529, 55 FR 47321, Nov. 13, 1990; Order 600, 63 FR 53809, Oct. 7, 1998]