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KPSC Case No. 2005-00341 ACTUAL: KIUC 2nd Set Data Requests October 2005 Item No. 46 RealizationSigningColculations

APPENDIX VIII

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	. East Dotait	East Realization	West	Total Realization	West Share of Realization	East Share of Realization	Eastern Funds To West	Account
okout Purchases Energy Purch - BrO Margin Rectass (Note 1) Purchases Commission Bookout Sates	(\$303;407;225) 50- 50- 510- 510- 510- 510- 510- 510- 5	·	(3555 462 5370,887 \$829,156	<u>.</u> 1 -				Hanne
Less Tractebel Sal a Energy Salas - B/O Margin Reclass (Note 1) Sales Commission	50 4(2) 58(850,978) 51 (\$95,968)		(\$9,029)	T		•		
Exercised Oplion - Purchases Exercised Purchase Option Premiums Exercised Oplion - Sales	(\$840,000) (\$64,753) \$7,184,000		581,553	r L				
Exercised Sales Option Premiums Non-Dedicated Spark Gas Commission	\$653,164 (\$4,165)		(\$438,124) (\$1,552) (\$1,552)					
Non-Dedicated Spark Gas ABN Armo Futures Reclass Dedicated Spark Gas in ERCOT on 9 Companies	50 (52 791 104)		(\$1,039,673)					
Non-Dedicated Swaps - Net Power Swaps - Net Paribas Power Commissions	(\$3,220,913). (\$7,138,084) (\$828,864)		(\$1,199,115) (\$308,748)	-				
Power Futures (REFCO) Power Future Accessis (REFCO) Buckeye Eucess Energy Credil	\$1 046 473 \$0 (52,287,007)		11 50					
Dow Sales - Associated	Silentia So.	\$2,352,700	(\$2,553,582)	(\$200,882)	(\$54,525)	(\$146,357)	\$2,499,057	4470.117
Dow Purchases - Associated	祖宗记: (\$202,200)	(\$202,200) SO	(\$202,200)	(\$54,883)	(\$147,317)	(354,883)	5550,044
ECRICR Revications Less Purchase Demand Charge Non-Deckated Seymour Energy Sales Less Realization on Dedicated Transactions Unit Power - CP&L SO2 Realizations	330,651,944 (31,222,224) (31,222,224) (32,749,432) (32,749,432) (32,745,805) (31,11,124,875)	2	52,640,552 52,640,552 54,676,441)					
NOx Realizations Transmission Purchases Total ECR/ICR Realization	15305148	\$39,259,541	\$8,803,380	\$46,062,921	\$12,502,812	\$33,560,109	\$5,699,432	4470.026
Spol Energy Sales (G/L to Invoice Adjustments) Transmission Congestion (GL to Invoice AJ) Transmission Loss Gradi (OSS) Spot Purchases from PJM Transmission Service Operaling Reserve Charge/Credit Capacity Credit Market 'nt-lo-Point Transmission work Int Transm Svc Chg (Buckeye-Other) . IR Revenues Transmission Owner System Control & Dispatch Non-EGR Purchased Power OSS Meter Carrection Charges (OSS) SECA Transmission Expense	523 5957 523 5957 523 5977 525 517 525 507 525 507	\$2 875 954		\$2 875 954	5780.617	\$2.095.337	\$760.617	4470.118
PJN Purchases with AEP as Agent	(\$72,353))	42,010,334		ar of start	#100,011	42,033,031		-
FTR Auction Charges	The so	(572,353)	,	(\$72,353)	(\$19,639)	(552,714)	(\$19,638)	5550,045
PJM Scheduling System Control & Dispatch	(SA59,524)	(\$459,524)		(\$459,524)	(\$124,728)	(\$334,796)	(\$124,728)	5560,004
Total	too	\$43,754,118	\$4,249,798	\$48,003,916	\$13,029,654	\$34,974,262	\$B,779,856	
Tolal West Realizations	· .	21/54/249/798	Ĺ					
Total AEP Realizations		\$48,003,915	•	Realization Sharing	Ralios			
Eastern AEP's Share of Total Realization Western AEP's Share of Total Realization		\$34,974,262 \$13,029,654 \$48,003,915		Base Year Capacity	\$0 \$48,003,918 \$48,003,916	0.00% 100.00% 100.00%		
Eastern AEP Funds to Western AEP		\$8,779,656						•
Base Year Realizations Eastern AEP Realization Western AEP Realization	\$252,860,378 \$25,095,575 \$277,955,953	90.97% 9.03% 100.00%		Capacity (MW) Real 25,304,000 9,427,000 34,731,000	Ization Sharing 72.86% 27.14% 100.00%			

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October 2005

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Realization Sharing Calculations

ACTUAL:

EASTERN FUNDS TO WESTERN AEP ALLOCATION BY OPERATING COMPANY

NO. TOTAL OF ALL	14 ACCOUNTS	232 8EZ 2 (006)	1 259) 651 728		1977) 2 (An 565	(1285) 1587 661	4,728) 8,779,858
ACCOUNT NO. ACCOUNT	5550.045 5560.00	(6.125) (35	(1.458) (5	(23 (23	(4.878) (30	(3.551) (22	(19,639) (12
ACCOUNT NO.	4470.118	243,459	57,945	144.180	193.874	141,159	780,617
ACCOUNT NO.	4470,026	1,777,539	423,069	1,052,685	1,415,511	1,030,628	5,699,432
ACCOUNT NO.	5550,044	(11,117)	(4,074)	(761,01)	(159'61)	(9,924)	(54,883)
ACCOUNT NO.	4470.117	779,406	185,505	461,576	620,666	. 451,904	2,499,057
	MLR	0.31188	0.07423	0.18470	0.24836	0.18083	1.00000
		APCO	KPCO	TAM	OPCO	CSP	TOTAL

Nolo 1: Current month margin reclassified between trading and non-trading due to non-trading transactions being booked out with trading transactions.

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APPENDIX X

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ACTUALI October 2005

OFFSET OF BUCKEYE PASS-THROUGH CHARGES ASSOCIATED WITH PJM

	ACCOUNT	ACCOUNT							
PJM CHARGE DESCRIPTION	NO.	AP ANT	KP ANT	IM ANT	OP AMT	CS AMT	BUCKEYE TOTAL		
Regulation (Revenue)	4470095				7207569552		-		
Solnring Reserva	4470098	(152)	E-136%	(90)	(121)	(188)	(488)		
Derating Reserve - OSS	4470098	(104 518)	(24 876)	61 897)	(83 231)	(60'600)	(335 122)		
Capacity Credit Market	4470099	883	210	523	703	·····································	2 831		
Viegheny Transmission Congestion	4470101	P. S.					-,		
Reactive Supply and Voltage Control (Revenue)	4470104						-		
Black Start Service (Revenue)	4470105			1.50			_		
Point-To-Point Transmission Service	4470108						-		
NITS / Other Supporting Facilities	4470107	(506,401)	(120.528)	(299,898)	1 (403 264)	(293 615);	(1.623.706)		
Operating Reserve - LSE	4470108	39.722	Tigle 9 454	23,524	31,6320	23 031	127.364		
Transmission Owner Scheduling (Expanse)	4470110	(14,740)	(3,508)	(8,729)	6 (11 738)	(8 546)	(47,262)		
Seams Elimination Cost Assignment Charges	4470119	(65,718)	15,642)	(38.919)	(52,334)	(38,104)	(210,717)		
PJM Service Fee	4560064	(37-216)	(8,858)	(22 040)		(21 578)	(119.329)		
Expansion Cost Recovery	4560085	(2,289)	(552)	(1.818).	(2.599)	(915)	(8,173)		
Emergency/Economic Load Response Program	5550038		市場になって						
Excess Energy Credit - OSS	5550038	711 010	169 226	1421 071	566 200	412 248	2,279,756		
AEP Inadverterx / AEP Power Factor - OSS	5550039	17.966	5 -1 4 276	10,640	14:307	10,417	57,606		
AEP Inadvartent / AEP Power Factor - LSE	5550040	品語生物語							
Synchronous Condensing	5550041	(7,086)	(1,686)	(4.196)	(5.642)	(4 108)	(22,719)		
Reactive Supply and Vollage Control (Expanse)	5550042	四十二(15,478)	+ (3,684)	1 (9,166)	(12,325)	(8,974)	(49,626)		
Bleck Start Sarvice (Expense)	5550043	(1.303)	添記24 (310)	27 777 (772)	(1 038)	(756)	(4,179)		
Excess Energy Credit - LSE	5550048						-		
Regulation (Expense)	6550057	(56,350)	HE (13 A12)	(33 371)	(44,873)	(32,672)	(180,679)		
PJM Scheduling System Control and Dispatch Service - OSS	5560002	(45 440)	10,815)	(26,910)	(36,186)	(26 347)	(145,698)		
PJM Scheduling System Control and Dispatch Service - LSE	5580003			E HAR ST			•		
Transilional Market Expansion / Expansion Integration	5570008	建設成設備 資		学员 同时 三日本	的限制指定				
TOTAL OFFSET OF BUCKEYE PASS-THROUGH CHARGES (ACTUAL)		(87,110)	(20,740)	(52,051)	(70,145)	(50,094)	(280,140)		
TOTAL OFFSET OF BUCKEYE PASS-THROUGH CHARGES (ESTIMATED)		(211,740)	(50,403)	(125,878)	(169,423)	(122,338)	(679,782)		
TOTAL OFFSET OF BUCKEYE PASS-THROUGH CHARGES (JULY 2005 ADJUSTMENT)		(0) (0				-		
TOTAL OFFSET OF BUCKEYE PASS-THROUGH CHARGES (AUGUST 2005 ADJUSTMENT)		1708	407	990	1 320	990	5,414		
		GENEURA	10 201	1849363645648 78 18 4	101.029	73 666	1,776		
	11			1	101 030	10 100	9000 d/9		

BUCKEYE SHARE OF PJA CONSESTION CHARGES

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	ACCOUNT	•					
PJH CHARGE DESCRIPTION	NO.	AP AMT	кр амт	IM ANT	OP AMT	CS AMT	AEP AMT TOTAL
Transmission Implicit Congestion Charge	4470126	336 223	80,024)	lar≓199,117∃	267,745	194,945.	1,078,054
TOTAL BUCKEYE SHARE OF PJM CONGESTION CHARGES (ACTUAL)		336,223	80,024	199,117	267,745	194,945	1,078,054
TOTAL BUCKEYE SHARE OF PJM CONGESTION CHARGES (ESTIMATED)		327,575	77,966	193,995	260,858	189,930	1,050,324
TOTAL BUCKEYE SHARE OF PJM CONGESTION CHARGES (ADJUSTMENT)	(1) 8,648	2,058	5,122	6,887	5,015	27,730

Note:

(1) The results shown on this oppendix are tabulated for system settlement on IPS, page 1, items VIII and IX.

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Kentucky Power Company

REQUEST

Refer to the Company's response to KIUC 1-45. Please provide the cost of dismantling each of the units indicated as retired on the attached schedule. If this information is not available, then please explain why it is not available and describe the Company's efforts to obtain the information. In addition, if this information is not available, then please describe how CSP and I&M accounted for the cost of removal in their property accounting records.

RESPONSE

The work orders that recorded the plant retirements have been destroyed. In accordance with the FERC Record Retention Catalog, removal work orders are not required to be maintained after 6 years of the plant retirement.

CSP and I&M accounted for the cost of removal as explained in response to the Attorney General's First Set of Data Requests, Question No. 123.

WITNESS: James E Henderson

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KPSC Case No. 2005-00341 KIUC Second Set Data Request Order Dated December 12, 2005 Item No. 48 Page 1 of 1

Kentucky Power Company

REQUEST

Refer to the Company's response to KIUC 1-58. The Company's response to Staff 2-83 does not provide the information requested. Please respond to KIUC 1-58. More specifically, provide the following information:

a. Please describe the criteria relied upon to select the gross salvage and cost of removal percentages selected for each FERC account referred to above as based on "judgment".

b. Please describe why the same gross salvage and cost of removal percentages were not used for each of the FERC accounts within each functional plant level given that individual account data was not available.

c. Please provide a copy of all analysis performed that would help to justify the selection of the above referenced percentages by individual FERC account.

RESPONSE

a. The basis for the gross salvage and removal percentages for each FERC account are stated in the summary page of the depreciation study workpapers for each FERC account.

b. It is not reasonable to assume that the same gross salvage and cost of removal would apply equally to each plant account. The current depreciation study recommends that the Company apply depreciation rates to the individual FERC accounts and, just as an different average service life is recommended for each account, it is appropriate to recomment salvage and removal percentages for each account based on the nature of the investments in each account.

c. All analyses by account performed are contained in the depreciation study workpapers for each account.

WITNESS: James E Henderson

KPSC Case No. 2005-00341 Attorney General Second Set Data Request Order Dated December 12, 2005 Item No. 49 Page 1 of 1

Kentucky Power Company

REQUEST

Refer to the response to AG Request No. 166. The files provided do not explain how the cost of removal reserve was calculated (the numbers are hardcoded). Please explain how these amounts are calculated and provide the embedded cost of removal amounts by account.

RESPONSE

The Company's current depreciation rates identify a removal cost for only the Production Plant function. The amount of removal costs embedded in the Production Plant functional depreciation reserve was determined using the following formula:

Gross Removal % / (100%-Net Salvage %) x Accumulated Depreciation

Based on the Company's last depreciation study approved in Case No. 91-066, the cost of removal and gross salvage percentages included in the approved depreciation rates are as follows:

Gross Removal % = 24% Gross Salvage % = 2% Net Salvage Percent = -22%

The removal costs were calculated for the total Production Plant function. The amounts were not identified by account.

WITNESS: James E Henderson

KPSC Case No. 2005-00341 KIUC Second Set Data Request Order Dated December 12, 2005 Item No. 50 Page 1 of 1

Kentucky Power Company

REQUEST

Refer to the Company's response to KIUC 1-24. Please provide the information requested on CD. The request for copies of the studies does not extend to the underlying workpapers and voucher reviews, which should substantially reduce any concerns regarding volume. The studies should include the summary results and any supporting schedules that show the derivation of the lead/lag days.

RESPONSE

Attached on a CD are the summary results.

WITNESS: Errol K Wagner

KPSC Case No. 2005-00341 KIUC Second Set Data Request Order Dated December 12, 2005 Item No. 51 Page 1 of 1

Kentucky Power Company

REQUEST

With regard to the response to AG First Set, Item No. 64, Part C, please describe the methodology used to develop the 29.66% decline in congestion costs and the 19.28% decline in FTR revenues due to the operation of the W-J Ferry 765 kV line. Please provide supporting workpapers for the percentages.

RESPONSE

The change in AEP related congestion and FTR revenue that results as a consequence of the operation of the Wyoming-Jackson Ferry 765 kV line has been estimated by simulating two cases and taking the difference. Case 1 assumes no Wyoming-Jackson Ferry line; Case 2 assumes the line is operational. Each case was simulated with PROMOD-TAM, a production-costing model with embedded dc load flow module.

The regional context for the simulations is the PJM 'footprint'. The time period used in the simulations is May 2005 through July 2005. The May through July time period is used in order to take advantage of the availability of historical data – PJM loads, fuel prices, unit outages, transactions – in the two simulated cases. These historical data are identical in each case.

PROMOD-TAM is a commercial, chronological production-costing model with embedded dc load flow module. The PJM footprint transmission topology is an input in the model simulations. The topology differs between the two cases by the addition of the Wyoming-Jackson Ferry 765 kV line. In each case, the software simulates the hourly, security-constrained commitment and dispatch of generating units to satisfy bus loads within the model's transmission area, the PJM footprint in this set of simulations. The model calculates the least cost hourly commitment and dispatch that satisfies the hourly bus loads without violating the transmission flow constraints, and as such, represents for each case the hypothetically optimal operation of the system. As part of the solution, the model produces hourly LMPs, bus generation, transmission flows, etc.

The effect of the Wyoming-Jackson Ferry 765 kV line is taken to be the difference between the total AEP related congestion and FTR revenues in the two cases. The percentage changes are found by dividing the change in AEP related congestion and FTR value by the respective Case 1 values and multiplying by 100.

The output files from the PROMOD-TAM model and subsequent workpapers associated with this Item are included on the attached CD consisting of pages 2 through 135. **WITNESS:** Robert W Bradish

KPSC Case No. 2005-00341 KIUC Second Set Data Request Order Dated December 12, 2005 Item No. 52 Page 1 of 1

Kentucky Power Company

REQUEST

With regard to the electronic spreadsheet provided by the Company in support of Mr. Bethel' exhibits entitled "Bethel KY Exhibits and MLR For DR", tab "DWB-1 pg1-PTP", line 10, please provide an explanation for the 23.42783% "% of Point-to-Point Revenue to AEP after April 1, 2006". Provide supporting work papers for the 23.42783% value.

RESPONSE

The "% of Point-to-Point Revenue to AEP after April 1, 2006" is the ratio PJM will use to allocate Border PTP revenues to the PJM Zones after April 1, 2006. The ratio is calculated as the AEP East Zone transmission revenue requirement as of April 1, 2006, per the filed settlement in Docket No. ER05-751-000, divided by the total PJM transmission revenue requirement per PJM OATT H-A adjusted to reflect the referenced settlement in Docket No. ER05-751-000. A copy of the settlement agreement was provided in response to PSC Staff 2nd set, item 22.

There are no additional workpapers as the calculation is performed in the referenced cell of the Excel spreadsheet.

WITNESS: Dennis W Bethel

KPSC Case No. 2005-00341 KIUC Second Set Data Request Order Dated December 12, 2005 Item No. 53 Page 1 of 4

Kentucky Power Company

REQUEST

With regard to the response to Staff 2nd Set, Item No. 6, please explain in detail the ratemaking treatment and accounting that will accompany a specific KPCO off-system sale. In particular, please address the following:

a. If KPCO makes such a sale, does AEP schedule the sale with PJM, sell the energy to PJM at LMP, then purchase the energy required for the sale from PJM at LMP, and finally, then sell to the third party buyer at the agreed contractual sale price. If this is the case, please confirm. If not, please provide the correct explanation.

b. How is the decision made within AEP regarding whether a third party sale is specifically assigned to an operating company (e.g., KPCO) or made as an AEP system sale, with the margins allocated to all AEP East Companies.

RESPONSE

a. In simplistic form, Item 53, page 3 provides a diagram of the function of PJM. The diagram represents, in a general manner, how value flows from a settlement perspective. However, the oversimplification provided in the diagram does not capture the efforts and value added by AEPSC in pursuing off-system sales.

AEPSC, on behalf of Kentucky Power Company and the other four east generating operating companies, explicitly adds value by actively trading and optimizing AEP's eastern generating fleet. AEPSC provides this service through a number of means. As stated in the response to Staff 2-5, the Commercial Operations group (AEPSC) makes daily decisions that impact the level of off-system sales the company achieves. Commercial Operations focuses on analyzing the cost and revenue drivers associated with operating in the PJM market and aligns behaviors to minimize costs and maximize revenues.

KPSC Case No. 2005-00341 KIUC Second Set Data Request Order Dated December 12, 2005 Item No. 53 Page 2 of 4

For example, with regards to offering available generation to PJM, Commercial Operations supplements PJM's unit commitment process with its own analysis to determine when units should be committed for start-up and shut down due to unit operating conditions and characteristics. Included in the analysis is whether or not AEP needs a physical hedge, and the magnitude of that hedge, in the real-time market to hedge against the volatility of the real-time prices. This analysis is used to protect AEP against PJM charges associated with deviations in generating requirements from the day-ahead awards versus the real-time dispatch. Once a unit has been committed and is being dispatched in real-time, Commercial Operations has in place real-time monitoring of dispatch accuracy to ensure plants are performing as requested and AEPSC dispatchers are optimizing the value from the inter-hour price volatility by adjusting unit output to maximize revenue when price is greater than cost and maximize purchases when price is less than cost.

AEPSC also provides bidding strategies to facilitate the award (or commitment) for its generating units. Although, AEP has lower cost coal units, congestion and reliability constraints may eliminate AEP's units from being dispatched. Therefore, AEPSC continuously evaluates short-term market fundamentals against unit cost profiles in an effort to optimize utilization of available generation to serve both native load and to provide off-system sales while covering the costs incurred to run the units.

In addition to day-to-day operations, AEPSC engages in marketing activities to pursue offsystem sales opportunities both within and outside of the PJM market including SPP, ERCOT and MISO.

From the Load Serving Entity perspective, AEPSC has detailed weather and load forecasting functions that produce hourly load forecasts for bidding into the PJM market. Accurate load forecast is critical to managing the Company's operating reserve exposure that results from real-time deviations from the day-ahead settlement results.

Post operating day, Commercial Operations runs its own shadow settlement process on a daily basis as a way to monitor the accuracy of the PJM invoice and to request compensation from PJM when there are discrepancies.

These types of value maximizing activities outlined above are what lie behind the simple settlement concept imbedded in the question and highlighted on page 3 of Item 53. It is the combined impact of the above activities that enables AEPSC to add value through off-system sales, and Kentucky Power Company to realize its share.

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b. If the selling price is negotiated with a third party (invariably a market-based price), or conforms with a market-based RTO's operating agreement (e.g. PJM), then that off-system sale is considered an AEP System pool sale, resulting in the MLR sharing of costs, revenues and margins among all five member companies of the AEP (east) Interconnection Agreement. Recently, several municipal utilities have chosen to tie the price of their firm requirements to a particular AEP operating company's embedded fixed and variable costs. Under this scenario, the sale is considered company-specific and the third party's load is added to that Company's internal load (according to Article 5.2 of the AEP Interconnection Agreement) to derive that Company's MLR load. However, that Company alone assumes the supply responsibilities for that load, as well as the revenues and margins resulting from that supply.

WITNESS: Robert W Bradish

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Kentucky Power Company

REQUEST

With regard to a new 150mW transaction to supply Indiana Municipal Utilities, entered on or about October 7, 2005 by I&M, has this transaction been included in the projected MLR computations used by KPCO in its filing in this case? If not, is the Company intending to update its filing to reflect this transaction? If not, why not?

RESPONSE

No, that transaction was not included in the projected MLR computations, inasmuch as those projections were developed in August 2005 and that transaction was not known at that time. The Company does not intend to update its filing. The filing is based on actual data and known and measurable quantities/changes as of a date certain. Changes beyond that date can occur ad infinitum.

WITNESS: Errol Wagner

KIUC Case No. 2005-00341 KIUC Second Set Data Request Order Dated December 12, 2005 Item No. 55 Page 1 of 1

Kentucky Power Company

REQUEST

With regard to a new 40mW transaction to supply the City of Lebanon, Ohio, entered on or about August 22, 2005 by AEP, has this transaction been included in the projected MLR computations used by KPCO in its filing in this case? If not, is the Company intending to update its filing to reflect this transaction? If not, why not?

RESPONSE

The above transaction does not have any effect on the Company's MLR or the MLRs of the other four AEP operating companies. The transaction is an off-system sale.

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WITNESS: Errol Wagner