MISSOURI PUBLIC SERVICE COMMISSION

STAFF REPORT

COST OF SERVICE

APPENDIX 8
Support for Transmission Tracker Testimony

KCP&L GREATER MISSOURI OPERATIONS COMPANY

FILE NO. ER-2010-0356

	Zone	SPS	OGE	OGE	GRDA	OGE	WFEC	KCPL	KCPL	OGE	ITC GP	NPPD	
	Project	Tuco-Woodward	Tuco-Woodward	[redacted]	[redacted]	[redacted]	[redacted]	Iatan - Nashua	[redacted]	[redacted]	[redacted]	[redacted]	
	Voltage	345 kV	345 kV	345 kV	345 kV	345 kV	138 kV	345 kV	345 kV	345 kV	345 kV	345 kV	Total
Cost	Total Cost	$148,727,500	$79,000,000	$34,000,000	$0	$8,000,000	$2,000,000	$54,444,000	$2,000,000	$131,000,000	$168,000,000	$71,377,015	$698,548,515
	Cost Per Mile	$688,750	$900,000	$900,000				$1,214,800		$1,250,000	$846,000	$1,416,667	
	Miles	178	72	36			3	30	0	100	170	45	
	Substation Cost	$26,000,000	$15,000,000	$1,000,000		$0		$18,000,000		$4,000,000	$14,000,000	$4,000,000	
Conductor	Size	2-795 ACSR	2-795 ACSR	2-795 ACSR				Bundled 1192.5, Grackle TW	2-795 ACSR	Bundled 1590	Bundled 1590	2 Bundle 477 T2 Hawk	
	Design	Single Circuit	Single Circuit	Single Circuit				Single Circuit		Single Circuit	Single Circuit	Single Circuit	
	Electrical Capacity (amps)	2468	2578	2578				4100		3000	3000	2324	
	Other	Fiber-optic shield wire	Fiber-optic shield wire	Fiber-optic shield wire						Fiber-optic shield wire			
Structure	Type	H-frame	H-frame	H-frame				H-frame		single-pole	H-frame	single-pole	
	Material	Steel	Steel	Steel				Steel		Steel	Steel	Steel	
	Base	direct buried w/ backfill	direct buried w/ backfill	direct buried w/ backfill				Direct embed		steel plate reinforced concrete	direct-embeded concrete pier	concrete anchor bolts	
	NESC Assumption	Heavy	Heavy	Heavy				Heavy		Heavy	Heavy	Heavy	
	Dead Ends							16 @ $50,000 each	2-3		60 @ $50,000 each	20 @ $140,000 each	
	Underbuild	No	No	No				No		No	No	No	
Sub	Transformers	345/230 kV 560 MVA	345/138 kV 50 MVAR reactor bank	breakers and relays		345/138 kV		600 MVA		two 345/138 kV	345/230 kV 200 MVA	none	
	Breaker Scheme	ring	ring	ring				ring	2 breakers, breaker disconnects, line panels	ring, replace 2 2,000 A breakers	ring	ring	
	Protection Scheme	$1,000,000	included	included		included in cost		$400,000		included	$220,000	$156,000	
	Voltage Contro												
	Cost	$26,000,000	$15,000,000	$1,000,000				$18,000,000		$4,000,000	$14,000,000	$4,000,000	
Construction Labor	Amount												
	Cost	$18,000,000	$27,000,000	$14,000,000				$7,000,000		$52,000,000	$17,000,000	$490,000,000	
Eng. Design, Project Management, Permitting	ROW	150	150	150				160		200	150	200	
	ROW Condition	farmland, pasture	rural, pasture	rural, pasture				Urban 50%, rural 50%		rural, pasture, rock, hill, high tree clearing cost	rural, pasture, agricultural, range land	rural farmaind, rainwater basin	
	Permitting/Certifications	CCN	RR and highway	RR and highway				yes		CCN	included	NE Power Review Board	
	Escalation Rate		2.5% per year	2.5% per year				2.5% per year		2.5% per year	0% for 2 years	3%	
	Eng. Design/ Proj. Mang.							$349,000			$13,770,000	$8,798,000	
	Total Cost	$15,000,000	cost included	cost included				$26,000,000		cost included	$24,000,000	$18,000,000	
Loadings and Overheads	Type 1	included in total	included in total	included in total				$123,000		included in total	$26,700,000	included in total	
Other cost											$4,560,000		
Other Cost Factor Notes		included in substation cost is $6.52 mil for midpoint reactor station						Large portion involved devdeloped urban areas		$25,000/mile cost included for tree clearing	4.56 mil addition contingency added	environmentally sensitive areas, possible double-circuit for 10 miles	

Schedule DIB-1

Schedule DIB-1

Worksheet A-1 Revenue Credits														Page 1 of 2
KCP&L Greater Missouri Operations Company														
											Total Company		Transmission	Transmission
1	I.	Rent from Electric Property, Account 454												
2			Account 4540001 - Other Rev -Rent Electric Property								$ 1,229,253		$ 980,344	$ 248,909
3			Transmission:											
4				Farm Land Rental							-			
5				Rental From Cell Phone Attachers							-			
6				Equipment / Facilities Rental							149,346			
7				Rental Substation Property -Cell Towers							99,563			
8				Other Rental							-			
9				Total Transmission								$ 248,909		
10		(Revenue related to transmission facilities for pole attachments, rentals, etc. Provide data sources and explanations in Section V, Notes below.)												
11														
12	II.	Other Operating Revenues To Reduce Revenue Requirement												$ 1,378,877
13														
14	III.	Revenues from Transmission of Electricity for Others, Account 456.1												$ 6,259,568
15		(Provide data sources and necessary explanations Section V, Notes below.)												
16		Less:												
17			TO's LSE Direct Assignment Revenue Credits										$ -	
18			TO's LSE Sponsored Upgrade Revenue Credits										-	
19			TO's LSE Sch. 11 Rev. from Sponsored or Direct Assign Facilities - Network Credits										-	
20			TO's LSE Sch. 11 Rev. from Sponsored or Direct Assign Facilities - PtP Credits										-	
21			TO's LSE Network Upgrades for Generation Interconnection - Credits										-	
22			Point-To-Point Revenue for GFAs Associated with Load Included in the Divisor										470,819	
23			Network Service Revenue (Schedule 9) Associated With Load Included in the Divisor										496,903	
24			Revenue Associated with Transmission Plant Excluded From SPP Tariff										-	
25			Wholesale Distribution Revenue										-	
26			Schedule 1 Revenue			Point-to-Point Subtotal:					$ 553,237		553,237	
27			Schedule 2 Revenue										101,127	
28			Schedules 3-6 Revenue										-	
29			Zonal Network Revenue for TO's Facilities Under Schedule 11 -(Note 2)											
30			Region-wide Network Revenue for TO's Facilities Under Schedule 11 -(Note 2)										-	
31			Zonal Point-to-Point Revenue for TO's Facilities Under Schedule 11 -(Note 2)										-	
32			Region-wide Point-to-Point Revenue for TO's Facilities Under Schedule 11 - (Note 2)										-	
33			Other -(Note 3)										(368,015)	
34			Other										-	
35														
36				Total Adjustments										$ 1,254,071
37				Net 456.1 Account Activity										$ 5,005,497
38														
39	IV.	Total Revenue Credits to Apply to Zonal Revenue Requirement												$ 6,633,283
40														
41	V.	Notes												
42		(1) Data for this worksheet came from the FERC Form 1 and the Company's General Ledger.												
43		(2) Includes any revenue from direct asignment to a customer of costs of a Base Plan, Balanced Portfolio, Priority or ITP project.												
44		(3) SPP and MISO charges incorrectly recorded in 456.1.												
45		(4) If long-term firm point-to-point service terminates prior to end of calendar year, the associated revenue is credited rather than including reservation in divisor.												

ATTACHMENT H
Annual Transmission Revenue Requirement For Network Integration Transmission Service

SECTION I: General Requirements

1. The Zonal Annual Transmission Revenue Requirement within each Zone for purposes of determining the charges under Schedule 9, Network Integration Transmission Service, is specified in Column (3) of Table 1. The Base Plan Zonal Annual Transmission Revenue Requirement used to determine the zonal charges under Schedule 11 is specified in Column (4) of Table 1. The amount of Zonal Annual Transmission Revenue Requirement and Base Plan Zonal Annual Transmission Revenue Requirement that is included in Columns (3) and (4) and reallocated to the Region-wide Annual Transmission Revenue Requirement, in accordance with Attachment J, is specified in Column (5) of Table 1.

Table 1

(1) Zone	(2)	(3) Zonal ATRR	(4) Base Plan Zonal ATRR	(5) ATRR Reallocated to Balanced Portfolio Region-wide ATRR
1	American Electric Power –West (Total)	$151,662,031	$8,481,841	$0
	American Electric Power (Public Service Company of Oklahoma and Southwestern Electric Power Company) See Section II.3	$147,162,500		
	East Texas Electric Cooperative, Inc.	$2,733,879		
	Tex-La Electric Cooperative of Texas, Inc.	$588,874		
	Deep East Texas Electric Cooperative, Inc.	$428,131		
	Oklahoma Municipal Power Authority	$748,647		
2	Reserved for Future Use			
3	City Utilities of Springfield, Missouri	$8,651,509	($5,500)	$0
4	Empire District Electric Company	$14,075,000	($18,001)	$0
5	Grand River Dam Authority (Est.)	$24,589,256	($92,135)	$0
6	Kansas City Power & Light Company	$35,461,776	$663,128	$0
7	Oklahoma Gas & Electric (Total)	$81,151,489	$1,906,234	$0
	Oklahoma Gas & Electric	$81,045,221	$1,951,309	
	Oklahoma Municipal Power Authority	$106,268		

8	Midwest Energy, Inc.	$4,197,347	$131,517	$0
9	Aquila Networks-MPS/L&P (Total)	$20,759,283	$139,965	$0
9a	Aquila Networks-MPS	$14,059,183		
9b	Aquila Networks-L&P	$6,700,100		
10	Southwestern Power Administration	$9,431,500	$0	$0
11	Southwestern Public Service	$91,414,185	$927,697	$0
12	Sunflower Electric Corporation	$14,484,045	$320,628	$0
13	Western Farmers Electric Cooperative	$20,719,639	$429,314	$0
14	Westar Energy, Inc. (Kansas Gas & Electric and Westar Energy)	$115,503,530	$11,338,432	$0
15	Mid-Kansas Electric Cooperative (Total)	$7,016,706	$305,944	$0
15a	Mid-Kansas Electric Cooperative	$5,947,002	$305,944	
15b	ITC Great Plains	$1,069,704	$0	
16	Lincoln Electric System	$14,168,176	$101,419	$0
17	Nebraska Public Power District	$46,111,083	$13,314,707	$0
18	Omaha Public Power District	$35,176,688	$1,101,878	$0
19	Total			$0

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Schedule DIB-3-2

Source	Total GMO	L&P	MPS
Acct 4540001 - Rent from transmission	$248,909	$80,336	$168,573
"Net Account 456.1 Activity"	$5,005,497	$1,615,534	$3,389,963

	Zonal ATRR *	%
MPS	$14,059,183	67.72%
L&P	$6,700,100	32.28%
Combined MPS and L&P revenue requirement	$20,759,283	100.00%

* based on SPP Zonal Annual Transmission Revenue Requirement before the KCPL and GMO FERC Formula Rate filing

Schedule DIB-4

Schedule DIB-4

KCP&L Greater Missouri Operations Company
Case No. ER-2010-0356

MPS

Account	Account Description	2009	GMO Proposed Included in current filing	Staff Adjustment 1	Staff Adjustment 2	As Adjusted
561400	TransOp-Schd,Contr & Dis Serv	$ 137,310	$ 979,269			$ 979,269
561800	Trans Op-Reli Plan&Std Dv-RTO	127,636	171,019			$ 171,019
565000	Transm Oper-Elec Tr-By Others	3,445,095	5,711,708	(3,389,963)	(168,573)	$ 2,153,172
565020	Trans of Electricity by Others	0	0			$ -
565021	Transm Oper-Elec Tr-Interunit	442,050	439,778	Adjustment E-66.2	Adjustment E-66.3	$ 439,778
565027	Transm Oper-Elec Tr-Demand	8,785,512	8,740,354			$ 8,740,354
565030	Transm Oper-Elec Tr-OffSys	5,292	5,265			$ 5,265
575700	Trans Op-Mkt Mon&Comp Ser-RTO	931,957	836,211			$ 836,211
928003	Reg Comm Exp-FERC Assessmernt	335,565	344,807			$ 344,807
Total		$ 14,210,417	$ 17,228,411			$ 13,669,875

To arrive at KCPL's Annual Transmission Revenue Requirement (ATRR), the Southwest Power Pool (SPP) applies revenue credits. These revenue credits are reflected in Staff Adjustment 1 and Staff Adjustment 2

Schedule DIB 5-1

KCP&L Greater Missouri Operations Company
Case No. ER-2010-0356

L&P

Account	Account Description	2009	GMO Proposed Included in current filing	Staff Adjustment 1	Staff Adjustment 2	As Adjusted
561400	TransOp-Schd,Contr & Dis Serv	295,720	281,483			281,483
561800	Trans Op-Reli Plan&Std Dv-RTO	39,351	49,311			49,311
565000	Transm Oper-Elec Tr-By Others	(35,466)	(35,446)	(1,615,534)	(80,336)	(1,731,316)
565020	Trans of Electricity by Others	0	0			0
565021	Transm Oper-Elec Tr-Interunit	442,050	442,050	Adjustment E-70.1	Adjustment E-70.2	442,050
565027	Transm Oper-Elec Tr-Demand	2,313,040	319,924			319,924
565030	Transm Oper-Elec Tr-OffSys	0	0			0
575700	Trans Op-Mkt Mon&Comp Ser-RTO	286,699	241,564			241,564
928003	Reg Comm Exp-FERC Assessmernt	118,314	110,162			110,162
Total		3,459,708	1,409,048			(286,822)

To arrive at KCPL's Annual Transmission Revenue Requirement (ATRR), the Southwest Power Pool (SPP) applies revenue credits. These revenue credits are reflected in Staff Adjustment 1 and Staff Adjustment 2

Schedule DIB 5-2