

In-Service Date	2006 Expansion Plan Date	Project type EXP	SPP Area	"From" Bus Number used in SPP MIDWG	From Bus Name	"To" Bus Number used in SPP MIDWG	To Bus Name	Circuit	Voltages (kV)	# of Reconductor	# of New	# of Voltage Conversion	Summer Rating Normal/Emergency	Cost Estimate	Project Description/Comments
Year 2006															
05/01/06		R	520	53170	Tontitown	53194	Elm Springs REC	1	161	2			451/499	\$640,000	Rebuild line with 2-397 ACSR. Replace 1200 A switch 1045, and bus Elm Springs.
06/01/06		R	520	53519	Carthage REC	53529	Carthage T	1	138	4,14			280/287	\$690,000	Reconductor line with 1272 ACSR
06/01/06		R	520	53598	Rock Hill	53519	Carthage REC	1	138	9,57			215/237	\$2,425,000	Reconductor with 1272 ACSR. In Rock Hill sub Replace 755 ACSR and CT
06/01/06		R	520	53276	Lone Star South	53311	Pittsburg	1	138				246/287	\$50,000	Replace CT
09/01/06		R	520	53311	Pittsburg	53337	Wimmsboro	1	138	20			368/478	\$9,630,000	New 138 kV Line
06/01/06		R	524	54972	Renb	54980	Sunny Lane	1	69				101/101	\$100,000	Replace Wave Trap and CT - new limit 1200A
06/01/06		R	524	55298	Van Buren AVEC	55336	VBI	1	69				134/143	\$50,000	Trap & CTR work increase to 1200A.
06/01/06		R	524	54855	Richards Tap	54862	Richards	1	138		4		268/308	\$1,000,000	New 138 kV line
06/01/06		R	524	55157	Brown	55153	Explorer Tap	1	138				133/143	\$25,000	Increase CTR ratio at OGE Brown substation to 600A.
12/31/06		R	524	54769	NE Enid	54734	Glenwood	1	138		6		268/287	\$3,732,000	Part of a long term project per K Study 5140.3 to enhance the transmission system in Enid, OK. This is the last phase of the project.
12/31/06		R	524	55331	Razorback	55312	Short Mountain	1	69		14		134/143	\$4,791,277	New 69(161)kV transmission line from Razorback to Short Mountain
06/01/06		R	526	51241	Bailey Co	51242	Bailey Co	1	115/69				84/84	\$2,200,000	Upgrade both existing transformer
06/01/06		R	526	51241	Bailey Co	51242	Bailey Co	2	115/69				84/84	\$1,250,000	Upgrade both existing transformer
06/01/06	06/01/07	R	526	51315	Kress	51316	Kress	2	115/69				84/84	\$1,250,000	Upgrade #2 Transformer
06/01/06		R	526	51959	Denver City	51960	Denver City	1	115/69				84/84	\$2,200,000	Upgrade both existing transformer
06/01/06		R	526	51959	Denver City	51962	Denver City	2	115/69				84/84	\$2,200,000	Upgrade both existing transformer
12/01/06		R	526	51597	Hockley	51598	Hockley	1	115/69				84/96	\$2,750,000	Upgrade both existing transformer
12/01/06		R	526	51597	Hockley	51598	Hockley	2	115/69				84/96	\$2,750,000	Upgrade both existing transformer
03/01/06		R	536	57505	Cities Service	57527	3rd & VanBuren	1	69	0			41 / 41	\$1,700,000	Tear down / Rebuild 3.18-mile line using 795 kcmil ACSR; Project is part of a long range plan to correct service issues in the City of Hutchinson area.
04/01/06		R	536	57413	Circle	57419	Hutchinson Energy Center	1	115	0			223/245	\$300,000	Tear down / Rebuild 0.40-mile line replacing 556.5 kcmil ACSR with 1192.5 kcmil ACSR; Project is part of a long range plan to correct service issues in the City of Hutchinson area
05/18/06		R	536	57478	Midwest Solvent Junction 1	57473	Atchison Junction 2	1	69	0,7			/108	\$35,000	Rebuild
08/01/06		R	536	57583	Butler	56987	Butler	2	138/69				100/110	\$1,600,000	Transformer will now be installed at Butler substation instead of Midian See email from Don Taylor 10/28/05
07/19/06		R	536	56863	Morris	56862	McDowell	1	230			28	363/363	\$7,224,000	Convert Morris County - McDowell Creek line to 230 kV operation; Construct McDowell Creek 230 kV substation and install 280 MVA 230-115 kV transformer; 230 kV ring bus substation work required at Morris County.
07/19/06		R	536	56862	McDowell	57335	McDowell	1	230/115				280/308	\$7,224,000	Convert Morris County - McDowell Creek line to 230 kV operation; Construct McDowell Creek 230 kV substation and install 280 MVA 230-115 kV transformer; 230 kV ring bus substation work required at Morris County.
12/31/06		R	536	57512	43rd & Lorraine	57524	Tower 33	1	69	2,47			72/72	\$2,400,000	Tear down / rebuild 5.20-mile 69 kV line as 115 kV. 69 kV system in Hutchinson will be converted to 115 kV by fall 2008.
12/31/06		R	536	57513	HEC	57512	43rd & Lorraine	1	69	2,7			72/72	\$2,400,000	Tear down / rebuild 5.20-mile 69 kV line as 115 kV. 69 kV system in Hutchinson will be converted to 115 kV by fall 2008.
06/01/06		R	540	57978	Craig				161				/	\$75,000	New interconnection with AECI at Craig 69 kV
10/01/06		R	540	59308	Nevada 161	59307	Nevada Plant	1	69	2			114/122	\$536,000	New Nevada Configuration - Appleton City now terminates in Nevada 161/69, new double circuit down to Nevada Plant
12/01/06		R	541	58035	Tomahawk	57992	Bendix	1	161	2			293/335	\$528,600	reconductor line with 1192 acsr
Year 2007															
05/01/07	06/01/07	R	520	53176	Tontitown	53170	Tontitown	1	345/161				675/675	\$4,278,100	Install new 345/161 kV Auto and install terminal equipment at Tontitown
05/01/07		R	520	53158	Siloam Springs	53154	Chamber Springs	1	161		8		429/597	\$6,627,225	New 161 line. Terminal equipment at Chamber Spring and Siloam Springs
05/01/07		R	520	53446	South Shreveport	53455	SW Shreveport	1	138				246/246	\$130,000	Replace wavetrapp at South Shreveport
	06/01/07	R	520	54122	Elk City	55897	Elk City	1	69				72/72	\$100,000	Replace CTS & jumpers. Limits on AEP end will be 600A switches and Breaker
	06/01/07	R	520	54126	Ponter Hill	54150	Elgin Junction	1	69				73/85	\$200,000	Replace Switches & reset CT @ Elgin Jct. Replace switches @ Ponter Hill. \$200,000 12 month lead time
06/01/07		R	520	53154	Chamber Springs 161 kV	53170	Tontitown 161 kV	1	161	11,7			378/490	\$4,000,000	Reconductor 666 ACSR (11.6 miles) and 1272 ACSR (1 mile) to Drake ACCC (2156 ACSR section 0.6 miles is not replaced)
06/01/08	06/01/07	R	520	53300	Northwest Texarkana	53245	Alumax Tap	1	138	2			362/424	\$1,750,000	Rebuild 2.0 miles of 1024 ACAR with 1590 ACSR, Replace wavetrapp & jumpers with 2156 ACSR. Replace Switch 2285 @ Alumax Tap.
06/01/07		R	520	53774	53rd & Garnett N. Tap	53823	Tulsa Southeast	1	138				287/287	\$63,000	Replace 3 switches
12/01/07		R	520	53337	Wimmsboro	53581	North Minneola	1	138		25		368/478	\$9,056,000	New 138 kV Line
06/01/07		R	523	54504	Stilwell	54521	Stilwell City	1	161/69				70/78	\$1,800,000	Install 161/69kV autotransformer at Stilwell
06/30/07		R	524	54862	Richards	54864	Piedmont	1	138		5		268/308	\$3,800,000	New 138kV line from Piedmont to Richards
06/30/07		R	524	55011	Stilwell	55009	McElroy	1	138	2			478/478	\$800,000	Reconductor 1.91 miles of 477AS33 to 795AS33
	12/01/07	R	525	55929	Bradley 69 kV	56041	Rush Springs 69 kV	1	69	6,9			81/106	\$1,658,000	Reconductor 6.9 miles from 110 ACSR to 795 ACSR. RateA=81MVA, RateB=106MVA
	12/01/07	R	525	55898	Elmore 69 kV	56087	Walville 69 kV	1	69	6,2			47/61	\$1,488,000	Reconductor 6.2 miles from 110 ACSR to 336 ACSR. RateA=47MVA, RateB=61MVA
	06/01/07	R	525	55802	ACME 69 kV	56095	W Norman 69 kV	1	69	3,8			81/106	\$912,000	Reconductor 3.8 miles from 310 ACSR to 795 ACSR. RateA=81MVA, RateB=106MVA
06/01/07		R	526	51829	Terry Co	51830	Terry Co	1	115/69				84/84	\$2,375,000	Upgrade both existing transformer
06/01/07		R	526	51829	Terry Co	51830	Terry Co	2	115/69				84/84	\$2,375,000	Upgrade both existing transformer
	06/01/07	R	526	52310	Carlsbad Interchange 115 kV	52309	Carlsbad Interchange 69 kV	1	115/69				84/96	\$2,750,000	Upgrade 115/69 kV transformer.
	06/01/07	R	526	52310	Carlsbad Interchange 115 kV	52309	Carlsbad Interchange 69 kV	2	115/69				84/96	\$2,750,000	Upgrade 115/69 kV transformer
	06/01/07	R	526	51563	Crosby County Interchange 69 kV	51564	Crosby County Interchange 115 kV	3	115/69				84/96	\$1,000,000	Add third transformer from spare stock
	06/01/07	R	526	51175	Curry County Interchange 69 kV	51176	Curry County Interchange 115 kV	3	115/69				40/46	\$1,000,000	Add third transformer from spare stock
	06/01/07	R	526	52029	Gaines County Interchange 69 kV	52030	Gaines County Interchange 115 kV	1	115/69				84/84	\$2,750,000	Replace both gaines transformers with 84 MVA xf
	06/01/07	R	526	52029	Gaines County Interchange 69 kV	52030	Gaines County Interchange 115 kV	2	115/69				84/84	\$2,750,000	Replace both gaines transformers with 84 MVA xf
12/01/07		R	526	51401	Hale Co	51402	Hale Co	1	115/69				84/96	\$2,900,000	Upgrade both existing transformer
12/01/07		R	526	51401	Hale Co	51402	Hale Co	2	115/69				84/96	\$2,900,000	Upgrade both existing transformer
	06/01/07	R	536	57733	Gatz	57735	Golden Plain Tap	1	69	1,72			72/72	\$590,000	Rebuild Gatz - Golden Plain Tap 69 kV line.
	06/01/07	R	536	57737	Hesston	57735	Golden Plain Tap	1	69	3,61			72/72	\$1,250,000	Rebuild Hesston - Golden Plain Tap 69 kV line.
	06/01/07	R	536	57165	HTI Junction	57152	Circleville	1	115	1,1			223/245	\$2,360,000	Rebuild 115 kV line
	06/01/07	R	539	58771	Greensburg	58764	JUDSON LARGE	1	115				121/130	\$148,000	Replace relays (upgrade protection system)
06/01/07		R	541	57969	Stilwell	58050	Antioch	1	161	4			558/558	\$892,600	Reconductor 161kV line
06/01/07		R	544	59500	ReinMiller	59472	Tipton Ford	1	161		4		/	\$3,215,000	Install new 161 kV line from 292 to 393 Build 4.2 miles Terminal at both
Year 2008															
06/01/08	06/01/07	R	520	53155	Chamber Springs	53176	Tontitown	1	345		14		1011/1176	\$14,405,000	Install new 345 kV line . ROW and terminal equipment at Chamber Springs
06/01/08	06/01/08	R	520	53138	Fayetteville	53146	N Fayetteville	1	161			3,95	429/597	\$1,161,000	Convert 69 kV line to 161 kV

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06/01/08	06/01/08	R	520	53146	N Fayetteville	53166	Carly Road	1	161			5.95	354/413	\$21,000,000	Convert 69 kV line to 161 kV
06/01/08	06/01/08	R	520	53166	Carly Road	53131	Dyess	1	161				354/413		Convert 69 kV line to 161 kV
06/01/08	06/01/08	R	520	53157	S Fayetteville	53138	Fayetteville	1	161			1.98	354/413		Convert 69 kV line to 161 kV
06/01/08	06/01/08	R	520	53249	Barn	53269	Kings Highway	1	69				90/105	\$50,000	Replace Switch in King Hwy substation
06/01/08	06/01/08	R	524	54996	Etowah	55052	Tribbey	1	69				52/66	\$1,900,000	Close NO switch of Etowah-Tribbey by rebuilding Etowah and installing 69kV breakers. NOTE: Overloads Midwest - Franklin so it must take place after the Midwest - Franklin project is complete
06/01/08	06/01/08	R	525	54167	Sayre	56001	Morewood	1	138		15	75	81/106	\$12,000,000	Build new 138 kV line Sayre to Erick. Convert voltage for Erick-Sweetwater-Durham-Brantley-Morewood-SWo 138 kV. Add Sayre PSO interconnect at 138 kV
06/01/08	06/01/07	R	526	51687	Lubbock East	51688	Lubbock East	1	115/69				84/96	\$2,750,000	Upgrade both existing transformer
06/01/08	06/01/08	R	526	51966	Mustang Station N. 115 kV	51969	Mustang Station 230 kV	2	230/115				252/289	\$3,000,000	Upgrade Transformer 230/115 kV 252/289 MVA
06/01/08	06/01/07	R	526	51687	Lubbock East	51688	Lubbock East	2	115/69				84/96		Upgrade both existing transformer
07/01/07	06/01/08	R	536	57795	Murry Gill Energy Center	57813	MacArthur	1	69				80/80	\$143,000	Replace bus, jumpers and disconnect switches at MacArthur 69 kV substation to increase line capacity to conductor rating
06/01/08	06/01/08	R	536	57683	Coffeyville	57685	CRA	1	69	0.58			116/128	\$250,000	Rebuild Coffeyville - CRA 69 kV line.
06/01/08	06/01/08	R	536	57688	Dearing	57683	Coffeyville	1	69	1.13			116/116	\$390,000	Rebuild Dearing - Coffeyville 69 kV line.
12/31/08	06/01/08	R	536	57419	HEC	57440	43rd & Lorraine	1	115			2.7	223/245		Convert the HEC - 43rd&Lorraine - Tower 33 - Meadowlark - 3rd&VanBuren 69 kV to 115 kV
12/31/08	06/01/08	R	536	57440	43rd & Lorraine	57455	Tower 33	1	115			2.5	223/245		Convert the HEC - 43rd&Lorraine - Tower 33 - Meadowlark - 3rd&VanBuren 69 kV to 115 kV
12/31/08	06/01/08	R	536	57455	Tower 33	57441	Meadowlark	1	115			1.0	68/68		Convert the HEC - 43rd&Lorraine - Tower 33 - Meadowlark - 3rd&VanBuren 69 kV to 115 kV
12/31/08	06/01/08	R	536	57455	Tower 33	57441	Meadowlark	2	115			1.0	141/141		Convert the HEC - 43rd&Lorraine - Tower 33 - Meadowlark - 3rd&VanBuren 69 kV to 115 kV
12/31/08	06/01/08	R	536	57441	Meadowlark	57435	3rd & VanBuren	1	115			2.2	68/68		Convert the HEC - 43rd&Lorraine - Tower 33 - Meadowlark - 3rd&VanBuren 69 kV to 115 kV
12/31/08	06/01/08	R	536	57441	Meadowlark	57435	3rd & VanBuren	2	115			2.2	118/118		Convert the HEC - 43rd&Lorraine - Tower 33 - Meadowlark - 3rd&VanBuren 69 kV to 115 kV
06/01/08	06/01/08	R	544	59541	SUB 167 - RIVERTON	59602	SUB 406 - RIVERTON SOUTH	1	69				54/65	\$20,000	Change Relay Settings and change jumpers on switch at Riverton Sub #406
06/01/08	06/01/10	R	544	59621	Ozarks	59442	Ozark South	1	161/69				100/100		Build 161 kV line from AECI's Riverdale substation to a new substation at Ozark. Install a 100 MVA 161/69 Auto-xfmr in the Ozark substation. Split the 69 kV line from Forsyth to Ozark #434 at this new substation. Project requires 30 month lead time
06/01/08	06/01/10	R	544	96726	Riverdale Sub	59621	Ozarks	1	161		8		218/268	\$14,057,000	Build 161 kV line from AECI's Riverdale substation to a new substation at Ozark. Install a 100 MVA 161/69 Auto-xfmr in the Ozark substation. Split the 69 kV line from Forsyth to Ozark #434 at this new substation. Project requires 30 month lead time
06/01/08	06/01/10	R	544	59570	Sub 330 - Ozark Northwest	59609	Sub 434 - Ozark Southeast	1	69		3		73/89		Build 161 kV line from AECI's Riverdale substation to a new substation at Ozark. Install a 100 MVA 161/69 Auto-xfmr in the Ozark substation. Split the 69 kV line from Forsyth to Ozark #434 at this new substation. Project requires 30 month lead time
06/01/08	06/01/10	R	544	59609	Sub 434 - Ozark Southeast	59442	Ozark South	1	69		1.5		89/106		Build 161 kV line from AECI's Riverdale substation to a new substation at Ozark. Install a 100 MVA 161/69 Auto-xfmr in the Ozark substation. Split the 69 kV line from Forsyth to Ozark #434 at this new substation. Project requires 30 month lead time
Year 2009															
06/01/09	10/01/07	R	524	54887	WESTMOORE 138	54925	PENNSYLVANIA 138	1	138				268/308	\$250,000	Replace the disconnect switches for breaker 108 at Pennsylvania Substation. Replace the 1200A trap. Increase CTR. Re
09/01/09	06/01/08	R	526	51709	Cochran	51710	Cochran	1	115/69				84/84	\$2,750,000	Upgrade both existing transformer
09/01/09	06/01/08	R	526	51709	Cochran	51710	Cochran	2	115/69				84/84		Upgrade both existing transformer
06/30/09	06/01/08	R	531	56562	Hays Plant	56562	Vine Street	1	115	0.3					Reconductor Line
06/30/09	06/01/08	R	531	56561	KNOLL 115	56591	VINE STREET	1	115		2.7		/	\$536,000	Tap Vine-Knoll 115 kV Line
06/30/09	06/01/08	R	531	56553	S. Hays	56562	Hays Plant	1	115	3.25					Reconductor Line
07/01/09	06/01/07	R	536	57268	Stranger Creek	57272	Thornton	1	115		7		223/245	\$2,500,000	New 115 kV Line from Stranger Creek (57268) to Thornton Street (57272).
07/01/09	06/01/07	R	536	57153	County Line	57456	County Line	1	115/69				112/123	\$1,700,000	Replace existing 66 MVA 115-69 kV transformer with 112 MVA unit
06/01/09	06/01/07	R	540	59255	Lake Road 161 KV	59256	Industrial Park 161 KV	1	161		1		292/356	\$250,000	Replace existing structures to allow for higher rating
Year 2010															
06/01/10	06/01/08	R	526	51094	NE Hereford	51095	NE Hereford	2	115/69				84/84	\$1,750,000	Add second 115/69 kV transformer
12/01/10	06/01/07	R	526	52153	Artesia	52154	Artesia	1	115/69				84/96	\$2,750,000	Upgrade both existing transformer
12/01/10	06/01/07	R	526	52153	Artesia	52154	Artesia	2	115/69				84/96		Upgrade both existing transformer
06/01/10	06/01/08	R	540	59205	Blue Springs East 161 KV	59325	Duncan Road 161 KV	1	161		2.5		446/558	\$1,605,500	Upgrade to conductor Bundled Drake
Year 2011															
Year 2012															
Year 2013															
Year 2015															
Year 2016															

In-Service Date	2006 Expansion Plan Date	Project Type Exp	SPP Area	Device Type	SPP MDWG Bus Number	Location	Voltage	Total Rating	Cost Estimate	Project Description
Year 2006										
06/01/06		R	520	Cap Bank	53386	Arsenal Hill	138	50.4 Mvar	\$432,000	Install switched capacitor bank
06/01/06		R	520	Cap Bank	53802	Catoosa	138	57.6 Mvar	\$394,000	Install switched capacitor bank
06/01/06		R	525	Cap Bank	56041	Rush Spring 69 kV	69	3 Mvar	\$90,000	Install switched cap
02/02/06		R	536	Cap Bank	57767	Mulbery	69	9.6 Mvar	\$390,000	Install switched capacitor bank
12/31/06		R	536	Cap Bank	57036	Clearwater	138	15 Mvar	\$1,000,000	Install switched capacitor bank at the new Clearwater 138 kV substation
12/31/06		R	536	Cap Bank	57559	UDALL 2	69	10 Mvar	\$525,000	Install switched capacitor bank
09/01/06		R	539	Cap Bank	58786	Plainville	115	8 Mvar	\$3,000,000	8Mvar Statcom at 34.5 kV bus
Year 2007										
	06/01/07	R	520	Cap Bank	53728	Broken Arrow Water	69	6 Mvar	\$550,000	Install 6 MVA Cap at Broken Arrow water 6 MVAR
	06/01/07	R	520	Cap Bank	54128	Hobart	69	4.8 Mvar	\$550,000	Install 4.8 MVAR cap at Hobart 54128
	04/01/07	R	525	Cap Bank	56051	Snyder	69	24 Mvar	\$100,000	Upgrade 12 Mvar cap bank at Snyder to 24Mvar
	04/01/07	R	525	Cap Bank	56028	Pink Southwest	138	6 Mvar	\$216,000	Install 6 MVAR capacitor at Pink Southwest 138 kV bus
	06/01/07	R	525	Cap Bank	55864	Comanche	138	12 Mvar	\$350,000	Install 12 MVAR Capacitor at Comanche 138 kV bus
	06/01/07	R	525	Cap Bank	55847	Cashion	69	6 Mvar	\$108,000	Install 2 - 3 MVAR capacitors at Cashion 69 kV bus
	06/01/07	R	526	Cap Bank	51952	San Andress Sub	115	14.4 Mvar	\$750,000	Install 1 - 14.4 Mvar cap bank on the 115 kV bus at San Andress
06/01/07	06/01/07	R	536	Cap Bank	57005	NE Parsons	138	30 Mvar	\$1,000,000	Install switched capacitor bank
	06/01/07	R	536	Cap Bank	57481	Nortonville	69	15 Mvar	\$564,000	Install 15 Mvar cap at Nortonville 69 kV (bus #57481)
07/01/07	06/01/07	R	536	Cap Bank	57704	Parsons	69	10 Mvar	\$525,000	Install switched capacitor bank
06/01/07		R	541	Cap Bank	58063	S. Waverly 161 kV	161	15 Mvar	\$611,000	Install 15 Mvar capacitor at S. Waverly 161 kV bus.
Year 2008										
	06/01/08	R	526	Cap Bank	50819	Bowers	69	14.4 Mvar	\$300,000	INSTALL 14.4 MVAR CAP BOWERS 69 KV
06/30/08	06/01/07	R	536	Cap Bank	57844	Sunset	69	10 Mvar	\$525,000	Install 10 Mvar cap at Sunset 69 kV (bus # 57844)
Year 2009										
Year 2010										
07/01/10	06/01/08	R	536	Cap Bank	57435	3rd & VanBuren	115	17 Mvar	\$500,000	Install switched capacitor bank
Year 2011										
Year 2012										
Year 2013										
Year 2014										
Year 2015										
Year 2016										