

2016 SPP Transmission Expansion Plan Project List
Kansas Projects

Facility Owner	2016 Project Type	Cost Estimate	Upgrade Description	TO Projected In-Service Date	RTO Determined Need Date	STEP Date	Voltage (kV)	New Miles
WR	Zonal Reliability	\$9,308,090	Build 6.7-mile Clay Center Switching Station to TC Riley 115 kV line	6/1/2018	10/1/2012		115	6.7
WR	Zonal Reliability	\$963,441	Install a 2000 Amp bus system, GOAB switches, metering and communication systems.	6/1/2018	10/1/2012		115	
WR	ITP	\$767,165	Install 9.6 Mvar capacitor bank at Potwin 69 kV bus.	6/1/2018	6/1/2013	6/1/2013	69	
WR	Regional Reliability	\$6,278,731	Rebuild 2.65-mile 69 kV line from Westlink to Tyler with terminal equipment.	12/31/2015	6/1/2014	6/1/2015	69	
WR	ITP	\$20,530,196	Build new Geary County 345/115 kV substation south of Junction City	6/1/2018	6/1/2014	6/1/2014	345/115	
WR	ITP	\$27,938,225	Build new 15.1-mile 115kV line between the new Geary County substation and Chapman Tap.	6/1/2018	6/1/2014	6/1/2014	115	4.67
WR	ITP	\$16,190,561	Install 345 kV ring bus at the new Geary County substation.	6/1/2017	6/1/2014	6/1/2014	345	
WR	ITP	\$6,751,197	Neosho #2 Substation Work	6/1/2016	6/1/2014	6/1/2014	138/69	
WR	ITP	\$5,226,656	Rebuild 9.06-mile 69 kV line from Wellington to Sumner County	6/1/2016	6/1/2014	6/1/2014	69	
WR	ITP	\$7,633,477	Rebuild 1.74-mile 69 kV line from Kenmar to Northeast	6/1/2017	6/1/2014	6/1/2014	69	
WR	ITP	\$734,229	Upgrade breakers and switches at Benton 138 kV substation to increase transformer rating.	6/1/2016	6/1/2015	6/1/2015	138	
WR	Regional Reliability		Install new 3-breaker ring bus at Vilda 138 kV substation.		6/1/2015	6/1/2015	138	
WR	ITP	\$1,390,166	Install 10.8-Mvar capacitor bank at Clay Center Switching Station	6/1/2018	6/1/2016	6/1/2016	115	
WR	ITP	\$58,317,000	Rebuild 27-mile 230 kV line from East Manhattan to Jeffrey Energy Center to 345 kV standards	6/1/2017	6/1/2017	6/1/2017	230	
WR	Regional Reliability	\$9,536,211	Tap the Lawrence Hill - Swissvale 230 kV line into the Baldwin Creek 115 kV substation. Install a new 230/115 kV transformer at Baldwin Creek.		6/1/2017	6/1/2017	230/115	
WR	ITP	\$66,202,442	Build new 345 kV line from the Summit substation to the ITC Great Plains, LLC interception point from the Elm Creek substation.	12/31/2016	3/1/2018	3/1/2018	345	28.46
WR	ITP	\$14,331,670	Install new 345/138 kV transformer at Viola substation.	6/1/2019	6/1/2018	6/1/2018	345/138	
WR	ITP	\$35,992,903	Build new 21.8-mile 138 kV line from new Viola substation to Clearwater 138 kV substation.	6/1/2019	6/1/2018	6/1/2018	138	21.8
WR	ITP	\$22,234,744	Build new 27.9-mile 138 kV line from new Viola substation to Gill 138 kV substation.	6/1/2019	6/1/2018	6/1/2018	138	27.9
WR	ITP	\$5,007,657	Install 345 kV breakers at Viola substation.	6/1/2019	6/1/2018	6/1/2018	345	
WR	ITP	\$19,943,188	Rebuild 9.7-mile 69 kV line from Elk Junction to Montgomery to achieve new emergency rating of 72 MVA.	12/1/2017	6/1/2018	6/1/2018	69	

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WR	ITP	\$23,820,104	Rebuild 18.8-mile 69 kV line from Elk Junction to Sedan to achieve new emergency rating of 72 MVA.	12/1/2018	6/1/2018	6/1/2018	69	
WR	ITP	\$28,010,000	Convert WR's portion of the existing 18.2-mile 161 kV line from Iatan to Stranger Creek to 345 kV operation.	1/1/2019	1/1/2019	1/1/2019	345	
WR	Transmission Service	\$108,694	Replace disconnect switches, wavetrap and CT	6/1/2016	6/1/2019		138	
WR	ITP	\$51,513,963	Build new 28-mile 138 kV line from Viola to Sumner County.	6/1/2020	6/1/2019	6/1/2019	138	28
WR	ITP	\$7,686,209	Rebuild 3.1-mile 115 kV line from Forbes to Underpass North		6/1/2021	6/1/2021	115	
WR	ITP	\$6,033,488	Rebuild 6.3-mile 138 kV line from Murray Gill East Energy Center to Interstate.		6/1/2024	6/1/2024	138	
WR	ITP	\$9,974,068	Add four (4) new 345 kV terminals to the Moundridge substation,		6/1/2024	6/1/2024	345	
WR	ITP	\$4,389,083	Install a new 345/138 kV transformer at at Moundridge.		6/1/2024	6/1/2024	345/138	
WR	ITP	\$12,600,000	Install new 345/115 kV transformer at Auburn.		1/1/2033	1/1/2033	345/115	
WR	ITP	\$11,839,190	Rebuild Westar portion of the Clearwater-Milan tap 115 kV with bundled 1192.5 kcmil ACSR conductor (Bunting)			3/1/2022	138	
WR	ITP	\$11,501,055	Tear down/rebuild 12.3 mile Abilene East - Chapman 115 kV line as single circuit with bundled 1192 ACSR conductor.			6/1/2022	115	
WR	ITP	\$3,806,178	Tear down/rebuild Abilene East - Abilene Energy Center 115 kV			6/1/2022	115	
WR	ITP	\$19,949,242	Tear down/rebuild Abilene Energy Center - Northview 115 kV			6/1/2022	115	
WR	ITP	\$5,131,249	Tear down/rebuild North Street - Northview 115 kV			6/1/2022	115	
WR	ITP	\$6,519,500	Build six miles of 345 kV Circle - Reno and associated terminal equipment			1/1/2030	345	6
WR	ITP	\$6,000,000	Install new 345/230 kV 448 MVA Circle Transformer			1/1/2030	345/230	
WR	ITP	\$54,000,000	Build 40 miles of 345 kV Wichita-Viola.			1/1/2030	345	40
WR	ITP	\$54,000,000	Build 40 miles of 345 kV Viola-Rose Hill.			1/1/2030	345	40
WR	Regional Reliability	\$6,564,395	Rebuild 3.54-mile 69 kV line between Allen and Ena.			6/1/2015	69	
WR	Regional Reliability	\$8,030,484	Rebuild 8.6-mile 69 kV line between Coal Creek and Tioga.			6/1/2015	69	
WR	ITP	\$14,363,150	Tap the Reno county - Wichita 345kV line into Moundridge.				345	15.11

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WR	ITP		Install a 345/138kv transformer at Moundridge.				345/138	
TBD	ITP	\$117,126,900	Build new 99 mile 345 kV line from Neosho to Wolf Creek and associated terminal equipment.		1/1/2033	1/1/2033	345	99
TBD	ITP	\$20,112,700	Convert 17 mile Auburn - Swissvale 230 kV line to a 345 kV line.		1/1/2033	1/1/2033	345	
TBD	ITP	\$35,493,000	Convert the 30 mile Auburn - Jeffrey EC 230 kV to 345 kV.		1/1/2033	1/1/2033	345	
TBD	ITP	\$79,875,000	Build new 71 miles of 345 kV line Iatan - Jeffrey Energy Center			1/1/2030	345	71
TBD	ITP	\$85,840,000	Build 79 miles of 345 kV Spearville - Mullergren and associated terminal equipment			1/1/2030	345	79
TBD	ITP	\$85,840,000	Build 79 miles of 345 kV Mullergren - Circle and associated terminal equipment			1/1/2030	345	79
SPS	ITP		Install 115 kV terminal equipment at Lynn County substation necessary to replace 115/69 kV transformer.	6/1/2019	6/1/2019	6/1/2019	115	
SPS	ITP		Tap the Moundridge and Wichita 345kV line into Moundridge bus.				345	28.05
SPS	ITP	\$3,649,492	New Switch at Highland Park Substation 115kV.				115	
SEPC	ITP	\$7,155,709	Install a second 345/115 kV transformer at Mingo.	6/1/2016	6/1/2015	6/1/2015	345/115	
SEPC	ITP	\$767,645	Construct new 1-mile 115 kV line from Walkemeyer to the new Stevens Co. substation.	6/1/2018	6/1/2015	6/1/2015	115	1
SEPC	ITP	\$5,668,987	Install 115 kV terminal equipment at the existing Walkemeyer substation	6/1/2018	6/1/2015	6/1/2015	115	
SEPC	Regional Reliability	\$11,695,379	Install new 345/115 kV transformer at the new Stevens Co. substation.	6/1/2018	6/1/2015	6/1/2015	345/115	
SEPC	ITP	\$1,909,424	Install one (1) 14.4-MVAR capacitor bank at Ellsworth 115 kV substation.	6/1/2019	6/1/2019	6/1/2019	115	
SEPC	ITP	\$12,600,000	Install 2nd 345/115 kV transformer at Holcomb.		1/1/2033	1/1/2033	345/115	
SEPC	Regional Reliability		Install new 138/115 kV 250 MVA transformer at Hazelton substation.			6/1/2023	138/115	
SEPC	ITP	\$674,700	Upgrade Capacitor banks at Mingo 115kV station to 12MVar.				115	
SEPC	ITP		Upgrade capacitor banks at Mingo substation to 48MVar.				115	
SEPC	ITP		Upgrade capacitor banks at Ross Beach 115kV substation to 18MVar.				115	
SEPC	Generation Interconnection	\$4,000,000	At the Buckner Substation: Add structural steel, switches, and all associated terminal equipment required.	10/15/2017			345	

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SEPC	Generation Interconnection	\$8,200,000	Buckner Substation: Add a third 345kV breaker and a half leg to the ring bus.	10/15/2017			345	
MKEC	High Priority	\$12,790,167	Construct new 15-mile 138 kV line from Harper to new Rago substation.	12/31/2017	6/1/2015	6/1/2015	138	15
MKEC	High Priority	\$10,506,358	Construct new 8-mile 138 kV line from Anthony to Bluff City.	2/18/2018	6/1/2015	6/1/2015	138	8
MKEC	High Priority	\$12,377,785	Construct new 46-mile 138 kV line from Bluff City to Caldwell.	2/18/2018	6/1/2015	6/1/2015	138	18
MKEC	High Priority	\$8,939,236	Construct new 16-mile 138 kV line from Caldwell to Mayfield.	2/18/2018	6/1/2015	6/1/2015	138	13
MKEC	High Priority	\$11,441,814	Construct a new 3-way switch at Milan. Construct new 5-mile 138 kV line from Mayfield to new switch at Milan.	2/18/2018	6/1/2015	6/1/2015	138	5
MKEC	Regional Reliability		Install new 3-breaker ring bus at Vilda 138 kV substation.		6/1/2015	6/1/2015	138	
MKEC	High Priority	\$12,838,896	Construct new 21-mile 138 kV line from Anthony to Harper.	2/18/2018	6/1/2018	6/1/2018	138	15.5
MKEC	ITP	\$6,908,748	Install any 115 kV terminal equipment at the existing North Liberal substation	6/1/2019	6/1/2019	6/1/2019	115	
MKEC	ITP	\$2,501,569	Rebuild MKEC portion of the 5.6 mile Clearwater-Milan Tap 115 kV		3/1/2022	3/1/2022	138	
MKEC	ITP	\$9,613,332	Reconductor 22.1 mile Harper to Milan Tap 138 kV line.			3/1/2020	138	
MIDW	ITP	\$8,922,219	Rebuild 3.25-mile 115 kV line from Hays Plant to South Hays.	6/1/2016	6/1/2013	6/1/2013	115	
MIDW	High Priority	\$4,477,251	Tap existing 115 kV line from Kanarado (Sunflower) to Sharon Springs.	7/2/2016	6/1/2015	6/1/2015	115	
MIDW	High Priority	\$2,443,469	Build new 5-mile 115 kV line from Midwest Pump to the new Midwest Pump Tap substation.	7/2/2016	6/1/2015	6/1/2015	115	6
MIDW	Generation Interconnection	\$457,882	69 kV line terminal construction.	10/14/2015			69	
MIDW	Generation Interconnection	\$231,564	Nekoma 115/69 kV Substation: Replace 115kV circuit switchers 3809 and 3810.	7/29/2016			115	
KCPL	ITP	\$2,000,000	Replace existing 161/69 kV transformer at South Waverly to increase the rating.	6/1/2016	6/1/2015	6/1/2015	161/69	
KCPL	ITP	\$280,000	Install 161 kV terminal upgrades at South Waverly	6/1/2016	6/1/2015	6/1/2015	161/69	
KCPL	ITP	\$3,263,000	Install any terminal upgrades required at Iatan to convert existing 18.2-mile 161 kV line from Iatan to Stranger Creek to 345 kV operation.	1/1/2019	1/1/2019	1/1/2019	345	
ITCGP	ITP	\$32,955,766	Build new 345 kV line from the Elm Creek substation to the Westar Energy, Inc. interception point from the Summit substation.	3/1/2018	3/1/2018	3/1/2018	345	29.77
ITCGP	ITP	\$5,544,361	Install new 345/230 kV transformer at Elm Creek.	12/31/2016	3/1/2018	3/1/2018	345/230	

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ITCGP	ITP	\$12,764,589	Install terminal equipment on the 345 kV side of the Elm Creek substation.	12/31/2016	3/1/2018	3/1/2018	345	
ITCGP	ITP	\$1,347,271	Install terminal equipment on the 230 kV side of the Elm Creek substation.	12/31/2016	3/1/2018	3/1/2018	230	
ITCGP	ITP	\$6,000,000	Install second 345/230 kV 448 MVA Post Rock Transformer			1/1/2030	345/230	
ITCGP	Generation Interconnection	\$1,138,472	Install one (1) 345 kV, 3000 Amp breaker, line relaying, disconnect switches, and associated equipment.	10/7/2016			345	
ITCGP	Generation Interconnection	\$2,607,257	Clark County 345kV Substation - Add one (1) 345kV breaker and a half leg to the ring.	10/7/2016			345	
	TOTALS	\$1,334,077,942						