



# **SPP** *Southwest Power Pool*

***System Impact Study SPP-2002-075  
For Transmission Service***

***Requested By  
PG&E Energy Trading***

***From WPEK To OKGE***

***For a Reserved Amount Of 105MW  
From 6/1/2003  
To 6/1/2018***

***SPP Coordinated Planning***

## **System Impact Study**

PG&E Energy Trading (PGET) has requested a system impact study for long-term Firm Point-to-Point transmission service from WPEK to OKGE. The period of the transaction is from 6/1/2003 to 6/1/2018. The request is for OASIS reservation 343660 for an amount of 105 MW.

The principal objective of this study is to identify constraints on the SPP Regional Tariff System and potential facility upgrades that may be necessary to facilitate the additional 105 MW of service requested.

The WPEK to OKGE transfer was studied to determine the facility upgrades required based on the actual queue position of the request with only those higher priority requests in Facility Study mode included in the models. Higher priority requests still in study that have not gone to facility study were not included in the models. These results are documented in Table 1 of the report. The results given in Table 1 include upgrades that may be assigned to higher priority requests. The results of this study give the customer an estimated cost of facility upgrades that may be required in order to accommodate the 105 MW WPEK to OKGE transfer.

SPP used eight seasonal models to study the WPEK to OKGE 105 MW transfer for the requested service period. The SPP 2002 Series Cases 2003 Summer Peak, 2003 Fall Peak, 2003/2004 Winter Peak, 2004 Spring Peak, 2005 Summer Peak, 2005/06 Winter Peak, 2008 Summer Peak and 2008/2009 Winter Peak were used to study the impact of the 100 MW transfer on the SPP system during the requested service period of 6/1/2003 to 6/1/2018. The Spring Peak models apply to April and May, the Summer Peak models apply to June through September, the Fall Peak models apply to October and November, and the Winter Peak models apply to December through March. The chosen base case models were modified to reflect the most current modeling information. The cases were modified to reflect firm transfers during the requested service period that were not already included in the January 2002 base case series models.

With only the higher priority requests that have signed Facility Study Agreements included in the models, the study results of the WPEK to OKGE 105 MW show that limiting constraints exist. Due to the number of limiting constraints identified, the Transmission Service Request cannot be granted. These results do not include an evaluation of potential constraints in the planning horizon beyond the reservation period that may limit the right to renew service. The upgrades and cost provided in the System Impact Study are planning estimates only. The final ATC and upgrades required may vary from these results due to the status of higher priority requests, unknown facility upgrades that will be identified during the facility study process, and the final results of the full AC analysis. Execution of a Facility Study Agreement is now required to maintain queue position. The final upgrade solutions and cost assignments will be determined upon the completion of the facility study.

**Table 1 – SPP facility upgrades identified for the WPEK to OKGE transfer**

Study Year	From Area - To Area	Branch Over 100% Rate B	Rate B	Outaged Branch Causing Overload	ATC	Solution	Estimated Cos
03SP	WERE-WERE	166Th Street - Jarbalo Jct Swi Sta. 115kV	97	Midland Jct - Pentagon 115kV	0	May be relieved due to Westar Transmission Operating Directive 1202	Not Available
03SP	WERE-WERE	Auburn Road - Jeffrey Energy Center 230kV	565	Hoyt - Jeffery Energy Center 345kV	0	May be relieved due to Westar Transmission Operating Directive 400	Not Available
03SP	WERE-WERE	Auburn Road - South Gage (West) 115kV	75	Hoyt - Jeffery Energy Center 345kV	0	May be relieved due to Westar Transmission Operating Directive 400	Not Available
03SP	WERE-WERE	Auburn Road - South Gage (West) 115kV ckt 2	97	Hoyt - Jeffery Energy Center 345kV Ckt 1	0	May be relieved due to Westar Transmission Operating Directive 400	Not Available
03SP	WERE-WERE	County Line - Hook Jct 115kV	92	Tecumseh Energy Center - Tecumseh Hill 115kV	0	Solution Undetermined	Not Available
03SP	AEPW-AEPW	Denver East 138/13.8kV Transformer	33	Carson South - Kenosha West 138kV	0	Solution Undetermined	Not Available
03SP	AEPW-AEPW	Denver-West 138/13.8kV Transformer	33	Tulsa North - 46Th Street East 138kV	0	Solution Undetermined	Not Available
03SP	OKGE-OKGE	Draper Lake 138/345kV Transformer ckt 1	493	Draper Lake 138/345kV Transformer Ckt 2	0	May be relieved due to OKGE Operating Guide	Not Available
03SP	OKGE-OKGE	Draper Lake 138/345kV Transformer ckt 2	493	Draper Lake 138/345kV Transformer Ckt 1	0	May be relieved due to OKGE Operating Guide	Not Available
03SP	AEPW-AEPW	Dyess - East Rogers 161kV	244	East Centerton - Gentry Rec 161kV	73	AEPW Planned Tontitown Project	\$
03SP	AEPW-AEPW	East Centerton - Gentry Rec 161kV	353	Dyess - East Rogers 161kV	67	Rebuild 19.16 miles of 2-397.5 ACSR with 2156 ACSR	\$ 8,000,000
03SP	AEPW-AEPW	Flint Creek - Elm Springs Rec 161kV	312	East Centerton - Gentry Rec 161kV	0	See Previous	See Previous
03SP	WERE-WERE	Gill Energy Center East - MacArthur 69kV	68	Gill Energy Center East - Oatville 69kV	0	Replace subSta. bus and jumpers at MacArthur 69 kV	\$ 22,000
03SP	WERE-WERE	Gill Energy Center East - Oatville 69kV	72	Gill Energy Center East - MacArthur 69kV	0	Replace disconnect switches at Gill 69 kV (use 800 A.), Replace line switch at Oatville 69 kV (use 800 A.)	\$ 45,000
03SP	WERE-WERE	Mockingbird Hill Swi Sta. - Stull Swi Sta. 115kV	92	Hoyt - Stranger Creek 345kV	0	May be relieved due to Westar Transmission Operating Directive 803	Not Available
03SP	MIDW-WEPL	Seward 69/115kV Transformer	44	Heizer 115/230kV Transformer	0	Solution Undetermined	Not Available
03SP	WERE-WERE	Tecumseh Energy Center - Hook Jct 115kV	160	Tecumseh Energy Center - Tecumseh Hill 115kV	0	Solution Undetermined	Not Available
03SP	WERE-WERE	Tecumseh Hill - 27Th & Croco 115kV ckt 1	68	Tecumseh Hill - 27Th & Croco 115kV Ckt 2	86	Solution Undetermined	Not Available
03SP	WERE-WERE	Tecumseh Hill - Stull Swi Sta. 115kV	92	Hoyt - Stranger Creek 345kV	0	May be relieved due to Westar Transmission Operating Directive 803	Not Available
03SP	OKGE-OKGE	Tinker #4 - Tinker #2 138kV	100	Horseshoe Lake - Midway 138kV	0	Invalid Overload	\$
03FA	WFEC-WFEC	Acme - Franklin Sw 69kV	34	Canadian Sw - Goldsby 69kV	15	Solution Undetermined	Not Available
03FA	WERE-WERE	Auburn Road - Jeffrey Energy Center 230kV	565	Hoyt - Jeffery Energy Center 345kV	0	See Previous	See Previous
03FA	WERE-WERE	Auburn Road - South Gage (West) 115kV	75	Hoyt - Jeffery Energy Center 345kV	0	See Previous	See Previous
03FA	WERE-WERE	Auburn Road - South Gage (West) 115kV ckt 2	97	Hoyt - Jeffery Energy Center 345kV Ckt 1	0	See Previous	See Previous
03FA	WERE-WERE	Coffey County No. 4 Vernon - Green 69kV	45	Wolf Creek - Lacygne 345kV	0	May be relieved due to Westar Transmission Operating Directive 1304	Not Available
03FA	WERE-WERE	El Paso - Gill Energy Center South 138kV	210	Evans Energy Ctr North - Evans Energy Ctr South 138kV	48	Solution Undetermined	Not Available
03FA	AEPW-AEPW	Flint Creek - Elm Springs Rec 161kV	312	Flint Creek - Gentry Rec 161kV	0	AEPW Planned Tontitown Project	\$
03FA	WERE-WERE	Mockingbird Hill Swi Sta. - Stull Swi Sta. 115kV	92	Hoyt - Stranger Creek 345kV	93	See Previous	See Previous
03FA	WERE-WERE	Tecumseh Hill - Stull Swi Sta. 115kV	92	Hoyt - Stranger Creek 345kV	0	See Previous	See Previous
03WP	WERE-WERE	Auburn Road - Jeffrey Energy Center 230kV	565	Hoyt - Jeffery Energy Center 345kV	0	See Previous	See Previous
03WP	WERE-WERE	Auburn Road - South Gage (West) 115kV	75	Hoyt - Jeffery Energy Center 345kV	0	See Previous	See Previous
03WP	WERE-WERE	Auburn Road - South Gage (West) 115kV ckt 2	97	Hoyt - Jeffery Energy Center 345kV Ckt 1	95	See Previous	See Previous
03WP	AEPW-AEPW	Denver East 138/13.8kV Transformer	33	Carson South - Kenosha West 138kV	0	See Previous	See Previous
03WP	AEPW-AEPW	Denver-West 138/13.8kV Transformer	33	Tulsa North - 46Th Street East 138kV	0	See Previous	See Previous

**Table 1 - continued** – SPP facility upgrades identified for the WPEK to OKGE transfer

Study Year	From Area - To Area	Branch Over 100% Rate B	Rate B	Outaged Branch Causing Overload	ATC	Solution	Estimated Cos
03WP	WFEC-WFEC	Goldsby - Oklahoma University Sw 69kV	34	Acme - Franklin Sw 69kV	64	Solution Undetermined	Not Available
03WP	WFEC-WFEC	Lexington - Paoli 69kV	34	Canadian Sw 69/138kV Transformer	0	Solution Undetermined	Not Available
03WP	WERE-WERE	Mockingbird Hill Swi Sta. - Stull Swi Sta. 115kV	92	Hoyt - Stranger Creek 345kV	14	See Previous	See Previous
03WP	WERE-WERE	Tecumseh Hill - Stull Swi Sta. 115kV	92	Hoyt - Stranger Creek 345kV	0	See Previous	See Previous
04G	WERE-WERE	Athens Swi Sta. - Coffey County No. 4 Vernon 69kV	45	Wolf Creek - Lacygne 345kV	0	May be relieved due to Westar Transmission Operating Directive 1304	Not Available
04G	WERE-WERE	Auburn Road - Jeffery Energy Center 230kV	565	Hoyt - Jeffery Energy Center 345kV	0	See Previous	See Previous
04G	WERE-WERE	Auburn Road - South Gage (West) 115kV	75	Hoyt - Jeffery Energy Center 345kV	0	See Previous	See Previous
04G	WERE-WERE	Auburn Road - South Gage (West) 115kV ckt 2	97	Hoyt - Jeffery Energy Center 345kV Ckt 1	0	See Previous	See Previous
04G	WERE-WERE	Coffey County No. 4 Vernon - Green 69kV	45	Wolf Creek - Lacygne 345kV	0	See Previous	See Previous
04G	AEPW-AEPW	Flint Creek - Tontitown 161kV	312	Flint Creek - Gentry Rec 161kV	0	Replace switch and jumpers	\$ 45,000
04G	WERE-WERE	Mockingbird Hill Swi Sta. - Stull Swi Sta. 115kV	92	Hoyt - Stranger Creek 345kV	0	See Previous	See Previous
04G	WERE-WERE	Tecumseh Hill - Stull Swi Sta. 115kV	92	Hoyt - Stranger Creek 345kV	0	See Previous	See Previous
05SP	WERE-WERE	166Th Street - Jarbalo Jct Swi Sta. 115kV	97	Midland Jct - Pentagon 115kV	0	See Previous	See Previous
05SP	WERE-WERE	Auburn Road - Jeffery Energy Center 230kV	565	Hoyt - Jeffery Energy Center 345kV	0	See Previous	See Previous
05SP	AEPW-AEPW	Broken Arrow 101St North - Oneta 138kV	210	Riverside Sta. Auto 138/345kV Transformer	0	Replace wavetrap	\$ 30,000
05SP	SWPA-EES	Carthage - Reed Springs 69kV	36	Neosho - Morgan 345kV	31	Third Party Facility	\$
05SP	WERE-WERE	Circleville - Hoyt Hti Swi Jct 115kV	97	Knob Hill - Greenleaf 115kV	0	Replace 82 structures	\$ 742,000
05SP	WERE-WERE	County Line - Hook Jct 115kV	92	Tecumseh Energy Center - Tecumseh Hill 115kV	0	See Previous	See Previous
05SP	AEPW-AEPW	Denver East 138/13.8kV Transformer	33	Carson South - Kenosha West 138kV	0	See Previous	See Previous
05SP	AEPW-AEPW	Denver-West 138/13.8kV Transformer	33	Tulsa North - 46Th Street East 138kV	0	See Previous	See Previous
05SP	OKGE-OKGE	Draper Lake 138/345kV Transformer ckt 1	493	Draper Lake 138/345kV Transformer Ckt 2	0	See Previous	See Previous
05SP	OKGE-OKGE	Draper Lake 138/345kV Transformer ckt 2	493	Draper Lake 138/345kV Transformer Ckt 1	0	See Previous	See Previous
05SP	AEPW-AEPW	Elm Springs Rec - Tontitown 161kV	306	South Fayetteville - Farmington Aecc 161kV	105	Replace Switch and Elm Springs Strain Bus	\$ 100,000
05SP	AEPW-AEPW	Flint Creek - Tontitown 161kV	312	East Centerton - Gentry Rec 161kV	0	See Previous	See Previous
05SP	WERE-WERE	Gill Energy Center East - Macarthur 69kV	68	Gill Energy Center East - Oatville 69kV	0	See Previous	See Previous
05SP	WERE-WERE	Gill Energy Center East - Oatville 69kV	72	Gill Energy Center East - Macarthur 69kV	0	See Previous	See Previous
05SP	SWPA-EES	Hergett - Jonesboro 161kV	148	Jonesboro - Jonesboro 161kV	0	Solution Undetermined	Not Available
05SP	WERE-WERE	Lawrence Hill - Wren 115kV	141	Bismark Jct Swi Sta. - Farmer's Consumer 115kV	0	May be relieved due to Westar Transmission Operating Directive 1210	Not Available
05SP	WERE-WERE	Mockingbird Hill Swi Sta. - Stull Swi Sta. 115kV	92	Hoyt - Stranger Creek 345kV	0	See Previous	See Previous
05SP	MIDW-WEPL	Seward 69/115kV Transformer	44	Heizer 115/230kV Transformer	0	See Previous	See Previous
05SP	WERE-WERE	SW Lawrence - Wakarusa Jct Swi Sta. 115kV	92	Ku Campus - 19Th Street Jct 115kV	69	Solution Undetermined	Not Available
05SP	AEPW-WFEC	SW Sta. - Anadarko 138kV	203	Midwest Tap - Franklin Sw 138kV	0	Replace bus, jumpers, switches, supports and foundations at Anadarko Switch Sta.	\$ 450,000
05SP	SWPA-SPRM	Springfield - Brookline 161kV	323	Jct - Brookline 161kV	0	Solution Undetermined	Not Available

**Table 1 - continued** – SPP facility upgrades identified for the WPEK to OKGE transfer

Study Year	From Area - To Area	Branch Over 100% Rate B	Rate B	Outaged Branch Causing Overload	ATC	Solution	Estimated Cos
05SP	WERE-WERE	Tecumseh Energy Center - Hook Jct 115kV	160	Tecumseh Energy Center - Tecumseh Hill 115kV	0	See Previous	See Previous
05SP	WERE-WERE	Tecumseh Hill - Stull Swi Sta. 115kV	92	Hoyt - Stranger Creek 345kV	0	See Previous	See Previous
05SP	OKGE-OKGE	Tinker #4 - Tinker #2 138kV	100	Horseshoe Lake - Midway 138kV	0	See Previous	See Previous
05WP	WERE-WERE	Auburn Road - Jeffrey Energy Center 230kV	565	Hoyt - Jeffery Energy Center 345kV	0	See Previous	See Previous
05WP	WERE-WERE	Circleville - King Hill N.M. Coop 115kV	92	Iatan - St Joe 345kV	58	May be relieved due to Westar Transmission Operating Directive 803	Not Available
05WP	AEPW-AEPW	Denver East 138/13.8kV Transformer	33	Carson South - Kenosha West 138kV	0	See Previous	See Previous
05WP	AEPW-AEPW	Elm Springs Rec - Tontitown 161kV	306	Dyess - Tontitown 161kV	0	See Previous	See Previous
05WP	WERE-WERE	Fort Jct Swi Sta. - West Jct City Jct (East) 115kV ckt 1	68	Fort Jct Swi Sta. - West Jct City Jct (East) 115kV Ckt 2	48	May be relieved due to Westar Transmission Operating Directive 1217	Not Available
05WP	WERE-WERE	Mockingbird Hill Swi Sta. - Stull Swi Sta. 115kV	92	Hoyt - Stranger Creek 345kV	0	See Previous	See Previous
05WP	WERE-WERE	Tecumseh Hill - Stull Swi Sta. 115kV	92	Hoyt - Stranger Creek 345kV	0	See Previous	See Previous
08SP	WERE-WERE	166Th Street - Jarbalo Jct Swi Sta. 115kV	97	Midland Jct - Pentagon 115kV	0	See Previous	See Previous
08SP	WERE-WERE	Auburn Road - Indian Hills 115kV	223	Hoyt - Jeffery Energy Center 345kV	0	May be relieved due to Westar Transmission Operating Directive 400	Not Available
08SP	WERE-WERE	Auburn Road - Jeffrey Energy Center 230kV	565	Hoyt - Jeffery Energy Center 345kV	0	See Previous	See Previous
08SP	AEPW-AEPW	Broken Arrow 101St North - Oneta 138kV	210	Riverside Sta. - Oru West Tap 138kV	0	See Previous	See Previous
08SP	AEPW-AEPW	Broken Arrow 81St - Broken Arrow 101St North 138kV	235	Riverside Sta. Auto 138/345kV Transformer	0	Rebuild 2.05 miles of 795 ACSR with 1590 ACSR	\$ 1,100,000
08SP	AEPW-AEPW	Broken Arrow North - North Tap - Oneta 138kV	235	Broken Arrow 101St North - Oneta 138kV	0	Solution Undetermined	Not Available
08SP	WFEC-WFEC	Carter Jct - Dill Jct 69kV	26	Pine Ridge - Washita 69kV	0	Solution Undetermined	Not Available
08SP	SWPA-EES	Carthage - Reed Springs 69kV	36	Montrose - Clinton 161kV	22	See Previous	See Previous
08SP	WERE-WERE	Circleville - Hoyt Hti Swi Jct 115kV	97	Clifton - Greenleaf 115kV	0	See Previous	See Previous
08SP	WERE-WERE	County Line - Hook Jct 115kV	92	Tecumseh Energy Center - Tecumseh Hill 115kV	0	See Previous	See Previous
08SP	WERE-WERE	County Line - Rock Creek 69kV	41	Stranger Creek 345/951kV Transformer	0	Solution Undetermined	Not Available
08SP	WERE-WERE	County Line - Tecumseh Hill 115kV	106	Tecumseh Energy Center - Tecumseh Hill 115kV	0	May be relieved due to Westar Transmission Operating Directive 1203	Not Available
08SP	KACP-KACP	Craig - College 161kV	335	Stilwell - Antioch 161kV	0	Solution Undetermined	Not Available
08SP	SWPS-SWPS	Curry County - Roosevelt County 115kV ckt 2	161	Oasis Interchange 115/230kV Transformer Ckt 1	0	Solution Undetermined	Not Available
08SP	AEPW-AEPW	Denver East 138/13.8kV Transformer	33	Carson South - Kenosha West 138kV	0	See Previous	See Previous
08SP	OKGE-OKGE	Draper Lake 138/345kV Transformer ckt 1	493	Draper Lake 138/345kV Transformer Ckt 2	0	See Previous	See Previous
08SP	OKGE-OKGE	Draper Lake 138/345kV Transformer ckt 2	493	Draper Lake 138/345kV Transformer Ckt 1	0	See Previous	See Previous
08SP	AEPW-AEPW	Flint Creek - Tontitown 161kV	312	East Centerton - Bentonville J Street 161kV	0	See Previous	See Previous
08SP	AEPW-AEPW	Fulton - Hope 115kV	174	Fulton 138/115kV Transformer	0	Solution Undetermined	Not Available
08SP	AEPW-EES	Fulton - Patmos 115kV	174	Riverside Sta. - Redbud 345kV	99	Using 1590MCM ACSR, reconductor 7.1 miles	\$ 2,300,000
08SP	AEPW-AEPW	Fulton 138/115kV Transformer	184	Fulton - Hope 115kV	0	Solution Undetermined	Not Available
08SP	WERE-WERE	Gill Energy Center East - Interstate 138kV	210	Evans Energy Center South - Lakeridge 138kV	0	Solution Undetermined	Not Available
08SP	WERE-WERE	Gill Energy Center East - Macarthur 69kV	68	Gill Energy Center East - Oatville 69kV	0	See Previous	See Previous

**Table 1 - continued** – SPP facility upgrades identified for the WPEK to OKGE transfer

Study Year	From Area - To Area	Branch Over 100% Rate B	Rate B	Outaged Branch Causing Overload	ATC	Solution	Estimated Cos
08SP	WERE-WERE	Gill Energy Center West - Haysville Jct 69kV	80	Canal 138/211kV Transformer	0	Solution Undetermined	Not Available
08SP	SWPA-EES	Hergett - Jonesboro 161kV	148	Jonesboro - Jonesboro 161kV	0	See Previous	See Previous
08SP	SWPA-EES	Jonesboro - Jonesboro 161kV	223	New Madrid - Kennett 161kV	0	Solution Undetermined	Not Available
08SP	WERE-WERE	Lawrence Hill - Wren 115kV	141	Bismark Jct Swi Sta. - Farmer's Consumer 115kV	0	See Previous	See Previous
08SP	WERE-WERE	Mockingbird Hill Swi Sta. - Stull Swi Sta. 115kV	92	Hoyt - Stranger Creek 345kV	0	See Previous	See Previous
08SP	WERE-WERE	NA Philips - NA Philips Jct (South) 115kV	160	East Mcpherson - Summit 230kV	79	Solution Undetermined	Not Available
08SP	WERE-WERE	NA Philips Jct (North) - Smoky Hill 115kV ckt 1	68	NA Philips Jct (North) - Smoky Hill 115kV Ckt 2	0	Solution Undetermined	Not Available
08SP	WERE-WERE	NA Philips Jct (South) - West Mcpherson 115kV	68	East Mcpherson - Summit 230kV	0	May be relieved due to Westar Transmission Operating Directive 613	Not Available
08SP	OKGE-OKGE	Pecan Creek 161/345kV Transformer	369	Muskogee - Ft Smith 345kV	0	Add 2nd 345/161 kV 369MVA transformer.	\$ 3,000,000
08SP	WEPL-WEPL	Phillipsburg - Smith Center 115kV	40	Saline River - Plainville 115kV	68	Solution Undetermined	Not Available
08SP	WFEC-WFEC	Russell 69/138kV Transformer	25	Anadarko - Paradise 138kV	0	Solution Undetermined	Not Available
08SP	MIDW-WEPL	Seward 69/115kV Transformer	44	Heizer 115/230kV Transformer	0	See Previous	See Previous
08SP	WERE-WERE	SW Lawrence - Wakarusa Jct Swi Sta. 115kV	92	Ku Campus - 19Th Street Jct 115kV	0	See Previous	See Previous
08SP	SWPA-SPRM	Springfield - Brookline 161kV	323	Jct - Brookline 161kV	0	See Previous	See Previous
08SP	WERE-WERE	Tecumseh Energy Center - Hook Jct 115kV	160	Tecumseh Energy Center - Tecumseh Hill 115kV	0	See Previous	See Previous
08SP	WERE-WERE	Tecumseh Energy Center - Tecumseh Hill 115kV	236	Hoyt - Stranger Creek 345kV	0	May be relieved due to Westar Transmission Operating Directive 803	Not Available
08SP	WERE-WERE	Tecumseh Hill - 27Th & Croco 115kV ckt 1	68	Tecumseh Hill - 27Th & Croco 115kV Ckt 2	4	See Previous	See Previous
08SP	WERE-WERE	Tecumseh Hill - Stull Swi Sta. 115kV	92	Hoyt - Stranger Creek 345kV	0	See Previous	See Previous
08SP	OKGE-OKGE	Tinker #4 - Tinker #2 138kV	100	Horseshoe Lake - Midway 138kV	0	See Previous	See Previous
08WP	WERE-WERE	166Th Street - Jarbalo Jct Swi Sta. 115kV	97	Midland Jct - Pentagon 115kV	0	See Previous	See Previous
08WP	WERE-WERE	Auburn Road - Jeffery Energy Center 230kV	565	Hoyt - Jeffery Energy Center 345kV	0	See Previous	See Previous
08WP	WERE-WERE	Circleville - Hoyt Hti Swi Jct 115kV	97	Clifton - Concordia 115kV	66	See Previous	See Previous
08WP	WERE-WERE	County Line - Hook Jct 115kV	92	Tecumseh Energy Center - Tecumseh Hill 115kV	0	See Previous	See Previous
08WP	AEPW-AEPW	Denver East 138/13.8kV Transformer	33	Carson South - Kenosha West 138kV	0	See Previous	See Previous
08WP	WERE-WERE	Kelly - King Hill N.M. Coop 115kV	92	Iatan - St Joe 345kV	92	May be relieved due to Westar Transmission Operating Directive 803	Not Available
08WP	AEPW-AEPW	Marshall 138/69kV Transformer ckt 1	121	Marshall 138/69kV Transformer Ckt 2	76	Replace 755 ACAR Strain Bus	\$ 25,000
08WP	AEPW-AEPW	Marshall 138/69kV Transformer ckt 2	121	Marshall 138/69kV Transformer Ckt 1	76	Replace 755 ACAR Strain Bus	\$ 25,000
08WP	WERE-WERE	Mockingbird Hill Swi Sta. - Stull Swi Sta. 115kV	92	Hoyt - Stranger Creek 345kV	0	See Previous	See Previous
08WP	WERE-WERE	SW Lawrence - Wakarusa Jct Swi Sta. 115kV	92	Ku Campus - 19Th Street Jct 115kV	0	See Previous	See Previous
08WP	WERE-WERE	Tecumseh Hill - Stull Swi Sta. 115kV	92	Hoyt - Stranger Creek 345kV	0	See Previous	See Previous
						Total (Excludes Costs Not Available)	\$ 15,884,000