

765 kV Transmission System Facts

Presentation to the SPP Regional State Committee

October, 2008



Overview

- The Need for an EHV System Solution
- Proven Performance of the 765 kV System
- 765 kV Facts



SPP's Challenges

Transmission is recognized as a limitation within SPP.

- Over 50,000 MW of new generation in the SPP queue.
 - Rapid expansion of wind generation.
- Uncertainty of future generation scenarios.
- States enacting Renewable Portfolio Standards.
- Congestion increasing cost to customers.
- Transmission constraints and aging infrastructure.
- Increasing reliability risks.
- Continued load growth.



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What EHV Transmission Will Do

New transmission to remove constraints and facilitate the future.

- New transmission built to a sufficient scale will facilitate:
 - Renewable energy's potential within SPP.
 - Continuing demand growth.
 - Unconstrained economic dispatch.
 - Safety margin to ensure reliability.
- Transmission can hedge future uncertainties.
 - Carbon constraints.
 - Renewable and other new generation development.
 - Growth of SPP.



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EHV Development for SPP

SPP Overlay provides clear benefits for a robust solution.

- SPP has a unique opportunity to plan a reliable and flexible transmission system.
- The SPP Overlay plan at 765 kV, viewed as an integrated “system solution” versus individual lines or point to point service of energy to load, provides maximum benefit.
- Operational impact of variable generation mitigated by a strong, far-reaching transmission network.



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AEP's Experience with 765 kV

History has proven 765 kV highly effective for the AEP East region.

- Operational since 1969; currently 2,116 miles of 765 kV transmission lines and about two dozen key stations.
- Planned as a network (not point-to-point transmission).
 - Overlays 345 kV and 138 kV similar to the SPP region.
- Transmission systems higher than 700 kV are established and growing.
 - Existing or planned in the Americas, S. Africa, Asia, Europe.
 - Expanded use increases supplier base, expertise, technology - increases opportunities for SPP.



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765 kV: High Capacity

Greater risk lies in under-building new transmission infrastructure.

- One 765 kV line can carry as much power as:
 - Three 500-kV lines.
 - Three double-circuit 345 kV lines.
 - Six single-circuit 345 kV lines.
- Virtually free of thermal overload risk, even under severe operating conditions.
- Offers predictability and flexibility for the future.



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765 kV: Strengthens the Network

A 765 kV overlay provides the most benefit to the existing system.

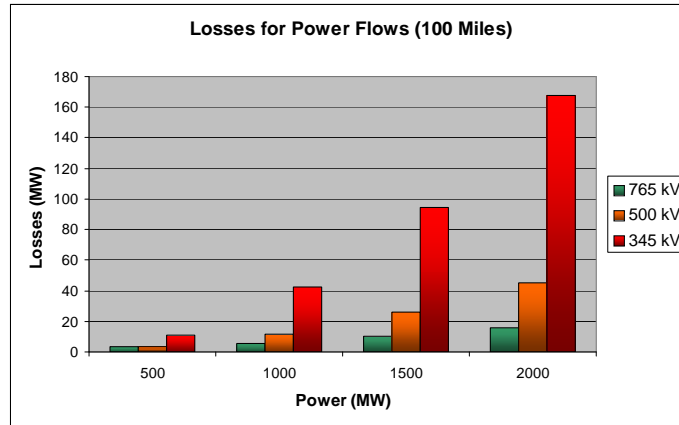
- Natural choice for overlaying existing 345 kV grid.
- Lower impedance increases transmission “reach”, allowing large power transfers over greater distances.
 - Enables variable generation resources to “lean on” dispatchable plants located far away.
 - May allow for reduction in generation reserve margins.
- Unloads the lower voltage transmission system.
 - Frees them to serve local area load.
 - Alleviates or defers upgrades to local systems.
 - Provides margin for growth and reliability.



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765 kV: High Efficiency

Higher voltage = lower losses, especially as loading increases.

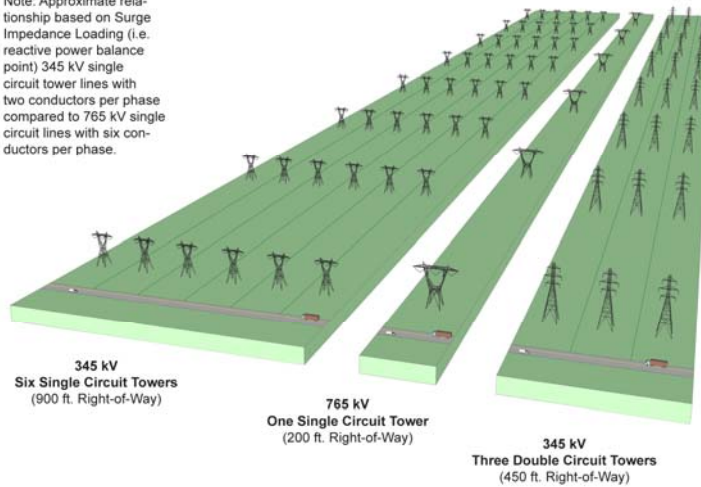


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765 kV: Environmentally Sensible

Higher utilization of right-of-way minimizes landscape footprint.

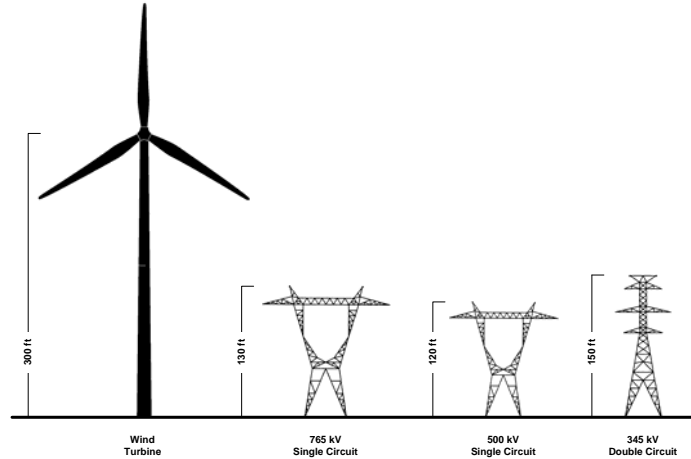
Note: Approximate relationship based on Surge Impedance Loading (i.e. reactive power balance point) 345 kV single circuit tower lines with two conductors per phase compared to 765 kV single circuit lines with six conductors per phase.



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765 kV: Visual Impact

765 kV towers are similar in stature to other voltage classes.



Wind Turbines and Transmission Towers
Average Height of Structures



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765 kV: Visual Impact

Multiple lower voltage lines required for equivalent capacity.



345 kV
Six Single Circuit Towers
(900 ft. Right-of-Way)

765 kV
One Single Circuit Tower
(200 ft. Right-of-Way)

345 kV
Three Double Circuit Towers
(450 ft. Right-of-Way)



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765 kV: Cost Effective

765 kV exemplifies economies of scale for transmission lines.

- Current SPP line cost estimates*:
 - 765 kV single-circuit: \$2.2M/mile
 - 345 kV single-circuit: \$1.0M/mile (17% capacity of 765 kV)
 - 345 kV double-circuit: \$1.4M/mile (34% capacity of 765 kV)
- Cost per equivalent capacity for 765 kV significantly less.
 - Six 345 kV single-circuit: \$6.0M/mile
 - Three 345 kV double-circuit: \$4.2M/mile
- Additional savings in system losses, regional generation diversity, reduced congestion, etc.

*Relative cost estimates based on recent SPP studies. Actual costs may vary dependent upon line route, terrain, right-of-way, material and labor costs, etc.



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765 kV: The Right Choice for the SPP EHV Overlay

Electrical, environmental, and economic benefits.

765 kV provides clear advantages for the SPP footprint:

- High capacity system capable of transferring power over longer distances with margin for future growth.
- High efficiency with reduced system losses.
- Reliable performance and operational flexibility.
- Highest right-of-way utilization factor.
- Significant economies of scale.



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First Two Loops of SPP EHV Overlay Transmission Expansion

Analysis of Benefits and Costs



Performed on behalf of Electric Transmission America,
OGE Energy Corp. and Westar Energy
September 26, 2008

Overview of Analysis

Overview

- **This presentation summarizes the benefits and costs of the proposed first two loops of the SPP EHV Overlay study, including the Prairie Wind and Tall Grass transmission projects (“Two Loop project”), comprised of:**
 - Approximately 600 miles of 765 kV lines in service in 2013/2014 in western Kansas and Oklahoma (1st loop).
 - An additional 600 miles of 765 kV lines in service in 2015/16 in the Texas Panhandle and southwest Oklahoma (2nd loop).
- **The benefits quantified include:**
 - Power supply costs in SPP
 - Reduction in losses in SPP
 - Economic incentive for construction of new wind power in SPP
 - CO₂ emissions
 - Local jobs, earnings, taxes, and economic output



New Transmission Lines in Base Case

Overview
of Analysis



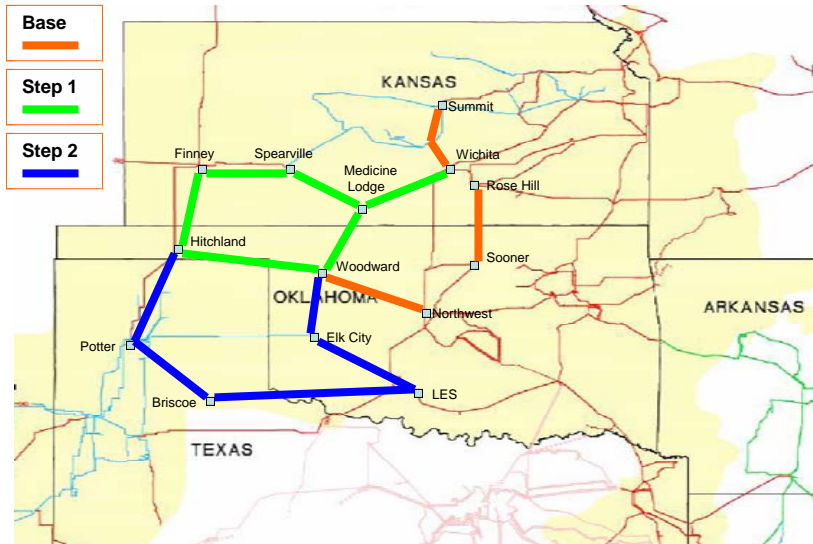
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New Transmission Lines in Change Case

Overview
of Analysis



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Wind Power Assumptions

- 14 GW of new wind power in SPP not already under construction was included in the Change Case using active SPP generation requests.

New SPP Wind Power in Change Case

	Wind (MW)
Kansas	5,601
Missouri	701
New Mexico	480
Oklahoma	3,268
Texas	4,026
Total	14,075

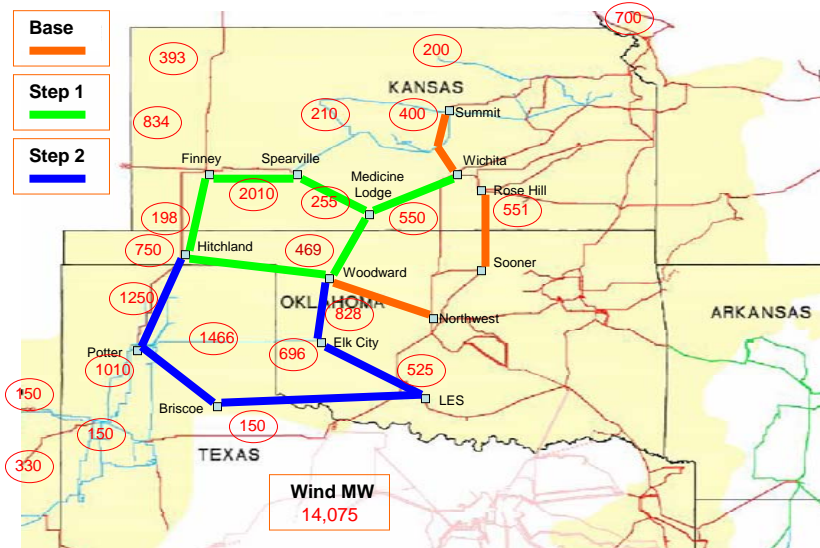
- Given physical constraints on the SPP system, no additional new wind not already under construction was included in the Base Case.
 - 2.5 GW of wind currently in operation or under construction in SPP was included in both the Base Case and the Change Case.

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Change Case: New Wind Locations



Note: Wind Capacity locations are grouped by one or more counties.

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Summary of Benefits and Costs

- **Benefits:**

- **SPP Power Supply Cost Benefits:** \$2.8 billion (08\$) annually
 - **CO₂:** Nearly 30 million tons of CO₂ emissions per year avoided.
- **Losses:** An additional \$100 million benefit in reduced power losses in SPP.
- **RPS:** More than 20% of SPP demand supplied by renewable energy.
- **Local impacts:** Over 10,000 SPP jobs during construction, and 5,000 during operation; \$60 million per year in property taxes, and \$500 million per year in economic output.

- **Costs:**

- **Cost of the EHV Overlay facilities needed to complete the Two Loop Project:** \$400 to \$500 million per year
- **New wind costs:** \$1.75 billion per year net of production tax credit

- **We conclude that the Two Loop project yields substantial net benefits to SPP.**



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Summary of Benefits and Costs

- **Breakdown of Net Power Supply Cost Benefits of the Two Loop project:**

Net Power Supply Benefits (millions)	
+ Energy Benefits/(Costs)	
Supply Cost Savings	\$2,766
Reduced Loss Benefits	\$96
Wind Energy Revenue	(\$1,867)
Total	\$995
+ Wind Cost Credit/(Shortfall)	
Wind Energy Revenue	\$1,867
Wind Revenue Requirement	(\$2,447)
Wind Production Tax Credit	\$713
Wind Market Revenue net of Cost	\$133
- Transmission Cost	\$400 - \$500
= Net Benefits	\$628 - \$728

- **Wind energy revenues are more than sufficient to cover the fixed cost of the new wind capacity.**
 - The wind production tax credit is an important factor in the Power Supply Cost benefits to SPP.
 - RPS considerations would make the economic comparison more favorable to the Two Loop project as the cost of the new wind would be compared to the cost of other renewable capacity.
- **Local economic impacts and the public benefits of responding to current and potential future state RPS standards are in addition to the Power Supply Cost benefits.**



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Benefits: Local Economic Impacts

- The local economic impacts in SPP resulting from the construction and operation of 14 GW of new wind power and the construction of the Two Loop project were estimated using a model developed for wind power projects by the U.S. Dept. of Energy.

Local Economic Impacts from Construction and Operation

	Construction Period	Operating Period
New Jobs	10,255 (4-year average)	5,488
Earnings (M\$)	1,380	229
Economic Output (M\$)	4,416	496
Property Taxes (M\$)	--	58

- The \$20 billion in construction expenditures create an average of more than 10,000 jobs in SPP during the roughly four-year construction period.
- During operation, the wind facilities would create over 5,000 jobs in SPP, \$60 million in annual property taxes, and \$500 million per year in economic output in SPP.



Benefits: By State

- Total Supply Cost benefits by state were estimated using a simplified method to allocate the SPP-wide benefits to each state.
 - The simplified allocation is based on generation impacts by control area and the use of jurisdictional shares to further allocate to the state level.
 - Losses and wind cost recovery was allocated on a similar basis. The resulting allocation of the \$1,128 million of Supply cost Benefits is:

Estimated Annual Power Supply Cost Benefits by State

	Benefits (M\$ 08)
Arkansas	34.6
Kansas	196.3
Louisiana	12.6
Missouri	218.6
New Mexico	30.3
Oklahoma	428.8
Texas	110.9
Total	1127.9

- Local economic impacts by states are on the following page.



Benefits: By State (cont.)

- The local economic impacts were evaluated for the four states with new wind units related to the Two Loop project.

Construction Period

	Kansas	New Mexico	Oklahoma	Texas
New Jobs (4-yr avg)	4,131	351	3,247	2,497
Earnings (M\$)	536	45	388	410
Economic Output (M\$)	1,818	129	1,315	1,255

Operating Period (annual impacts)

	Kansas	New Mexico	Oklahoma	Texas
New Jobs	1,955	269	1,610	1,654
Earnings (M\$)	76	10	69	74
Economic Output (M\$)	182	20	129	165
Property Taxes (M\$)	--	2	34	21



**Helping our members work together
to keep the lights on...
today & in the future**



Southwest Power Pool Cost Benefit
Study for Future Market Design

Presentation to RSC/BOD

Tulsa, OK October 27-28, 2008

Project Overview

Measure the cost and benefits of moving from the current SPP EIS market structure (“base case”), including implementation of the 2007 SPP Transmission Expansion Plan (STEP), to the market structures of the following Change Cases:

- Change Case I – Day-Ahead Market with Unit Commitment Addition only 2009-2016
- Change Case IIA - Day-Ahead Market with Unit Commitment and Co-optimized Ancillary Service Market 2011-2016 (All Inclusive with FTR & TSRO Sensitivities)
- Change Case IIB - Day-Ahead Market with Unit Commitment 2009, 2010 and All Inclusive 2011-2016 (FTR & TSRO Sensitivities)
- Change Case IIC - Co-optimized Ancillary Service Market 2009, 2010 and All Inclusive 2011-2016 (FTR & TSRO Sensitivities)
- Change Case III – Ancillary Service Market Addition only 2009 - 2016
- Change Case IV – Simplified Day-Ahead Market with Unit Commitment (Qualitative analysis only)

Wind Assumptions

- **4,270 MW of wind facilities modeled at most likely locations (nodes)**
 - **Moderate wind penetration assumption for consistency with transmission expansion plan and to avoid weighting the market design decision based on wind levels**
 - **Same wind schedules across Base Case and all Change Cases reduce cost differentials**
 - **Annual capacity factor 38.6%, varying monthly between 26% summer and 58% spring**
 - **Generic hourly wind patterns entered to reflect hourly wind variation but lack of intra-hour volatility modeling increases perceived market benefits**
 - **Each new wind facility assigned to an SPP Member, no new IPP wind**
 - **Wind given highest priority on transmission grid, i.e. wind curtailed as extreme last resort**

Cost and Benefit Measures

- Quantify benefits of market changes using simulation model to compute Adjusted Production Cost (APC) for Base case and all Market change scenarios

$$\text{APC} = \text{Generation Cost (Fuel, VOM, Emissions)} + \text{Purchase Cost} - \text{Sales}$$

Revenue

- SPP in Total
- Market Participants
- State by State
- Balancing Area

Estimate ranges of Market Change Implementation Costs

- Hardware and software costs
- Staff Training
- Administrative Costs

Total Net Benefit by Case

Summary - Total SPP Net Benefit 2011 - 2016			
Case	Description	% Benefit	Avg Yr Benefit (\$M*)
Case I	DAM Only	2.5% - 4.3%	140 - 225
Case II	DAM & ASM w/ FTR or TSRO	3.0% - 5.7%	160 - 295
Case III	ASM Only	.3% - .4%	15 - 20

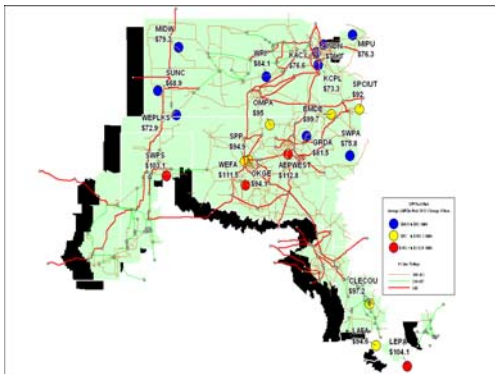
*(2008 \$, 6% Discount Rate)

Note: All values may be different in the finalized written report

Market Design Net Benefit Observations

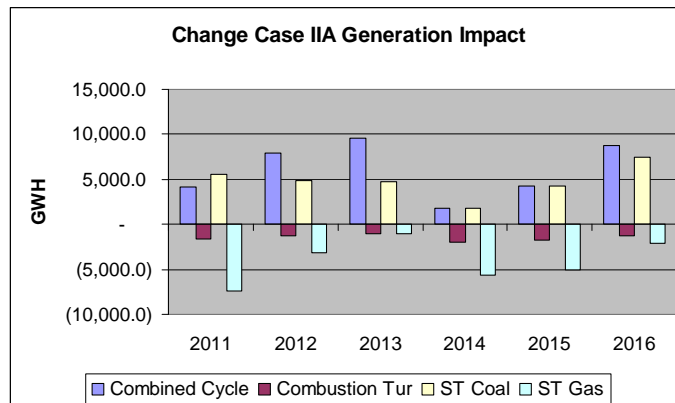
- All analyses have indicated a benefit in excess of costs in all scenarios
- Combining DAM and ASM has the greatest cost-benefit impact, producing significantly more benefit than implementing each market separately
- DAM allows more efficient utilization of coal and CC and reduces use of CTs and Steam Gas Turbines
- DAM benefit is a significant benefit over ASM; Primary benefit is to move towards a DAM first if market implementation is staged

SPP 2012 Average Load Hub Prices – Comparison Base Case to Change Case II



	Current EIS Market Prices	DAM & ASM Prices	Percent Change
CSWS - AEPW	112.80	90.30	19.9
EDE	99.70	79.60	20.0
GRDA	81.50	76.50	6.1
KACY	76.60	70.90	7.4
KCPL	73.30	71.10	3.0
Mid-Kansas	72.90	68.40	6.2
Midwest	79.30	69.80	12.0
OKGE	94.10	85.30	9.4
OMPA	95.00	85.50	10.0
SECI	68.90	65.70	4.6
SPS	103.10	87.00	15.6
WEFC	111.50	88.50	20.6
WRI	84.10	73.10	13.1
\$/MWh			

SPP Generation Impact – Change in Generation between Current EIS to DAM/ASM Markets



General Observations Regarding ISO Costs

- SPP Implementation and Ongoing Costs
 - Change Case I: 122.497 MM\$
 - Change Case II: 138.646 – 176.815 MM\$ depending on phase-in and financial configuration
 - Change Case III: 62.590 MM\$
- Actual consulting dollars incurred by other ISOs generally have exceeded original estimates in transitioning markets
- Market trial costs and training were typically under estimated
- Market start is often delayed
- Cost begin 2-3 years prior to market start-up

Southwest Power Pool Administration Fee Impacts of Future Market Options Estimations

	Day Ahead Market		
	Day Ahead Market	Day Ahead Market with ASM	ASM Only
	Admin Fee	Admin Fee	Admin Fee
2009			
2010	\$0.0066	\$0.0076	\$0.0010
2011	\$0.0126	\$0.0145	\$0.0019
2012	\$0.0430	\$0.0575	\$0.0145
2013	\$0.0525	\$0.0614	\$0.0188
2014	\$0.0541	\$0.0632	\$0.0194
2015	\$0.0557	\$0.0651	\$0.0200
2016	\$0.0573	\$0.0670	\$0.0205

SPP - Market Participant Range of Costs

Base	Systems Costs						Personnel Costs	
	Initial Install Costs		SPP Change Case Adaption Costs		Ongoing Costs		(Training, Testing, etc)	
	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi
Total (1000's)	1500	3700	200	900	205	525	275	1100
SCADA (AGC)	600	2000	50	200	50	200	100	750
Unit Commitment ¹	300	600	0	100	50	100		
Bid Strategy	200	300	50	200	50	100		
ISO Communications	200	300	50	100	25	50		
Settlement	100	300	50	200	25	50		
FTR/TSRO Analysis ²	100	200	0	100	5	25	175	350

Note 1: Unit Commitment does not apply for Change Case III; Note 2: FTR/TSRO Analysis applies only to Change Case II

Total Range of Market Participant Costs: \$2.18 - \$6.23 M

General Observations Regarding Members' Costs

- Complexity of transactions was a key factor in determining market design costs for Members
- Difficult to obtain necessary information due to competitive nature of market trading strategies
- Cost effort relied heavily on Ventyx market experience
- Options available to Members include self build infrastructure or outsource
- Market trials provide good opportunity to test systems and staff training and should be utilized
- Training of staff is typically under estimated and occurs too late in the schedule to maximize market trial experience

Next Steps

- **CBTF continuing to review:**
 - **Market Participant Level Benefits**
 - **State-wide Level Benefits**
 - **Balancing Authority Level Benefits**
- **The Market Working Group will review the final report and make a recommendation to the MOPC for the January meetings**

Additionally requested analysis

- **MOPC requested additional benefits sensitivities: Ventyx is currently estimating time & cost**
 - Reduce Gas price for study year 2012 by 25%; run base case and change case II (all-inclusive)
 - Reduce Wind generation by half for a high wind study month in 2012; run base case and change case II (all-inclusive)
- **RSC requested a high wind analysis:**
 - Ventyx has provided an estimate for a thorough high-wind analysis that will determine transmission upgrade locations and net benefit changes for Change Case II
 - Two months to complete; \$73k-\$100k based on two options



Questions?



Cost Benefit Task Force Contacts

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Detailed Southwest Power Pool Cost Estimates
 for Future Market Options

\$ in 1000s	Day Ahead Market		
	Day Ahead Market	with ASM	ASM Only
	<u>Total</u>	<u>Total</u>	<u>Total</u>
2009			
2010	\$2,268	\$2,623	\$355
2011	\$4,445	\$5,129	\$684
2012	\$15,482	\$20,720	\$5,238
2013	\$19,294	\$22,557	\$6,915
2014	\$20,260	\$23,686	\$7,260
2015	\$21,279	\$24,870	\$7,626
2016	\$22,344	\$26,115	\$8,007

Detailed Southwest Power Pool Capital Expenditures Cost Estimates for Future Market Options

\$ in 1000s	Day Ahead Market		
	Day Ahead Market	with ASM	ASM Only
	<u>Total</u>	<u>Total</u>	<u>Total</u>
2009	\$1,381	\$1,891	\$510
2010	\$14,684	\$21,359	\$6,675
2011	\$14,766	\$20,466	\$5,700
2012	\$1,204	\$2,404	\$1,200
2013			
2014			
2015			
2016			
	\$32,035	\$46,120	\$14,085



Southwest Power Pool, Inc.
2008, 4TH QUARTER
PROJECT TRACKING REPORT



Southwest Power Pool, Inc.

2008 4TH QUARTER PROJECT TRACKING REPORT

October 14, 2008

History

The Southwest Power Pool Inc, Transmission Project Tracking program actively monitors the progress of the approved SPP Transmission Expansion Plan (STEP) transmission projects. This effort is in response to the SPP Strategic Planning Committee strategic plan, which was approved by the SPP Board of Directors (BOD), January 30, 2007. The strategic project tracking plan was outlined as follows:

The following steps should be taken:

1. SPP staff shall develop a tracking and reporting tool for transmission expansion projects for quarterly reporting to the BOD, Members Committee and Regional State Committee.
2. SPP Staff shall be proactive in its support of the Membership in terms of project approval, siting, and cost recovery.
3. SPP Staff shall report to the BOD annually on its evaluation of the processes, planning, approval and construction of needed transmission, emphasizing areas of strength and weakness and resulting in enhanced processes to streamline these efforts.

PROJECT TRACKING, Current SPP Process

SPP actively monitors and supports the progress of transmission expansion projects, emphasizing the importance of maintaining accountability for areas such as grid regional reliability standards, firm transmission commitments and tariff cost recovery

Each quarter, SPP staff solicits feedback from the project owners to determine the progress of each approved transmission project. This quarterly report charts the progress of all STEP projects approved either directly by the BOD or through an executed service agreement under the SPP Open Access Transmission Tariff.

Recent Activity

In this report, three key summaries of the projects are provided:

- 1) Status of all transmission projects in the 4 year horizon, (through 2011)
- 2) Status of transmission projects needed for regional and zonal reliability in the 4 year horizon, (through 2011)

3) Status of transmission projects needed for Transmission Service and Generation Interconnection Agreements in the 4 year horizon, (through 2011)

Results

This 2008 4th quarter project tracking report indicates the status of 717 projects with an estimated Engineering and Construction (E&C) value of \$2.7 billion. The projects have been divided into the following three categories:

1. 2008 – 2011 Project Summary
2. 2008 – 2011 Reliability Project Summary
3. 2008 – 2011 TSR/GI Project Summary

2008 – 2011 Project Summary:

The 2008 – 2011 project summary denotes all projects, including reliability, transmission service, economic, generation interconnection and sponsored upgrades. It consists of 369 projects with an E&C value of \$1.5 billion. 57 projects valued at \$118 million are complete. 190 projects valued at \$1 billion are on schedule for the 4 year horizon. Transmission owners have provided mitigation plans for 99 projects valued at \$280 million. Nine projects valued at \$7 million have been delayed with no interim mitigation. SPP staff is working closely with transmission owners of these delayed projects to develop solutions.

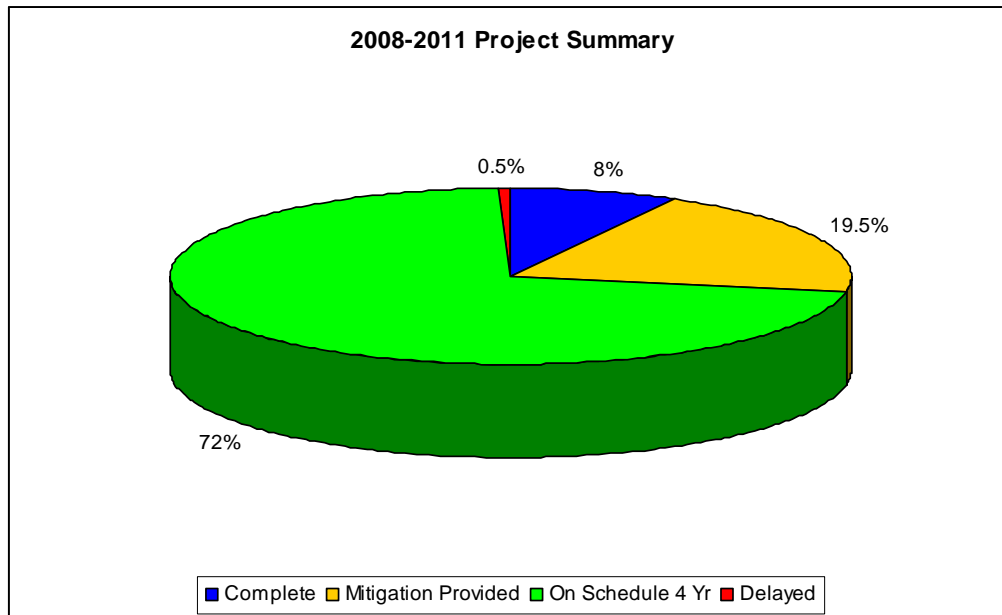


Figure 1: 2008 – 2011 Project Summary

2008 – 2011 Reliability Project Summary:

The 2008 – 2011 reliability project summary denotes all projects identified in an SPP study, which includes tariff signatory projects to meet regional reliability criteria, non tariff signatory projects to meet regional reliability criteria, and reliability projects to meet more stringent zonal criteria. It consists of 215 projects with an E&C of \$533 million. 29 projects valued at \$7 million are complete. 87 projects valued at \$228 million are on schedule for the 4 year horizon. Transmission owners have provided mitigation plan for 93 projects valued \$225 million. Six projects valued at \$3.8 million have been delayed no interim mitigation. SPP staff is working closely with transmission owners of these delayed projects to develop solutions.

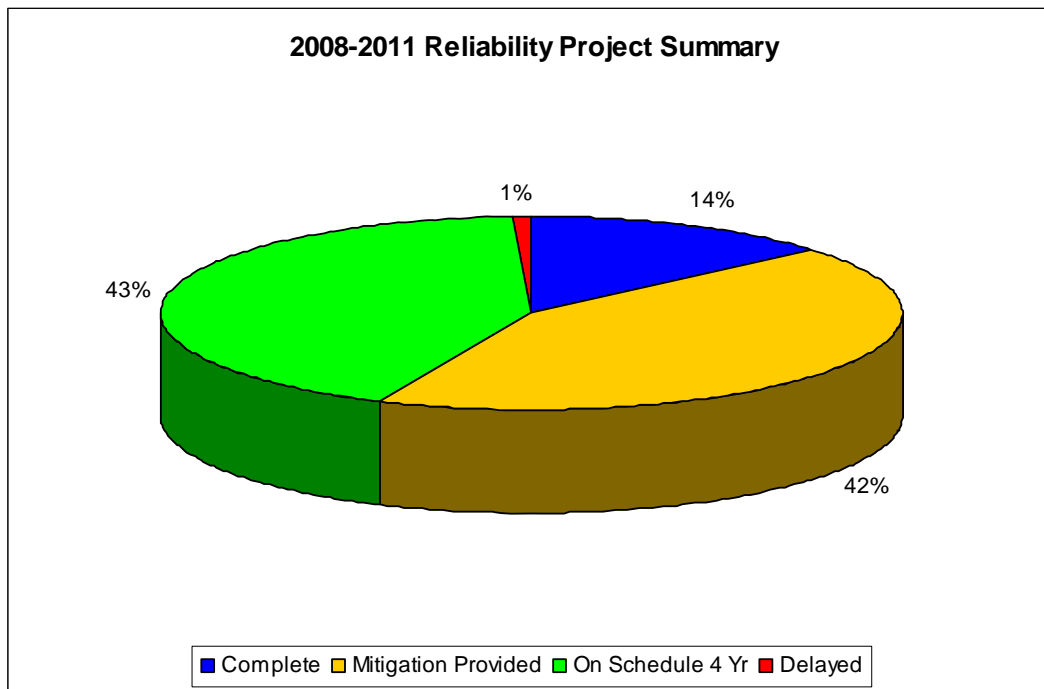


Figure 2: 2008 – 2011 Reliability Project Summary

2008 – 2011 TSR/GI Project Summary:

The 2008 – 2011 TSR/GI project summary denotes completion and commissioning of projects identified as needed through Transmission Service and Generation Interconnection Agreements. It consists of 40 projects with an E&C of \$1 billion. Eight projects valued at \$17 million are complete. 30 projects valued at \$290 million are on

schedule for the 4 year horizon. Transmission owners have provided mitigation plan for 1 project valued \$8 million. No projects have been delayed no interim mitigation.

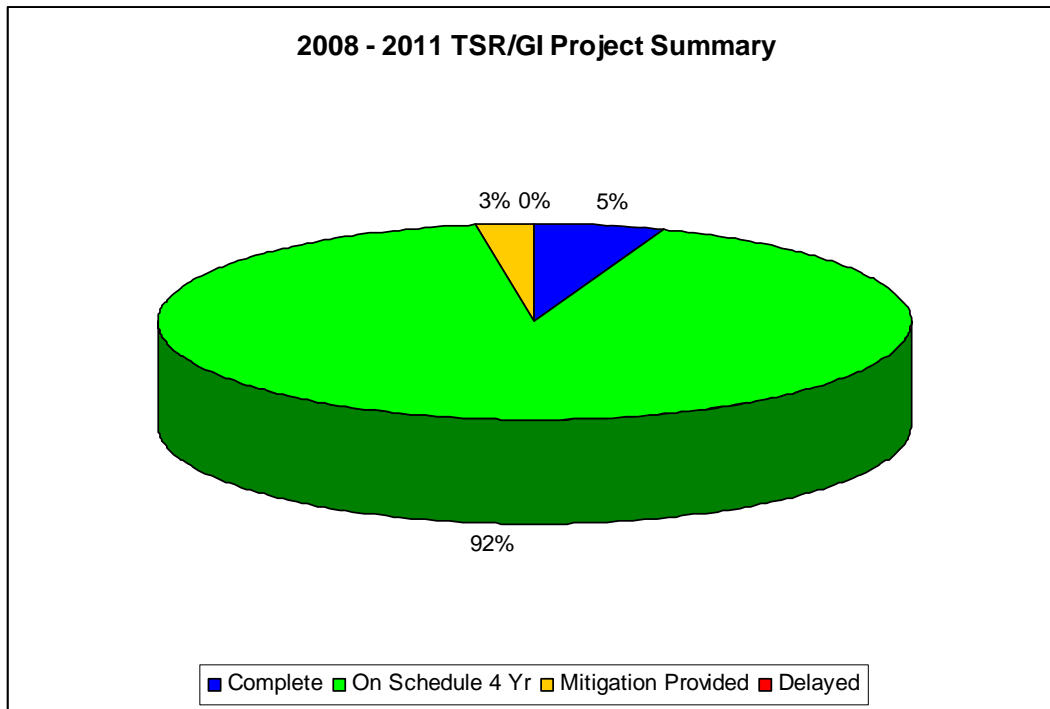


Figure 3: 2008 – 2011 TSR/GI Project Summary

Key Issues:

A key issue that came up during the 4th Quarter Project Tracking was the lack of a reliability mitigation plan for the Clay Center-Greenleaf project. At the July 2008 MOPC meeting, MOPC discovered that Sunflower had delayed the Clay Center-Greenleaf project, which was needed for reliability issues in the 2008 summer, due to a new pipeline coming to the area. Sunflower had also not provided any mitigation plan for the current reliability problems. Although SPP Staff conducted a study of the Northeast Kansas area with the additional pipeline load present and determined that Clay Center-Greenleaf was not the best regional solution, interim mitigation plans for reliability problems in the area were needed until the necessary transmission could be built for the pipeline loads. Through project tracking, Sunflower provided an interim mitigation plan for the Clay Center-Greenleaf project, which will be used in the upcoming summer to mitigate any reliability issues in the area should they occur.

Conclusions



The 4th Quarter project Tracking saw completion of projects worth an estimated \$ 5 million. \$7 million in capacitor bank installations, 9 projects, continue to be delayed without mitigation plans. There were no significant changes on projects to be in-service beyond 2011.

Southwest Power Pool
Project Tracking Report

Blue	Complete.
Green	On Schedule 4 Year Horizon.
Green	On Schedule beyond 4 Year Horizon.
Yellow	Behind schedule, interim mitigation provided or project may change but time permits the implementation of project.
Red	Delayed beyond the RTO Determined need date and no mitigation plan provided.
\$ / months	Project lead time and cost estimated by SPP staff
R	Reliability project that SPP Recommends to the BOD for Authorization to Construct
R2	Reliability project not within budgeting cycle
PL	Transmission Owner Planned Project
NC3	Transmission Owner Planned Project for NERC TPL-003_0
OC-R	Out of Cycle Reliability project
RN	Reliability project not under SPP tariff
EU	Economic Upgrade
GI	Generation Interconnect
IA	Interconnection Agreement
TS	Transmission Service with signed contract
PT	Project Tracking

NTC_ID	PID	UID	Area	Project Name	Project Type EXP	Project Owner Indicated In-Service Date	RTO Determined Need Date	Letter of Notification To Construct issue date	Cost Estimate	Final Cost	Project Lead Time	Project Status	Project Status Comments
SPP Tariff Projects													
Year 2006													
		3	10003	520	Line - Okmulgee - Weleetka 138 kV Ckt 1	TS	04/01/06	04/01/06	03/31/06	\$84,000			
		4	10004	520	Line - East Central Henryetta - Okmulgee 138kV	TS	04/01/06	04/01/06	03/31/06	\$180,000			
19999		5	10005	520	Line - Rock Hill - Carthage REC 138 kV	R	06/01/06	06/01/05	02/02/07	\$4,370,000			
19999		6	10006	520	Line - Tontitown - Elm Springs REC 161 kV	R	05/01/06	05/01/07	02/02/07	\$640,000			
19999		7	10007	520	Line - Carthage REC - Carthage T 138 kV	R	06/01/06	06/01/07	02/02/07	\$1,590,000			
19999		8	10008	520	Line - Lone Star South - Pittsburg 138 kV	R	06/01/06	06/01/06	02/02/07	\$50,000			
		9	10009	520	Line - Finney Tap - Port Robson 69kV	PL	12/31/06	-		\$6,230,000			
19999		10	10010	520	Line - Pittsburg - Winnsboro 138 kV	R	09/01/06	06/01/04	02/02/07	\$18,220,000			
		11	10011	524	Line - Cottonwood Creek - Skyline 138 kV Ckt 1	PL	06/30/06	06/30/06		\$154,603			
		12	10012	524	Line - Redbud - Arcadia	EU	05/15/06	05/15/06		\$1,609,082			
19996		13	10013	524	Line - Reno - Sunny Lane 69 kV	R	06/01/06	06/01/06	02/02/07	\$67,511			
19996		14	10014	524	Line - Van Buren AVEC - VBI 69 kV	R	06/01/06	06/01/06	02/02/07	\$107,114			
19996		15	10015	524	Line - Brown - Explorer Tap 138 kV Ckt 1	TS	06/01/06	06/01/06	02/02/07	\$31,518			
19996		16	10016	524	Line - Richards Tap - Richards 138 kV	R	06/01/06	06/01/06	02/02/07	\$2,760,215			
		17	10017	524	Line - Bristow - Keystone West 138 kV	PL	01/01/06	-		\$554,254			
		18	10018	524	Line - Tarby - Breaker Failure	PL	08/31/06	-		\$1,136,503			
		19	10019	524	Line - Woodward District - Iodine 138 kV	PL	12/01/06	-		\$7,870,364			
19996		20	10020	524	Line - NE Enid - Glenwood 138 kV	R	12/31/06	12/31/06	02/02/07	\$3,882,549			
19987		21	10021	526	XFR - Denver City 115/69 kV	R	12/01/06	06/01/06	02/02/07	\$3,000,000	\$2,670,460		
19987		21	10022	526	XFR - Denver City 115/69 kV	R	12/01/06	06/01/06	02/02/07	\$3,000,000	\$2,670,460		
19996		22	10023	536	Line - Cities Service - 3rd & VanBuren 69 kV	R	03/01/06	06/01/06	02/02/07	\$1,700,000			
19996		23	10024	536	Line - Circle - Hutchinson Energy Center 115 kV	R	03/29/06	06/01/06	02/02/07	\$300,000			
19996		24	10025	536	Line - Midwest Solvent Junction 1 - Atchison Junction 2 69 kV	R	05/18/06	06/01/06	02/02/07	\$55,026			
19996		25	10026	536	XFR - Butler 138/69 kV	R	03/31/06	11/01/06	02/02/07	\$1,621,593			
19996		26	10027	536	Line - Morris - McDowell 230 kV	R	09/22/06	06/01/06	02/02/07				
19996		26	10028	536	XFR - McDowell 230/115 kV	R	07/19/06	06/01/06	02/02/07	\$7,073,312			
19996		27	10029	536	Multi - HEC - 43rd & Lorraine - Tower 33 69 kV	R	12/31/06	12/31/06	02/02/07	\$2,400,000			
19996		27	10030	536	Multi - HEC - 43rd & Lorraine - Tower 33 69 kV	R	11/22/06	12/31/06	02/02/07	\$2,400,000			
		28	10031	536	Line - Chisholm - Grant 69 kV Ckt 1	R	12/31/06	06/01/09		\$658,841			
		29	10032	540	Line - Gravois Mills - North Warsaw 161 kV	PL	01/01/06	-		\$500,000			
		29	10033	540	Line - Truman - North Warsaw 161 kV	PL	01/02/06	-		\$500,000			
		30	10034	541	Line - Lacygne - West Gardner 345 kV Ckt	EU	05/01/06	05/01/06		\$10,461,346	\$10,461,346		
19990		31	10035	541	Line - Tomahawk - Bendix 161 kV	R	12/01/06	12/01/06	02/02/07	\$1,105,317	\$1,105,317		
		32	10036	544	Line - Sub 110 - Oronogo Jct. - Sub 432 - Joplin Oakland North 161 kV Ckt	TS	05/01/06	03/01/06		\$504,000	\$2,120,082		
		33	10037	544	Line - Sub 109 - Atlas Jct. - Sub 432 - Joplin Oakland North 69 kV Ckt	TS	05/01/06	06/01/06		\$1,353,600			
Year 2007													
		39	10043	520	Line - 36th & Lewis - 52nd & Delaware Tap	TS	06/01/07	06/01/16	01/02/07	\$15,000			
19999		40	10044	520	Line - Winnsboro - North Minneola 138 kV	R	10/17/07	12/01/07	02/02/07	\$20,770,000			
19999		41	10045	520	Line - South Shreveport - SW Shreveport 138 kV	R	07/04/07	06/01/10	02/02/07	\$110,000			
19999		42	10046	520	XFR - Tontitown 345/161 kV	R	06/01/07	06/01/07	02/02/07	\$4,278,100			
19999		43	10047	520	Line - Siloam Springs - Chamber Springs 161 kV	R	06/01/07	06/01/07	02/02/07	\$6,627,225			
19997		44	10048	520	Line - Knox Lee - Oak Hill #2 138 kV	R	07/11/07	06/01/07	03/09/06	\$135,000			
19998		45	10049	520	Line - Chamber Springs - Tontitown 161 kV	R	06/01/07	06/01/07	02/14/07	\$4,000,000			
19999		46	10050	520	Line - 53rd & Garnett N. Tap - Tulsa Southeast 138 kV	R	06/01/07	06/01/07	02/02/07	\$63,000			
		47	10051	520		PL	07/01/07	-					
		47	10052	520		PL	07/01/07	-					
		47	10053	520		PL	07/01/07	-					

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		47	10054	520		PL	07/01/07						
		47	10055	520		PL	07/01/07						
		47	10056	520		PL	07/01/07						
		47	10057	520		PL	07/01/07						
		47	10058	520	Multi - Tulsa Project	PL	07/01/07		\$58,710,000				
		47	10059	520		PL	07/01/07						
		47	10060	520		PL	07/01/07						
		47	10061	520		PL	11/01/07						
		47	10062	520		PL	11/01/07						
		47	10063	520		PL	07/01/07						
		47	10064	520		PL	07/01/07						
		48	10065	520	Line - Oak Hill - NW Henderson 138 kV	TS	07/13/07	06/01/07	10/17/06	\$122,000			
		50	10068	523	Line - Kerr - 412 Sub 161 kV	R	06/07/07	06/01/09		\$4,991,590			
19991		51	10069	523	XFR - Stillwell City 161/69 kV	R	06/01/07	06/01/07	02/02/07	\$2,200,000			
		53	10071	524	Line - Tecumseh - 69 kV Ckt	PL	08/30/07			\$540,855			
		54	10072	524	Line - Dewey - 138 kV Ckt	PL	06/01/07			\$1,428,565			
		57	10075	524	Line - Russell - Springdale 138 kV Ckt 1	PL	06/01/07			\$22,000			
		59	10077	524	Line - 3rd St (Motorize Switches)	PL	11/30/07			\$165,439			
19996		61	10079	524	Line - Richards - Piedmont 138 kV	R	12/31/07	12/31/07	02/02/07	\$3,800,000			
		62	10080	524	Line - Stillwater - Morrison 138 kV	PL	10/31/07			\$2,987,338			
		64	10081	524	Line - Wind Farm - Mooreland 138 kV	TS	06/01/07	06/01/07	12/18/06	\$120,000			
		64	10082	524	Line - Osage - 138 kV Ckt	PL	11/15/07			\$149,230			
		65	10083	524	XFR - KNOBHILL 138 to KNOBHILL 69	TS	12/12/07	06/01/08	01/02/07	\$1,950,541	\$2,017,744		
		66	10084	524	Line - Igo - 161 kV Ckt	PL	12/31/07			\$2,832,404			
		69	10086	524	Line - Oakgrove - 69 kV Ckt	PL	12/31/07			\$312,570			
19996		69	10087	524	Line - Razorback - Short Mountain 69 kV	R	12/31/07	12/31/06	02/02/07	\$9,600,000			
		70	10088	525	Line - Sleeping Bear/Fort Supply	IA	04/01/07	02/01/07		\$2,080,000		18 months	
		71	10089	525	Line - Windfarm - Mooreland 138 kV	TS	08/01/07	06/01/07	12/20/06	\$750,000		18 months	
		73	10091	526	XFR - Mustang Station N. 115 kV - Mustang Station 230 kV	R	06/22/07	06/01/08	02/02/07	\$3,000,000	\$2,269,005		
19987		74	10092	526	XFR - Artesia 115/69 kV	R	-	06/01/07	02/02/07	\$2,750,000		Cancelled	Autos ok until 2017 w/switching. Study completed. Recommend construction of Eagle Creek/Navajo Switching Station by summer 2010. Mitigates this problem, but
19987		74	10093	526	XFR - Artesia 115/69 kV	R	-	06/01/07	02/02/07	\$2,750,000		Cancelled	
19987		75	10094	526	XFR - Bailey Co 115/69 kV	R	04/01/07	06/01/06	02/02/07	\$3,000,000	\$2,476,344		
19987		75	10095	526	XFR - Bailey Co 115/69 kV	R	04/02/07	06/01/06	02/02/07	\$3,000,000	\$2,476,344		
19987		76	10096	526	XFR - Terry Co 115/69 kV	R	11/01/07	06/01/07	02/02/07	\$2,375,000			
19987		76	10097	526	XFR - Terry Co 115/69 kV	R	09/26/08	06/01/07	02/02/07	\$2,375,000		18 months	Cannot change second transformer until Fall due to summer loading. Mitigation Plan verified by SPP staff.
19987		77	10098	526	XFR - Hockley 115/69 kV	R	11/21/08	06/01/06	02/02/07	\$2,062,000		18 months	
19987		77	10099	526	XFR - Hockley 115/69 kV	R	12/19/08	06/01/06	02/02/07	\$2,062,000		18 months	Mitigation Plan verified by SPP staff.
19987		79	10101	526	XFR - Gaines County Interchange 69 kV - Gaines County Interchange 115 kV	R	-	06/01/07	02/02/07	\$2,750,000			Legacy Interchange Project to replace this project scope. Submitted to capital budget for approval 1/1/2008. Estimated ISD is 6/1/2011, with an estimated cost of
19987		79	10102	526	XFR - Gaines County Interchange 69 kV - Gaines County Interchange 115 kV	R	-	06/01/07	02/02/07	\$2,750,000			
		81	10104	531	XFR - South Hays 230/115	PL	10/01/07			\$2,000,000	\$1,850,000		
		82	10105	531	Line - Knoll 115 - S Hays 115/230 Conversion	PL	10/01/07			\$3,525,000			
		83	10106	531	Line - Mullergren - S Hays 115/230 Conversion	PL	10/01/07			\$1,310,000		6 months	
19986		84	10107	536	Line - Hesston - Golden Plain - Gatz 69 kV Rebuild	R	02/20/08	06/01/07	02/02/07	\$1,617,177			
19986		84	10108	536	Line - Hesston - Golden Plain - Gatz 69 kV Rebuild	R	02/20/08	06/01/07	02/02/07	\$1,617,177			
19986		85	10109	536	Line - HTI Junction - Circleville 115 kV	R	10/15/07	06/01/07	02/02/07	\$3,094,877			
		86	10110	536	XFR - Swissvale 345/230 kV #2	PL	12/31/07			\$5,861,654			
19994		87	10111	539	Line - Greensburg - Judson Large 115 kV Ckt 1	R	11/20/07	06/01/07	02/02/07	\$148,000		4-6 months	
		186	10240	539	Line - Sun City - Medicine Lodge 115 kV	TS	11/20/07	09/01/07	05/31/07	\$167,500	\$90,380		
		88	10112	540	Line - St. Joseph-Cooper 345 kV	PL	06/07/07			\$125,000			
		88	10113	540	Line - St. Joseph-Fairport 345 kV	PL	06/01/07			\$125,000			
		90	10114	540	Line - Martin City - Turner Road 161 kV	R	06/30/07	06/01/07		\$47,683			
19994		91	10115	540	Line - Lake Road to Industrial Park 161 kV	R	06/01/07	06/01/07	02/02/07	\$10,000		8- months	
19994		92	10116	540	Line - Nevada 161 - Nevada Plant 69 kV	R	10/01/07	10/01/06	02/02/07	\$536,000			
1994		93	10117	540	Line - Craig Interconnection	R	07/01/07	06/01/06	02/02/07	\$75,000			
		94	10118	540	Multi - Loma Vista 161kV - Montrose 161kV (North Raymore 161kV Substation)	PL	08/15/07			\$4,080,500			
19990		95	10119	541	Line - Stillwell - Antioch 161 kV	R	05/25/07	06/01/07	02/02/07	\$2,120,082	\$2,120,082		
		96	10120	544	XFR - Sub 167 - Rivoton 161/69 kV Ckt	TS	06/22/07	06/01/07		\$900,000			
		97	10121	544	Line - Neosho - Sub 292 - Tipton Ford 161 kV Ckt	TS	07/01/07	06/01/07		\$2,200,000			
19992		98	10122	544	Line - ReinMiller - Tipton Ford 161 kV	R	08/18/07	06/01/07	02/02/07	\$3,215,000			
Year 2008													
19999		1	10001	520	Line - Bann - Kings Highway 69 kV	R	06/01/07	06/01/08	02/02/07	\$50,000			
		105	10129	520	Line - Dyess - Elm Springs REC	PL	05/21/08	06/01/08		\$81,000			
20000		106	10130	520	Line - Snyder - Altus Junction 138 kV	R	05/21/08	06/01/13	02/13/08	\$16,760,000			
20000		107	10131	520	Line - E Rogers - Dyess 161 kV	PL	05/20/08			\$720,000			As an alternative, this could be installed at Dyess on the same line, the 161 kV line to East Rogers. Switchable Series Reactor installation complete.
20000		107	10132	520	Line - E Rogers - Avoca 161 kV	R	05/20/08	06/01/08	02/13/08	\$720,000			Switchable Series Reactor installation complete.
19999		109	10133	520		R	05/08/08	06/01/08	02/02/07				

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19999	109	10134	520	Multi - Fayetteville 69 kV conversion	R	05/08/08	06/01/08	02/02/07	\$21,000,000				
19999	109	10135	520		R	05/08/08	06/01/08	02/02/07					
19999	109	10136	520		R	05/08/08	06/01/08	02/02/07					
20000	110	10137	520	XFR - Pryor Junction 138/69 kV	R	04/25/08	06/01/08	02/13/08	\$1,829,100				
	111	10138	520	Line - Hobart Junction - Tamar - 138 kV	R2	06/01/09	06/01/15		\$125,000		6 months		
	112	10139	520	Line - Sayre - Erick	OC-R	12/01/08	06/01/09	07/28/08	\$10,400,000				
20000	113	10140	520	Multi - Wallace Lake - Port Robson - RedPoint 138 kV	R	06/01/10	06/01/12	02/13/08	\$4,200,000				24 months
20000	113	10141	520	Multi - Wallace Lake - Port Robson - RedPoint 138 kV	R	06/01/10	06/01/12	02/13/08	\$7,000,000				24 months
20000	113	10142	520	Multi - Wallace Lake - Port Robson - RedPoint 138 kV	R	06/01/10	06/01/12	02/13/08	\$9,800,000				24 months
20000	113	10143	520	Multi - Wallace Lake - Port Robson - RedPoint 138 kV	R	05/09/08	06/01/12	02/13/08	\$3,000,000				24 months
	114	10144	520	Line - Northwest Texarkana-Bann T - Bann 138kV	TS	03/26/08	06/01/08	01/02/07	\$25,000				
	115	10145	520	Line - Northwest Texarkana - Alumax Tap	R	03/04/08	06/01/07		\$2,160,000				
	116	10146	520	Line - Alumax Tap - Bann	TS	03/26/08	06/01/09	01/02/07	\$1,180,000				
19998	117	10147	520	Line - Chamber Springs - Tontitown 345 kV	R	05/15/08	06/01/07	02/14/07	\$14,405,000				
19999	118	10148	520	Line - Elk City - Elk City 69 kV	R	12/06/07	06/01/07	02/02/07	\$100,000				
	119	10149	520	Line - Cache - Snyder 138kV	TS	05/21/08	06/01/08	10/11/06	\$73,348				
19997	120	10150	520	Line - Linwood to McWillie Street Rebuild	R	04/30/08	06/01/08	03/09/06	\$1,100,000				
20001	121	10151	523	Line - 412 Sub - Kansas Tap 161 kV	R	06/08/08	06/01/10	02/13/08	\$2,971,180				
	60	10078	524	Line - Ft Smith (Motorize Switches)	PL	01/31/08	-		\$105,852				
	89	10076	524	Line - Vbi - 161 kV Ckt	PL	10/31/08	-		\$350,017				OGE Zonal/local Upgrade. Not for SPP reliability.
19996	52	10070	524	Line - Stillwater - McElroy 138 kV	R	02/27/09	05/31/08	02/02/07	\$1,758,527				Interim Mitigation is to redispach Sooner Power Plant.
	55	10073	524	Line - Maud - 138 kV Ckt	PL	12/30/08	-		\$359,964				OGE Zonal/local Upgrade. Not for SPP reliability. OGE combined with another project at Maud in 2008.
	67	10085	524	Line - Igo - Razorbak 69 kV	PL	03/31/09	-		\$5,939,246				
	123	10153	524	Multi - Earlywine	PL	06/01/09	-						TO Zonal/local upgrade. Not for SPP reliability.
	123	10154	524	Multi - Earlywine	PL	06/01/09	-						TO Zonal/local upgrade. Not for SPP reliability.
	123	10155	524	Multi - Earlywine	PL	06/01/09	-		\$12,900,000				TO Zonal/local upgrade. Not for SPP reliability.
	123	10156	524	Multi - Earlywine	PL	06/01/09	-						TO Zonal/local upgrade. Not for SPP reliability.
20002	124	10157	524	Line - Fort Smith - Colony 161 kV	R	12/31/08	06/01/09	02/13/08	\$133,000				Replace 1200A terminal Equipment at Ft. Smith & Colony
	125	10158	524	Line - Poteau - Cavanal Mtn 69kV	PL	12/31/08	-		\$22,692				Breaker Failure contingency of breaker 183 & 186 at Ft. Smith cause the 69kV Poteau-Cavanal line to overload in 2008SP for those TPL-003 contingencies
	126	10159	524	Line - Maud - Seminole 138kV	PL	12/31/08	-		\$326,346				An SPP Flowgate
19995	127	10160	524	Line - Westmoore - Pennsylvania 138 kV	PL	12/30/08	-	02/15/07	\$250,000				
	128	10161	524	Line - Muskogee - Pecan Creek 345 kV	PL	06/01/08	-						
	129	10162	524	Multi - Riverside - Pecan Creek - Muskogee 345 kV	PL	06/01/08	-						
	129	10163	524	Multi - Riverside - Pecan Creek - Muskogee 345 kV	PL	06/01/08	-						
	130	10164	524	XFR - Pecan Creek 345/161/13.8 kV	R2	06/01/08	06/01/15		\$7,226,027				
20002	131	10165	524	Line - Canadian - Cedar Lane 138 kV	R	06/01/08	06/01/08	02/13/08	\$12,637	\$30,000			
	72	10090	525	Line - Elmore - Wallville 69 kV	R	03/31/08	06/01/12	02/02/07	\$1,488,000		16 months		Project Under Construction, will be completed early 2008
20003	132	10166	525	Line - Anadarko - Cyril 69 kV	R	06/01/09	06/01/08	02/13/08	\$3,120,000		16 months		WFEC can have local generation at Georgia substation turned on to remove 4MW, WFEC can also move load from medicine Park to Paradise substation to fix overload until 2009
	133	10167	525	Line - Hamon Butler - Morewood 69 kV	TS	-	06/01/08	01/02/07	\$0		8- months		WFEC has requested removal from STEP, closing of line from Arapaho to Hammon Butler has been approved as a viable solution
	134	10168	525	Multi - Erick - Morewood SW conversion	OC-R	10/01/08	06/01/08	02/02/07			12 months		New loads which required this project will not be put into service until the this project is complete
	134	10169	525	Multi - Erick - Morewood SW conversion	OC-R	10/01/08	06/01/08	02/02/07			12 months		New loads which required this project will not be put into service until the this project is complete
	134	10170	525	Multi - Erick - Morewood SW conversion	OC-R	10/01/08	06/01/08	02/02/07	\$12,000,000		12 months		New loads which required this project will not be put into service until the this project is complete
	134	10171	525	Multi - Erick - Morewood SW conversion	OC-R	10/01/08	06/01/08	02/02/07			12 months		New loads which required this project will not be put into service until the this project is complete
	134	10172	525	Multi - Erick - Morewood SW conversion	OC-R	10/01/08	06/01/08	02/02/07			12 months		To be constructed in conjunction w/ AEPW New loads which required thid project will not be put into service until the this project is complete
20003	136	10174	525	Line - Meeker - Hammett 138 kV	R	06/01/10	06/01/08	02/13/08	\$5,250,000		10 months		WFEC can reduce load on substations in Canadian Valley to restore voltage until project is completed.
20003	137	10175	525	Line - Wakita - Hazelton 69 kV	R	06/01/10	06/01/08	02/13/08	\$5,670,000		10 months		WFEC can transfer load from Ringwood Substation to Aline Substation to restore voltage until project can be completed
20003	138	10176	525	Line - OGE Woodward - WFEC Woodward 69 kV	R	12/01/09	06/01/08	02/13/08	\$1,050,000		10 months		WFEC can redispach generation from Mooreland to Anadarko to prevent overloading until line can be built
20003	139	10177	525	Multi - Kingfisher 69 kV	R	11/01/08	06/01/08	02/13/08	\$4,050,000		10 months		Install King Fisher switching Station this assumes Twin lakes was installed earlier
20003	139	10178	525	Multi - Kingfisher 69 kV	R	11/01/08	06/01/08	02/13/08	\$3,540,000		10 months		Install King Fisher switching Station this assumes Twin lakes was installed earlier
	140	10179	525	Line - ACME - W Norman 69 kV	R	06/01/09	06/01/08	02/02/07	\$912,000		8 months		
	141	10180	525	XFR - Ft Supply 70 MVA	TS	06/01/08	06/01/08	01/02/07	\$2,000,000		18- months		WFEC will transfer load from West Norman ot Acme in case of the line overloading.

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20003	142	10181	525	Line - Little Axe - Noble 69 kV	R	06/01/09	06/01/08	02/13/08	\$2,640,000		16 months		WFEC will transfer load from Little Axe to Noble Substation in case of the line overloading.
20004	144	10183	526	Line - Curry County - North Clovis Conversion	R	06/01/10	06/01/08		\$200,000				Approved in 2008 budget. Replacement for upgrade of Curry autos. Requires changeout of 69 kV dist transformer to 115 kV. No mitigation needed if built by 6/1/10.
20004	146	10185	526	Multi - Seminole - Hobbs Project 230 kV	R	06/01/09	06/01/08	02/13/08	\$8,762,733				
20004	146	10186	526		R	06/01/10	06/01/08	02/13/08	\$8,920,699				
20004	146	10187	526		R	06/01/09	06/01/08	02/13/08	\$7,715,262				
20004	146	10188	526		R	06/01/09	06/01/08	02/13/08					
20004	146	10189	526		R	06/01/09	06/01/08	02/13/08					
20004	146	10190	526		R	06/01/09	06/01/08	02/13/08	\$3,891,288				
20004	147	10191	526	XFR - Roswell Interchange 115/69 kV	R	-	06/01/08	02/13/08	\$600,000				Needs further study. Will likely convert 69 kV load to 115 kV. Studying new load requests on 69 kV in Roswell.
	148	10192	526	Line - Amarillo South - Springdraw 115 kV	PL	06/06/08	-		\$5,713,560		24 months		
	149	10193	526	Line - Cox - Floyd 115 kV	PL	12/01/08	-		\$9,898,838		28 months		
19987	150	10194	526	XFR - Kress 115/69 kV	R	12/26/08	06/01/08	02/02/07	\$1,250,000		18 months		Mitigation Plan verified by SPP staff.
20004	151	10195	526	XFR - Tucco 115/69 kV	R	-	06/01/08	02/13/08	\$1,260,000				New system configuration mitigates this project.
19987	152	10196	526	XFR - NE Hereford 115/69 kV #2	R	-	06/01/08	02/02/07	\$1,260,000				New system configuration mitigates this project.
20004	153	10197	526	XFR - Potash Junction Interchange 115/69 kV	R	-	04/01/08	02/13/08	\$600,000			Cancelled	No project here! Step study justified this project with a modeling error. Project ISD has slipped due to transformer delivery. LPL generation will serve as a mitigation.
	154	10198	526	XFR - Tucco Interchange 230/115 kV Ckt 2	TS	10/31/08	06/01/08		\$7,978,726		24 months		
20004	155	10199	526	XFR - Nichols 230/115 kV	R	05/01/09	06/01/11	02/13/08	\$6,000,000		24 months		
20004	156	10200	526	Multi - Hitchland - Texas Co. 230 kV and 115 kV	R	06/01/10	06/01/08	02/13/08	\$5,132,829				Construct double-circuit 115 kV line from Hitchland Interchange to V30. (Estimated cost includes UID 10328 scope)
20004	156	10201	526	XFR - Hale Co 115/69 kV	R	06/01/10	06/01/08	02/13/08	\$31,915,701				Construct the new 345/230/115 kV Hitchland Interchange. (Estimated cost includes UID 10327 scope)
19987	157	10202	526		R	02/06/09	06/01/07	02/02/07			18 months		
19987	157	10203	526		R	03/13/09	06/01/07	02/02/07	\$2,900,000		18 months		Mitigation Plan verified by SPP staff.
19987	157	10204	526		R	-	06/01/08	02/02/07			18 months		
19987	158	10205	526		XFR - Carlsbad Interchange 115 kV - Carlsbad Interchange 69 kV	R	-	06/01/08	02/02/07	\$2,750,000		18 months	
20004	159	10206	526	Line - Plant X Station - Tolk Station West 230 kV	R	12/01/08	06/01/08	02/13/08	\$56,000				STEP study justification based on an invalid contingency. However SPS recognizes the line flow constraint of the these wave traps.
20004	160	10207	526	Line - Terry County Interchange - Wolfthor Interchange 115 kV	R	-	06/01/08	02/13/08	\$5,000			Cancelled	Need to correct models to reflect field verified jumper ratings of 138/138 MVA summer normal/emergency ratings (winter rating 153/153) based on terminal CT ratings
	161	10208	526	XFR - Floyd Co 115/69 kV	TS	03/24/06	06/01/07		\$1,375,000		18 months		No mitigation is needed for this project since project will be complete by end of 2008 and overload problems were in summer peaks in the later years.
	161	10209	526		TS	12/19/08	06/01/07		\$1,556,906		18 months		
19987	162	10210	526	XFR - Lubbock East 115/69 kV	R	03/01/09	06/01/07	02/02/07	\$1,300,000		18 months		
19987	162	10211	526	XFR - Lubbock East 115/69 kV	R	03/01/09	06/01/07	02/02/07	\$1,300,000		18 months		Mitigation Plan verified by SPP staff.
	163	10212	526	XFR - Lubbock East 230/115 kV	TS	01/31/08	06/01/07		\$3,000,000	\$2,130,662	24 months		
19987	250	10323	526	XFR - Cochran 115/69 kV	R	04/01/09	06/01/08	02/02/07	\$2,000,000		18 months		
19987	250	10324	526	XFR - Cochran 115/69 kV	R	04/01/09	06/01/08	02/02/07	\$2,750,000		18 months		Mitigation Plan verified by SPP staff.
20007	164	10213	534	Line - WEPL Cimarron Plant - North Cimarron 115 kV	R	12/31/09	06/01/08	02/13/08	\$900,000				Currently in engineering design and cost review. Mitigation is to reduce generation in area 534 and increase in area 539 as needed to relive overload.
	165	10214	534	Line - Phillipsburg - Rhoades 115 kV Ckt 1	PL	12/31/09	-		\$6,250,000			Under Construction	
20007	166	10215	534	Line - Holcomb - Plymell 115 kV	R	12/31/09	06/01/08	02/13/08	\$1,980,000				Currently in engineering design and cost review. Mitigation is to reduce generation in area 534 and increase in area 539 as needed to relive overload.
20006	167	10216	536	Line - Gill Energy Center East - Gill Energy Center Jct - Oatville 69 kV Rebuild	R	06/01/08	06/01/08	02/13/08	\$1,589,322		18 months		
	168	10217	536	Line - Emporia Energy Center 345 kV Switchyard Connections	PT	03/13/08	-		\$243,020				
20006	169	10218	536	Line - Chapman - Clay Center 115 kV Uprate	R	12/01/08	06/01/08	02/13/08	\$10,000		12 months	Cancelled	Model error.
20006	170	10219	536	Line - Fort Junction - Anzio 115 kV	R	06/01/08	06/01/08	02/13/08	\$2,008,040		12 months		
20006	171	10220	536	Line - Weaver - Rose Hill 69 kV	R	12/01/08	06/01/08	02/13/08	\$2,363,907		12 months		Transmission Operating Directive 1104
20006	172	10221	536	Line - Tecumseh Energy Center - Midland 115 kV	R	06/01/08	06/01/12	02/13/08	\$2,000,000		6 months		
	173	10222	536	Line - Gill Energy Center West-Pack 69 kV Rebuild	PL	12/01/08	-		\$4,036,483		12 months		TO Zonal/local upgrade. Not for SPP reliability. Project deferred.
19986	174	10223	536	Line - Murry Gill Energy Center - MacArthur 69 kV	R	06/01/08	06/01/08	02/02/07	\$150,000		8 months		
20006	175	10224	536	Line - McDowell Creek - Fort Junction 115 kV	R	06/01/08	10/01/08	02/13/08			12 months		
20006	175	10225	536	Line - McDowell Creek - Fort Junction 115 kV	R	06/01/08	10/01/08	02/13/08	\$6,350,667		12 months		
19986	176	10226	536	Line - Dearing - Coffeyville 69 kV Rebuild	R	06/01/08	06/01/08	02/02/07			7 months		
19986	176	10227	536	Line - Coffeyville - CRA 69 kV Rebuild	R	06/01/08	06/01/08	02/02/07	\$1,226,705		7 months		
20006	179	10228	536	Line - Summit - NE Saline 115 kV	R	12/01/09	10/01/08	02/13/08	\$3,525,000		18 months		Project is modified: Rebuild Summit-Northview 115 kV; Build Summit-Southgate 115 kV; Remove Northview-Southgate 115 kV; Work will be performed when extensive crews are completing Reno County-Summit 345 kV work.
19986	180	10229	536	Line - Stranger Creek - Thornton Street 115 kV Addition	R	06/01/09	06/01/07	02/02/07	\$9,253,007		12 months		Interim mitigation is implementation of Transmission Operating Directive 1216; Project delay is due to routing difficulties at Stranger Creek substation taking into account the addition of the 2nd 345-115 kV transformer in 2009.
19986	181	10230	536	XFR - County Line 115/69 kV Replacement	R	05/31/08	06/01/07	02/02/07	\$2,860,000		14 months		Interim mitigation is moving load from the 34 kV winding of the 115-69 kV transformer; New 115-34.5 kV transformer placed in service 11/20/2007

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19986	182	10231	536	Line - Chase - White Junction 69 kV	PL	06/01/09	06/01/08		\$3,805,000		8 months		Interim mitigation is application of existing Transmission Operating Directive
	185	10234	536	Multi - Hutchinson 115 kV conversion	PL	12/01/08							
	185	10235	536		PL	12/01/08							
	185	10236	536		PL	12/01/08							
	185	10237	536		PL	12/01/08	12/31/08	02/02/07	\$6,711,881		20 months		
	185	10238	536		PL	12/01/08							
	185	10239	536		PL	12/01/08							
	270	10353	536	Line - Tap Emporia Energy Center in/out of Lang - Swissvale 345 kV	PT	03/13/08	-		\$0				Costs included in 2008 project
20007	187	10241	539	Line - Green Leaf - Clay Center 115 kV	R	-	06/01/08	02/13/08	\$7,520,000		12 months		Mitigation is putting the Clifton Unit (539655) on and increasing the output as needed to relieve the line loading. Project has been suspended after TransCanada study determined that this line did not need to be constructed.
20008	188	10242	540	Line - Anaconda - Harrisonville West	R	12/01/08	06/01/08		\$0				Project is behind the schedule, but KCPL/Aquila is able to mitigate the overload problems on the 69 kV line by manually opening the 69 kV line at South Harper 69 kV Sub
20008	189	10243	540	Line - Grandview - Martin City 161 kV	R	12/01/08	06/01/08	02/13/08	\$150,000				Project is behind the schedule. But no mitigation plan is needed until the coming summer
20008	190	10244	540	Line - Martin City - Turner Road 161 kV Reconductor	R	06/01/13	06/01/08	02/13/08	\$1,350,000				KCPL/Aquila is working on an alternative to replace the project. The alternative will be sent to SPP for review.
20008	191	10245	540	Line - Belton South - Turner Road Sub 161 kV	R	06/01/09	06/01/08	02/13/08	\$800,000				KCPL/Aquila is working on an alternative to replace the project. The alternative will be sent to SPP for review.
	192	10246	540	Line - Iatan - Platte City 161 kV Ckt 1	PL	06/01/10	-		\$1,050,000				
20008	194	10248	540	Line - Harrisonville North - Ralph Green 69 kV	R	-	06/01/08	02/13/08	\$2,200,000				This line is under re-study by RTO.
	195	10249	540	Line - Pope Lane to Smithville 161kV	R	06/01/09	-		\$4,550,000		12-18 months		
	196	10250	541	Multi - Pleasant Valley Sub	PL	06/01/08	-						
	196	10251	541	Multi - Pleasant Valley Sub	PL	06/01/08	-		\$2,360,000		6 months		
20009	197	10252	541	XFR - West Gardner 345/161 kV	R	06/01/08	06/01/08	02/13/08	\$5,000,000	\$4,574,216	6 months		cost near final but not complete yet.
20009	198	10253	541	Line - Antioch - Oxford 161 kV	R	12/01/08	06/01/08	02/13/08	\$2,250,000				project scheduled to begin construction, some delay due to hurricane restoration; mitigation plan not required 2008 summer STEP model indicates mitigation not required
	199	10254	541	Multi - Lackman Sub	PL	06/01/08	-						
	199	10255	541	Multi - Lackman Sub	PL	06/01/08	-		\$138,200		6 months		
	200	10256	541	Line - Terrace - Boulevard 161 kV	PL	06/01/08	-		\$4,352,600		10 months		
	201	10257	541	Line - Crosstown - Boulevard 161 kV	PL	06/01/08	-		\$4,750,000				
20010	202	10258	544	Line - Sub 436 - Webb City Cardinal - Sub 110 - Oronogo Jct. 1 69 kV	R	-	06/01/08	02/13/08	\$400,000		12 months		Operating Directive available
20010	203	10259	544	Line - Sub 109 - Atlas Jct. - Sub 108 - Carthage Northwest 1 69 kV	R	-	06/01/08	02/13/08	\$1,277,935		18 months		Operating Directive available
20010	204	10260	544	Line - Webb City Cardinal - Carthage 69 kV	R	-	06/01/08	02/13/08	\$3,000,000		18 months		Operating Directive available
20010	205	10261	544	Line - Boston East - Jasper West Tap 69 kV	R	-	06/01/08	02/13/08	\$1,200,000		12 months		Operating Directive available
20010	207	10263	544	Line - Sub 145 - Joplin West 7th - Sub 341 - Joplin NorthWest 69 kV	R	06/01/08	06/01/08	02/13/08	\$780,000		12 months		
19982	208	10264	544	Line - SUB 167 - RIVERTON - SUB 406 - RIVERTON SOUTH 1	R	06/01/08	06/01/08	02/02/07	\$20,000		6 months		
19982	209	10265	544	Multi - Riverdale - Ozarks 161 kV Ckt 1	R	03/01/09	06/01/10	02/02/07					
19982	209	10266	544		R	03/01/09	06/01/10	02/02/07					
19982	209	10267	544		R	03/01/09	06/01/10	02/02/07	\$14,057,000		30 months		
19982	209	10268	544		R	03/01/09	06/01/10	02/02/07					
20010	210	10269	544		Line - Boston East - Richland 69 kV rating change	R	-	06/01/08	02/13/08	\$150,000			
20011	212	10271	546	Line - Norton - Neergard 69 kV	R	06/01/10	06/01/08	02/13/08	\$1,485,000		24 months		SPRM will mitigate overload by transferring load prior to reconductor completion in 2010.
			520	Line - Hugo Tap	PT	12/01/08			\$361,000		6 months		Eliminating 3 terminal at Valiant---Change the Hugo Tap -ldabel 138 to routed into Valiant instead of the Hugo Tap approximately .1 miles of new line
Year 2009													
	216	10275	520	Line - Ben Wheeler - Barton's Chapel (Rayburn) 138 kV Ckt 1	PL_Rayburn	06/01/10	-				18 months		Rayburn Country Project. Rayburn confirm project In Service Date is 06/01/2009.
			520	Line - Tap N. Huntington - Waldron 69 kV	R	06/01/09	06/01/08	02/13/08	\$400,000				Mitigation Plan: For the loss of the OG&E AES-Tarby 161 kV line, AEP will open 69 kV breaker #930 at Midland (AEP) toward Howe (OG&E). This mitigates overloading of AEP's North Huntington-Huntington and Huntington-Midland REC 69 kV line sections. This operating procedure is to be finalized and submitted to SPP for approval prior to the need date.
20000	217	10276											
20000	218	10277	520	Line - Huntington - N Huntington 69 kV	R	06/01/09	06/01/09	02/13/08	\$20,000				
20000	219	10278	520	Line - Excelsior - Excelsior Tap 161 kV	R	06/01/09	06/01/09	02/13/08	\$4,000,000				Reeves Road station will be built under the existing North Huntington - Bonanza 161kV line. This project will replace the Excelsior Tap project.
	220	10279	520	Line - Riverside Station - Explorer Glenpool 138 kV Ckt 1	TS	06/01/09	06/01/09	07/21/06	\$1,000,000				
20000	221	10280	520	Line - Hope - Fulton 115 kV	R	06/01/09	06/01/09	02/13/08	\$100,000				
20000	222	10281	520	Line - Bonanza - Bonanza Tap 161 kV	R	06/01/09	06/01/11	02/13/08	\$100,000				
	223	10282	520	Line - SW Shreveport - SW Shreveport Tap	PL	01/01/09	-		\$2,550,000				
	224	10283	520	XFR - Southwest Shreveport Transformer Ckt 1 345/161 kV	TS	01/01/09	06/01/10	06/27/07	\$1,500,000				
	224	10284	520	XFR - Southwest Shreveport Transformer Ckt 2 345/161 kV	TS	01/01/09	06/01/10	06/27/07	\$1,500,000				
20000	225	10286	520	Line - North Magazine - Magazine REC - Danville 161 kV	R	06/01/09	06/01/09	02/13/08	\$17,900,000				
20000	225	10289	520	Line - North Magazine - Magazine REC - Danville 161 kV	R	06/01/09	06/01/09	02/13/08	\$7,294,800				

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20000	227	10291	520	Line - Breaker Daingerfield - Jenkins REC 69 kV	R	12/01/08	06/01/09	02/13/08	\$250,000				
20000	229	10292	520	Multi - Flint Creek - E Centerton 161 kV	R	06/01/09	06/01/11	02/13/08					
20000	229	10293	520	Multi - Flint Creek - E Centerton 161 kV	R	06/01/09	06/01/13	02/13/08	\$15,200,000		24 months		
20000	229	10294	520	Multi - Flint Creek - E Centerton 161 kV	R	06/01/10	06/01/13	02/13/08			24 months		
20000	230	10295	520	Line - Broken Bow - Craig Junction 138 kV	R	06/01/09	06/01/08	02/13/08	\$8,900,000				Mitigation Plan: For the loss of either the WFEC Broken Bow Dam Tap-Mt. River or Mt. River-Craig Junction 138 kV line sections, which outage the three-terminal line at WFEC's Broken Bow Dam Tap, WFEC will open 138 kV switch #277 at Broken Bow Dam Tap toward Broken Bow Dam (SWPA). This allows all load to be restored without closing the loop from Hugo Power Plant (WFEC) to Broken Bow Dam or overloading the AEP Broken Bow Dam-Craig Junction 138 kV line. This operating procedure is to be finalized and submitted to SPP for approval prior to the need date.
	231	10296	520	Line - Turk - SE Texarkana - 138 kV	GI	12/31/09	-		\$26,850,000				
	232	10297	520	Line - Turk - Sugar Hill 138 kV	GI	12/31/09	-		\$19,700,000				
20001	233	10298	523	XFR - Claremore 161/69 kV	R	06/01/09	06/01/08	02/13/08	\$6,000,000		24 months		GRDA will install a mobile substation 161/13kV that will eliminate overload on autotxfr
	56	10074	524	Line - Chitwood - Garber 138 kV	PL	05/31/09	-		\$5,920,226				
	234	10298	524	Line - Explorer Glenpool - Beeline 138 kV Ckt 1	TS	06/01/09	06/01/09	07/21/06	\$200,000				
	235	10300	524	Line - Fort Smith - Colony 161 kV	PL	06/01/09	06/01/17		\$2,137,500		14 months		
20002	236	10301	524	Line - Alva - Knobhill 69 kV	R	06/01/09	06/01/09	02/13/08	\$35,000				
	237	10302	524	Line - Explorer Glenpool - Riverside Station 138 kV Ckt 1	TS	06/01/09	06/01/09	07/21/06	\$400,000				
20003	238	10303	525	Line - Atoka - WFEC Tupelo - Lane 138 kV	R	06/01/09	06/01/12	02/13/08	\$8,265,000		12 months		
20003	238	10304	525	Line - Atoka - WFEC Tupelo - Lane 138 kV	R	06/01/09	06/01/12	02/13/08			12 months		
20005	177	10729	520	Line - Atoka 138 kV Three Breaker Ring Bus & Relay Work at Tupelo	R	06/01/09	06/01/12	02/20/08	\$442,800				
20005	177	10728	520	Line - Atoka 138 kV Three Breaker Ring Bus & Relay Work at Tupelo	R	06/01/09	06/01/12	02/20/08	\$2,887,600		12 months		
20003	240	10306	525	Line - Cyril to Medicine Park Jct 69 kV	R	06/01/09	06/01/09	02/13/08	\$750,000		16 months		
20003	241	10307	525	Line - Anadarko - Georgia Tap 138 kV	R	06/01/09	06/01/09	02/13/08	\$750,000		16 months		
20003	242	10308	525	Line - Elmore - Paoli 69 kV	R	06/01/09	06/01/09	02/13/08	\$3,240,000		12 months		
20003	243	10309	525	Multi - OU SW - Goldsby - Canadian SW 138 kV	R	06/01/09	06/01/09	02/13/08	\$1,837,500		12 months		
20003	243	10310	525	Multi - OU SW - Goldsby - Canadian SW 138 kV	R	06/01/09	06/01/09	02/13/08	\$2,250,000		12 months		
20003	243	10311	525	Multi - OU SW - Goldsby - Canadian SW 138 kV	R	06/01/09	06/01/09	02/13/08	\$5,000,000		12 months		
20003	244	10312	525	XFR - Paoli 138 kV/69 kV Transformer	R	06/01/08	06/01/09	02/13/08	\$1,500,000		12 months		
20004	246	10314	526	Multi - Nichols - Whitaker Sub 115kV; Nichols - Cherry 115 kV	R	12/31/08	06/01/09	02/13/08	\$5,000				SPP STEP study results indicate this terminal upgrade is needed before the 2017 summer peak without any overload occurrences in any of the models before then.
20004	246	10315	526	Multi - Nichols - Whitaker Sub 115kV; Nichols - Cherry 115 kV	R	12/31/08	06/01/09	02/13/08					SPP STEP study results indicate this terminal upgrade is needed before the 2017 summer peak without any overload occurrences in any of the models before then.
20004	247	10316	526	Line - Curry County Interchange-Farmers Electric REC-Clovis 115 kV	R	12/31/08	06/01/09	02/13/08	\$5,000				This terminal upgrade is needed only after the North Clovis Substation is upgraded to the 115 kV circuit, which won't be in-service until 2010.
20004	249	10320	526	Multi - Seven Rivers - Pecos - Potash 230 kV	R	06/01/09	06/01/09	02/13/08			30 months		
20004	249	10321	526	Multi - Seven Rivers - Pecos - Potash 230 kV	R	06/01/09	06/01/09	02/13/08	\$15,891,640		30 months		
20004	249	10322	526	Multi - Seven Rivers - Pecos - Potash 230 kV	R	06/01/09	06/01/09	02/13/08			30 months		
20004	156	10325	526		R	06/01/10	06/01/09	02/13/08	\$11,922,643				
20004	156	10326	526		R	06/01/10	06/01/09	02/13/08	\$16,094,371				
20004	156	10327	526		R	06/01/10	06/01/09	02/13/08	\$0				
20004	156	10328	526	Multi - Hitchland - Texas Co. 230 kV and 115 kV	R	06/01/10	06/01/09	02/13/08	\$0				
20004	156	10329	526		R	06/01/10	06/01/09	02/13/08	\$10,771,825				
20004	156	10330	526		R	06/01/10	06/01/09	02/13/08	\$10,766,250				
20004	156	10331	526		R	06/01/10	06/01/09	02/13/08	\$5,846,295				
20004	252	10332	526	XFR - Yoakum County Interchange 230/115 kV	R	06/01/09	06/01/09	02/13/08	\$4,101,185		24 months		
	256	10336	534	Line - Johnson - Pioneer 115 kV	PL	-	-		\$10,650,000			Cancelled	Project for local upgrade Only. Contingent on Holcomb Unit 2 construction.
	257	10337	534	Line - Ulysses Plant 69 kV	PL	-	-					Cancelled	Project for local upgrade Only. Contingent on Holcomb Unit 2 construction.
	253	10333	536	Line - Jarbalo - 166th Street 115 kV	TS	09/18/08	06/01/09	05/29/07			18 months		
	253	10334	536	Line - 166th - Jaggard Junction 115 kV Rebuild	TS	06/01/09	06/01/09	05/29/07	\$7,816,524		18 months		
	253	10335	536	Line - Jaggard Junction - Pentagon 115 kV Rebuild	TS	06/01/09	06/01/09	05/29/07			18 months		
20006	260	10343	536	Line - Reno - Circle 115 kV	R	12/01/08	06/01/09	02/13/08	\$1,700,000		18 months		Rebuild will be done as part of Wichita - Reno County 345 kV; Reviewing the connections of the Reno County - Circle 115 kV lines
	183	10232	536	Line - Wichita - Reno County 7 345 kV Ckt	EU	12/01/08	-						
	183	10233	536	XFR - Reno County 345/115 kV Ckt 1	EU	12/31/08	-		\$74,211,804		24 months		
	262	10345	536	Line - Reno County-Summit 345 kV ckt 1	EU	12/01/09	-				24 months		Project costs include rebuilding of 115 kV and 230 kV underlying system on same ROW
	262	10346	536	XFR - Reno County 345/115 kV #2	EU	12/01/09	-		\$70,552,421		24 months		
20006	265	10348	536	XFR - Stranger Creek 345/115 #2 Addition	R	06/01/09	06/01/09	02/13/08	\$8,000,000		24 months		
20006	266	10349	536	Line - Circle - HEC GT 115 kV Rebuild	R	06/01/09	06/01/09	02/13/08	\$300,000		18 months		Interim mitigation is redipatch of HEC GT units.
20006	267	10350	536	Multi - Halstead - Mud Creek Jct. - Mid-American Jct. - Newton 69 kV	R	06/01/09	06/01/09	02/13/08	\$2,500,000		12 months		
20006	267	10351	536	Multi - Halstead - Mud Creek Jct. - Mid-American Jct. - Newton 69 kV	R	06/01/09	06/01/09	02/13/08	\$360,000		12 months		
20006	267	10352	536	Multi - Halstead - Mud Creek Jct. - Mid-American Jct. - Newton 69 kV	R	06/01/09	06/01/09	02/13/08	\$1,300,000		12 months		Cancelled Project not needed. UVLS operational in Newton Division. Adjustment of CTs at Halstead and Newton may be interim mitigation.

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	273	10356	540	Multi - 161kV Tap of Nashua to Liberty West	PL	06/01/09	-		\$1,260,000		12-18 months		
	273	10357	540	Multi - 161kV Tap of Nashua to Liberty West	PL	06/01/09	-				12-18 months		
	275	10359	540	Multi - 161kV Tap of Platte City to Stranger Creek	R	06/01/09	-		\$7,127,000		12-18 months		
	275	10360	540	Multi - 161kV Tap of Platte City to Stranger Creek	PL	06/01/09	-				12-18 months		
	278	10361	540	Line - Longview - Sampson 161 kV	PL	06/01/09	-		\$1,250,000		12-18 months		
	278	10362	540	Line - Sampson - Grandview East 161 kV	PL	06/01/09	-		\$1,250,000		12-18 months		
	279	10363	541	Line - Craig - Lenexa 161 kV	PL	06/01/09	-		\$192,000		6 months		
	280	10364	541	Line - College - Craig 161 kV	TS	06/01/09	06/01/11	05/31/07	\$1,193,400		24 months		
20010	282	10366	544	Line - Sub 389-Joplin Southwest - Sub 422-Joplin 24th & Connecticut 161 kV	R	06/01/09	06/01/09	02/13/08	\$5,000		6 months		
Year 2010													
	288	10374	520	Line - Valiant Substation - Install 345 kV terminal equipment	TS	04/01/12	07/01/12	10/11/06	\$3,840,000				Notification received from the SPP concurring with the new in-service date due to the delay of the Turk plant
	289	10375	520	Line - Clinton City Wave Trap	TS	06/01/10	06/01/10	10/17/06	\$75,000				
20000	291	10377	520	Line - Bann - Lonestar Ordinance Tap 69 kV	R	06/01/10	06/01/10	02/13/08	\$25,000				
20000	292	10378	520	Line - Greggton - Lake Lamond 69 kV	R	06/01/10	06/01/10	02/13/08	\$1,496,000				
20000	294	10380	520	Line - North Mineola - Mineola 69 kV	R	06/01/10	06/01/10	02/13/08	\$350,000				
	295	10381	520	Line - Coffeyville Tap - Dearing - 138 kV	TS	06/01/10	06/01/10	06/26/07	\$1,473,750		24 months		
20000	297	10383	520	Line - Quitman - Westwood 69 kV	R	06/01/10	06/01/10	02/13/08	\$1,600,000				
	299	10385	523	Multi-Kansas Tap - Siloam City 161KV	R2	06/01/10	06/01/15		\$4,212,500		24 months		
	299	10386	523	Multi-Kansas Tap - Siloam City 161KV	R2	06/01/10	06/01/15		\$1,700,000		24 months		
20001	300	10387	523	Line - Kerr - 412 Sub 161 kV Rebuild (Line - Kerr - Kerr Tap)	R	06/01/10	06/01/10	02/13/08	\$950,000		24 months		
20001	301	10388	523	XFR - Sallsaw 161/69 kV Auto #2	R	06/01/10	06/01/08	02/13/08	\$3,000,000				Installing cap bank to support voltage until 2nd autoxfmr is in place. This cap bank won't be in service until summer of 2009. In the event of a contingency, the voltage falls to 0.89pu and in reality we would max out voltage regulators and let this ride, unless we received concerns from our customer and then we would have to shed load.
	302	10389	523	Line - Siloam Springs Tap - Siloam City	PL	06/01/10	-		\$3,210,200		24 months		
	302	10390	523	XFR - Siloam Springs Tap 345/161kV	PL	12/01/10	-		\$8,019,000		24 months		
			524	Line - Northwest - Woodward 345kV	PL	12/31/09	-		\$172,000,000				
	310	10391	524	Line - Fitzhugh - Helberg 161 kV	PL	06/01/10	-		\$1,416,000				
	310	10392	524	Line - Great Lakes Carbon - Altus 161 kV	PL	06/01/10	-		\$543,000				
	310	10393	524	Line - Altus - Fitzhugh 161 kV	PL	06/01/10	-		\$660,000				
	310	10394	524	Line - Igo - Noark 161 kV	PL	06/01/10	-		\$2,994,000				
	310	10395	524	Line - Little Spadra - Igo 161 kV	PL	06/01/10	-		\$2,112,000				
	310	10396	524	Line - Noark - Great Lakes Carbon 161 kV	PL	06/01/10	-		\$522,000				
	309	10397	524	Line - Park Lane - Ahlso Tap 69 kV	PL	06/01/10	-		\$50,000				
	310	10398	524	Line - Razorback - Igo 161 kV	PL	06/01/10	-		\$2,973,000				
	310	10399	524	Line - Razorback - Short Mountain 161 kV	PL	06/01/10	-		\$500,000				
	310	10400	524	Line - Short Mountain - Branch 161 kV	PL	06/01/10	-		\$3,231,000				
	523	10668	524	Line - Rose Hill - Sooner 345 kV	TS	12/31/10	06/01/16	06/27/07	\$45,000,000		48 months		
20003	311	10401	525	Multi - Franklin SW - Acme - Norman - OU SW Conversion 138 kV	R	06/01/10	06/01/10	02/13/08	\$931,000		12 months		
20003	311	10402	525	Multi - Franklin SW - Acme - Norman - OU SW Conversion 138 kV	R	06/01/10	06/01/10	02/13/08	\$1,138,594		12 months		
20003	311	10403	525	Multi - Franklin SW - Acme - Norman - OU SW Conversion 138 kV	R	06/01/10	06/01/10	02/13/08	\$1,577,000		12 months		
20003	312	10404	525	Line - Alva - Cherokee SW 69 kV	R	06/01/08	06/01/10	02/13/08	\$150,000		6 months		
	313	10405	525	Line - Valiant - Hugo 345 kV	TS	06/01/12	06/01/12	10/17/06	\$11,000,000		24 months		
	314	10406	525	XFR - Valiant 345/138 kV	TS	06/01/12	06/01/12	10/17/06	\$5,000,000		24 months		
20004	248	10317	526	Multi - State Line-Graves Project 230/115 kV transformer & 115 kV line	R	06/01/10	06/01/09	02/13/08			30 months		
20004	248	10318	526	Multi - State Line-Graves Project 230/115 kV transformer & 115 kV line	R	06/01/10	06/01/09	02/13/08	\$10,585,000		30 months		
20004	248	10319	526	Multi - State Line-Graves Project 230/115 kV transformer & 115 kV line	R	06/01/10	06/01/09	02/13/08			30 months		
	315	10407	526	Line - Roosevelt County Interchange 115 kV - Curry County Interchange 115 kV	R2	06/01/10	06/01/15		\$200,000		6 months		Will need additional study
19989	316	10409	531	Line - S Hays - Hays Plant	R	06/01/10	06/01/08	02/02/07			18 months		This line is under re-study by RTO.
	318	10412	536	Line - Coffeyville - Dearing 138 kV	TS	06/01/10	06/01/10	06/27/07	\$2,790,000		18 months		Timing is based on WERE voltages. The AEP & WERE sections should both be done in 08.
20006	319	10413	536	Line - Cowskin-Westlink-Tyler-Hoover 69 kV Rebuild	R	-	06/01/10	02/13/08	\$830,000				
20006	319	10414	536	Line - Cowskin-Westlink-Tyler-Hoover 69 kV Rebuild	R	-	06/01/10	02/13/08	\$1,010,000				
20006	319	10415	536	Line - Cowskin-Westlink-Tyler-Hoover 69 kV Rebuild	R	-	06/01/10	02/13/08	\$770,000				Project may be revised because of extensive distribution underbuild; Investigating addition of Hoover 138-69 #3; Tyler - Westlink 69 kV line is currently operated open
20006	321	10417	536	Line - Oaklawn - Oliver 69 kV	R	06/01/10	06/01/10	02/13/08	\$965,000		12 months		
20006	323	10419	536	Line - West McPherson - Wheatland 115 kV	R	12/01/08	06/01/10	02/13/08	\$3,949,405		12 months		
	325	10421	536	XFR - Weaver 138/69 kV #2 Addition	PL	06/01/10	-		\$1,200,000		18 months		
20006	326	10422	536	Line - Lawrence Energy Center Unit 4 - Jarbalo 115 kV Rebuild	R	06/01/10	06/01/10	02/13/08	\$1,300,000		12 months		
20006	328	10424	536	Line - Reno(Circle) - Moundridge Project 115 kV Rebuild	R	12/01/08	06/01/10	02/13/08	\$5,800,000		18 months		Rebuild will be done as part of Wichita - Reno County 345 kV
20006	330	10426	536	Multi - Fort Scott - Marmaton/Lichtfield 161kV	R	-	06/01/10	02/13/08	\$3,000,000		18 months		

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20006	330	10427	536	Multi - Fort Scott - Marmaton/Lichtfield 161kV	R	-	06/01/10	02/13/08	\$1,400,000		18 months		
	529	10674	536	Line - Rose Hill - Sooner 345 kV	TS	12/01/10	06/01/16	06/27/07	\$68,000,000		24 months		Project costs are for Westar Energy portion only; Public hearing held; Technical hearing held; Project costs include rebuilding of 138 kV underlying system on same ROW
	271	10354	539	Line - Spearville - Judson Large 115 kV Ckt 2	PL	-	-	-	\$8,310,000		12 months	Cancelled	Project for local upgrade Only. Contingent on Holcomb Unit 2 construction.
	271	10355	539	XFR - Spearville 230/115kV	PL	-	-	-	\$4,800,000		6 months	Cancelled	Project for local upgrade Only. Contingent on Holcomb Unit 2 construction.
	331	10428	540	Line - Clinton MIPU - Clinton AECI 161 kV	PL	01/01/10	-	-	\$1,200,000				This project has been postponed since some of the loads in the Clinton area will be transferred to the new Osceola 161/34.5 kV Sub.
	332	10429	540	XFR - Sibley 161/69kV	PL	01/01/10	-	-	\$7,500,000				This project has been postponed since budget limitation. The problem will be mitigated by the existing operation guide.
	333	10430	540	Line - Ritchfield - Sibley 161 kV	PL	06/01/10	-	-	\$1,250,000		12-18 months		
	334	10431	540	Line - Lone Jack - Greenwood 161 kV	PL	06/01/10	-	-	\$1,600,000		24 months		
	335	10432	540	Line - Hallmark - Ritchfield 161 kV	PL	06/01/10	-	-	\$1,250,000		12-18 months		
	336	10433	540	Line - Nevada Plant - Nevada Tap 69 kV	PL	06/01/10	-	-	\$711,000			Cancelled	TO planned project.
	338	10435	544	Line - SUB 184 - NEOSHO SOUTH JCT. - Neosho (SWPA) 161 kV	PL	06/01/10	06/01/10	09/22/06	\$1,215,000		12 months		
	339	10436	546	XFR - SWPS Bus - SWPS #2 161 kV	PL	10/01/10	-	-	\$3,200,000		24 months		Related to SW2 being added to the models; This will go to the review committee
Year 2011													
20000	343	10440	520	Line - Winnsboro - Magnolia Tap 69 kV	R	06/01/11	06/01/11	02/13/08	\$250,000				
20000	108	10441	520	Line - North Market - Arsenal Hill 69 kV	R	06/01/11	06/01/11	02/13/08	\$2,300,000				
20000	345	10442	520	Line - Magnolia - Forest Hill 69 kV	R	06/01/11	06/01/11	02/13/08	\$125,000				
20000	346	10443	520	Line - Forest Hills - Quitman 69 kV	R	06/01/11	06/01/11	02/13/08	\$100,000				
20000	347	10444	520	Line - Woodlawn - Baldwin 69 kV	R	06/01/11	06/01/11	02/13/08	\$1,700,000				
20000	348	10445	520	Line - Dyess - Tontitown 161 kV	R	06/01/11	06/01/11	02/13/08	\$300,000				
	349	10446	520	Line - Ashdown - Okay 115 kV	GI	06/01/11	-	-	\$8,100,000				
	349	10447	520	Line - Ashdown - Patterson 138 kV	GI	06/01/11	-	-	\$9,670,000				
	349	10448	520	Line - MCNAB REC - Turk 115 kV	GI	06/01/11	-	-	\$1,520,000				
	349	10449	520	Line - MCNAB REC - Turk 115 kV recon	TS	06/01/11	06/01/11	-	\$1,000,000				
	349	10450	520	Line - McNab REC - Hope	TS	06/01/11	06/01/11	-	\$4,000,000				SPP to confirm if AECC McNab switches and strain bus need to be replaced. Changed from PL. 2006 AG3
	349	10451	520	XFR - Okay 115/69 kV	GI	06/01/11	-	-	\$3,400,000				Replacement not needed in 2009 due to re-rating, but replacement needed in 2011 due to voltage conversion associated with Turk.
	349	10452	520	Line - Okay 115 - Turk 138 kV	GI	06/01/11	-	-	\$9,190,000				
	349	10453	520	Line - Turk - NW Texarkana 345 kV	TS	06/01/11	-	-	\$50,000,000				
	349	10456	520	XFR - Turk 345/138 kV	TS	06/01/11	-	-	\$7,000,000				
	349	10457	520	XFR - Turk 138/115 kV #1	GI	06/01/11	-	-	\$9,110,000				
	350	10459	520	Line - Bann - Red Springs REC	GI	06/01/11	-	-	\$300,000				
	351	10460	AECC	Line - Hope - Fulton 115 kV Recon	PL	06/01/11	-	-	\$1,485,000				
	351	10461	AECC	Fulton Switching Station	PL	06/01/11	-	-	\$440,000				
20002	354	10463	524	Line - Muldrow to 3rd St. 69 kV	R	06/01/11	06/01/11	02/13/08	\$100,000				
20003	356	10466	525	Line - Medicine Park Jct - Fletcher 69 kV	R	06/01/09	06/01/11	02/13/08	\$1,230,000		16 months		
	357	10467	525	XFR - Anadarko 138/69 kV	TS	06/01/11	06/01/11	01/02/07	\$2,000,000		16 months		
20003	358	10468	525	Line - Franklin SW - Midwest Tap 138 kV	R	06/01/07	06/01/11	02/13/08	\$200,000		12 months		
20003	360	10470	525	Line - South Brown - Russett 138 kV	R	01/01/07	12/01/11	02/13/08	\$100,000				
20003	361	10471	525	Line - Fletcher - Marlow Jct 69 kV	R	06/01/09	06/01/11	02/13/08	\$2,000,000		16 months		
19987	362	10472	526	XFR - Crosby County Interchange 69 kV - Crosby County Interchange 115 kV	R	-	06/01/11	02/02/07	\$1,426,786		18 months		Studies will be conducted to further analyze 69 kV system.
20004	363	10473	526	Line - Whitaker Sub - East Plant Interchange 115 kV	R	-	06/01/11	02/13/08	\$100,000		Cancelled		No Project. Wrong ratings were used in STEP study.
20006	369	10482	536	Line - SW Lawrence - Wakarusa 115 kV Rebuild	R	-	06/01/11	02/13/08	\$1,603,280		18 months		
20006	370	10483	536	Line - Co-op - Wakarusa	R	-	06/01/11	02/13/08	\$599,760		18 months		
	374	10487	536	Line - Creswell - Oak 69 kV	R2	06/01/11	06/01/13	-	\$2,000,000		18 months		
	375	10488	536	XFR - Rose Hill 345/138 kV #3 Addition	TS	06/01/11	06/01/11	06/27/07	\$7,000,000		24 months		
	377	10490	541	Line - Paola - Middle Creek 161 kV	PL	06/01/11	-	-	\$2,622,850		18 months		
	378	10491	541	Line - North Louisburg - Middle Creek 161 kV	PL	06/01/11	-	-	\$12,179,000		24 months		TO Zonal/local upgrade. Not for SPP reliability.
20010	381	10494	544	Line - Boston East - Jasper west Tap 69 kV Rebuild	R	-	06/01/11	02/13/08	\$2,610,000		12 months		Operating Directive available
20010	382	10495	544	Line - Baxter Spring West - Hockerville 69 kV	R	06/01/10	12/01/11	02/13/08	\$50,000		6 months		
20010	383	10496	544	Line - Sub 152-Monett H.T. - Sub 383-Monett 69 kV	R	06/01/10	06/01/11	02/13/08	\$75,000		6 months		
20010	421	10547	544	Line - Sub 124 - Aurora H.T. - Sub 152 - Monett H.T. 69 kV	R	06/01/10	06/01/11	02/13/08	\$5,000		6 months		
	352	10730	544	Line - Oronogo Junction - Riverton 161 kV Recon	TS	06/01/11	06/01/11	01/10/08	\$5,750,000		24 months		
	499	10644	544	XFR - Oronogo - 161/69 kV	TS	06/01/11	06/01/11	01/10/08	\$4,000,000		36 months		
Year 2012													
	386	10500	TBD	Multi - Axtell -Knoll- Spearville	EU	06/01/12	-	-	\$73,000,000				
	386	10501	TBD	Multi - Axtell -Knoll- Spearville	EU	06/01/12	-	-	\$69,000,000				
	386	10502	TBD	Multi - Axtell - Comanche- Wichita	EU	06/01/12	-	-	\$47,000,000		48 months		
	386	10503	TBD	Multi - Axtell - Comanche- Wichita	EU	06/01/12	-	-	\$180,000,000				
	386	10504	TBD	Multi - Axtell -Knoll- Spearville	EU	06/01/12	-	-	\$10,000,000				

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20000	296	10382	520	Line - Dyess - Elm Springs REC 161 kV	R	06/01/09	06/01/12	02/13/08	\$300,000		12 months		
20000	387	10505	520	Line - Riverside - Okmulgee 138 kV	R	06/01/12	06/01/12	02/13/08	\$125,000		15 months		
20000	388	10506	520	Line - New Boston - North New Boston 69 kV	R	06/01/12	06/01/12	02/13/08	\$100,000		15 months		
20000	389	10507	520	Line - SE Texarkana - Texarkana 69 kV	R	06/01/12	06/01/12	02/13/08	\$150,000		15 months		
20000	391	10509	520	Line - Lone Star South - Pittsburg 138kV	R	06/01/12	06/01/12	02/13/08	\$300,000		15 months		
20000	392	10510	520	Line - Howell - Kilgore 69 kV	R	06/01/12	06/01/12	02/13/08	\$2,000,000		18 months		
20001	393	10511	523	XFR - Afton 161/69 kV #2 Addition	R	06/01/12	06/01/12	02/13/08	\$2,000,000		24 months		
20001	394	10512	523	Line - Pensacola - Kerr 115 kV	R	06/01/12	12/01/12	02/13/08	\$6,600,000		24 months		
20002	395	10513	524	Line - OGE Russett - WFEC Russett 138kV	R	-	12/01/12	02/13/08	\$347,073		12 months		An SPP Flowgate
20002	396	10514	524	Breaker - Bodle 138 kV	R	-	06/01/12	02/13/08	\$1,000,000		12 months		Cost to install breaker plus relays at Bodle and replace relays at Caney Creek & OGE Brown.
20002	397	10515	524	Multi - Mustang - Cimarron 138 kV	R	-	06/01/12	02/13/08	\$3,375,000		24 months		
20002	397	10516	524	Multi - Mustang - Cimarron 138 kV	R	-	06/01/12	02/13/08	\$1,875,000		24 months		
20002	89	10517	524	Line - OGE Paoli - WFEC Paoli 138 kV	R	-	06/01/12	02/13/08	\$500,000		12 months		**This cost is only the substation work, relay work, & breaker. OGE will be build 1/2 of the line, but the cost does not reflect this. OGE does not know the length of the line. The cost of building 1/2 of the line can be added to the OGE substation cost of \$500,000. TDH 7/27/07
20003	398	10518	525	Line - OGE Paoli - WFEC Paoli 138 kV	R	06/01/12	06/01/12	02/13/08	\$1,900,000		12 months		
20003	399	10519	525	Line - Lindsay - Wallville 69 kV	R	06/01/12	06/01/12	02/13/08	\$1,347,000		12 months		
20003	400	10520	525	Line - Pharoah - Weleetka 138 kV	R	06/01/12	06/01/12	02/13/08	\$100,000		6 months		
20003	401	10521	525	Line - WFEC Russell 138 kV - AEP Altus Jct Tap 138 kV	R	06/01/12	06/01/12	02/13/08	\$50,000		6 months		
20003	402	10522	525	Multi - Granfield - Cache SW 138 kV	R	06/01/12	06/01/12	02/13/08	\$1,125,000		12 months		
20003	402	10523	525	Multi - Granfield - Cache SW 138 kV	R	06/01/12	06/01/12	02/13/08	\$5,137,500		24 months		
20003	402	10524	525	Multi - Granfield - Cache SW 138 kV	R	06/01/12	06/01/12	02/13/08	\$5,000,000		24 months		
20003	403	10525	525	XFR - Comanche 138/69 kV Transformer	R	06/01/09	06/01/12	02/13/08	\$210,000		24 months		
20004	404	10527	526	Line - Hasting - Van Buren 69 kV	R	-	06/01/12	02/13/08	\$1,380,000		30 months	Cancelled	No Project: The recommended reconductor will not be necessary after the Channing & Tascosa loads are converted to 115 kV (ISD 2010)
20004	407	10531	526	Line - Northwest - North Amarillo SW 69 kV	R	-	06/01/12	02/13/08	\$963,000		30 months	Cancelled	No Project: The recommended reconductor will not be necessary after the Channing & Tascosa loads are converted to 115 kV (ISD 2010)
20004	409	10533	526	XFR - Hereford 115/69 kV Ckt 1 and Ckt 2	R	-	06/01/12	02/13/08	\$1,260,000		24 months	Cancelled	No Project. New system configuration mitigates this project.
20004	409	10534	526	XFR - Hereford 115/69 kV Ckt 1 and Ckt 2	R	-	06/01/12	02/13/08	\$1,260,000		24 months	Cancelled	No Project. New system configuration mitigates this project.
20006	410	10535	536	Line - Circle - Ark Valley - Tower 33 115 kV	R	-	06/01/12	02/13/08	\$1,800,000		18 months		
20006	410	10536	536	Line - Circle - Ark Valley - Tower 33 115 kV	R	-	06/01/12	02/13/08	\$1,537,500		18 months		
20006	411	10537	536	Line - Lawrence Hill - Wren 115 kV Rebuild	R	-	06/01/12	02/13/08	\$1,400,000		18 months	Cancelled	Project not required: Lawrence - Wren 115 kV is a radial
20006	412	10538	536	Line - 64th - Minneha 69 kV Rebuild	R	-	06/01/12	02/13/08	\$680,000		18 months		
20006	413	10539	536	Line - Eastborough - Minneha 69 kV Rebuild	R	-	06/01/12	02/13/08	\$680,000		18 months		
20009	379	10492	541	Line - Hillsdale - Cedar Niles 161 kV	R	06/01/12	06/01/13	02/13/08	\$5,418,700		24 months		TO Zonal/local upgrade. Not for SPP reliability. Delayed 2 year; mitigation not needed.
20009	414	10540	541	Line - Cedar Niles - Quarry 161 kV	PL	06/01/12	-	-	\$3,756,500		24 months		TO Zonal/local upgrade. Not for SPP reliability.
20009	416	10542	541	Line - West Gardner Tap 345 kV	R	06/01/12	06/01/12	02/13/08	\$1,740,500		24 months		kcpI declines project due to scenario case dispatch; SPP staff to review the need for this project.
20009	417	10543	541	Line - Avondale - Gladstone 161 kV	R	06/01/12	06/01/12	02/13/08	\$13,000		6 months		
20010	420	10546	544	Line - Jamesville - Sub 415 Blackhawk Jct. 69 kV	R	06/01/12	06/01/12	02/13/08	\$50,000		6 months		
20010	422	10548	544	Multi - Sub 170 - Nichols St. - Sub 359 - Republic East 69 kV	R	-	06/01/12	02/13/08	\$4,550,000		18 months		
20010	422	10549	544	Multi - Sub 170 - Nichols St. - Sub 359 - Republic East 69 kV	R	-	06/01/12	02/13/08	\$4,550,000		18 months		
20010	424	10552	546	Line - Southwest - Brookline 161 kV	PL	06/01/12	-	-	\$450,000		24 months		Reconductor is complete but terminals need to be upgraded
20010	425	10553	546	Line - Southwest - Southwest Disposal 161 kV	PL	06/01/12	-	-	\$175,000		24 months		Reconductor is complete but terminals need to be upgraded
20010	426	10554	546	Line - Southwest Disposal - Battlefield 161 kV	PL	06/01/12	-	-	\$675,000		24 months		Reconductor is complete but terminals need to be upgraded
Year 2013													
20013	429	10558	524	Line - Tarby 161kV	PL	12/30/08	-	-	\$198,534		12 months		Motorize L&M switches for Tarby Breaker 183 for Breaker Failure Contingency TPL-003
20013	317	10411	534	Line - Scott City - Manning Tap 115 kV	PL	01/01/13	-	-	\$1,500,000		9 months	Cancelled	Project for local upgrade Only. Contingent on Holcomb Unit 2 construction.
20013	365	10476	534	Line - Manning Tap - Dighton Tap 115 kV	PL	01/01/13	-	-	\$2,100,000		Cancelled	Cancelled	Project for local upgrade Only. Contingent on Holcomb Unit 2 construction.
20013	366	10477	534	Line - Holcomb - Fletcher 115 kV	PL	01/01/13	-	-	\$1,500,000		Cancelled	Cancelled	Project for local upgrade Only. Contingent on Holcomb Unit 2 construction.
20013	365	10478	534	Line - Dighton Tap - Beeler 115 kV	PL	01/01/13	-	-	\$3,150,000		Cancelled	Cancelled	Project for local upgrade Only. Contingent on Holcomb Unit 2 construction.
20013	365	10479	534	Line - Beeler - Ness City 115 kV	PL	01/01/13	-	-	\$1,800,000		Cancelled	Cancelled	Project for local upgrade Only. Contingent on Holcomb Unit 2 construction.
20014	367	10480	534	Line - Plymell - Pioneer Tap 115 kV	R	12/31/09	06/01/09	09/22/08	\$2,380,000				Currently in engineering design and cost review. Mitigation is to reduce generation in area 534 and increase in area 539 as needed to relieve overload.
20014	368	10481	534	XFR - Spearville 345/230 kV	PL	01/01/13	-	-	\$4,500,000		Cancelled	Cancelled	Project for local upgrade Only. Contingent on Holcomb Unit 2 construction.
20014	433	10563	536	Line - Yost - Moundridge	R2	-	06/01/13	-	\$150,000		18 months		
20014	414	10541	541	Line - Quarry - Clare	PL	06/01/13	-	-	\$1,385,000		18 months		TO Zonal/local upgrade. Not for SPP reliability.
20009	470	10606	541	Line - Hillsdale - Lackman 161 kV	R	-	06/01/13	02/13/08	\$3,553,000		18 months		kcpI declines project due to scenario case dispatch; SPP staff to review the need for this project.
20009	418	10544	541	Multi - Waldron Sub	PL	06/01/13	-	-	\$1,632,300		18 months		TO Zonal/local upgrade. Not for SPP reliability.
20009	418	10545	541	Multi - Waldron Sub	PL	06/01/13	-	-	\$1,632,300		18 months		TO Zonal/local upgrade. Not for SPP reliability.
20009	437	10567	544	Line - Riverton - Galena Northeast 69 kV	R2	-	06/01/13	-	\$75,000		12 months		2007 Expansion plan date changed from 06/01/2008 to 06/01/2209
20010	439	10569	544	Multi - Joplin 59 - Joplin 26th St. 161/69 kV transformer; Sub 439 Stateline 161 kV	R	-	06/01/13	02/13/08	\$9,200,000		48 months		
20010	439	10570	544	Multi - Joplin 59 - Joplin 26th St. 161/69 kV transformer; Sub 439 Stateline 161 kV	R	-	06/01/13	02/13/08	\$7,182,217		48 months		

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20010	440	10571	544	Line - Diamond Jct - Sarcoxie SW 69 kV	R	-	06/01/13	02/13/08	\$2,274,000		18 months		
20011	441	10572	546	Line - Kickapoo - Sunset 69 kV	R	06/01/12	06/01/13	02/13/08	\$805,000		24 months		
20011	442	10573	546	Multi - Brookline - Summit 345 kV	R	-	06/01/13	02/13/08			60 months		The addition of Southwest #2 generator defers the need for this project.
20011	442	10574	546	Multi - Brookline - Summit 345 kV	R	-	06/01/13	02/13/08	\$29,000,000		60 months		The addition of Southwest #2 generator defers the need for this project.
Year 2014													
	443	10575	520	Line - Osborne - Osborne Tap	R2	-	06/01/14		\$2,000,000		24 months		
	445	10577	520	Line - Big Sandy - Perdue 69kV	R2	06/01/14	06/01/14		\$2,700,000		18 months		
	446	10578	520	Line - Coffeyville Tap - North Bartlesville - 138 kV	R2	-	06/01/14		\$13,000,000		24 months		
	447	10579	520	Line - Weleeka-East Central Henryetta 138 kV Reconnector	R2	-	06/01/14		\$10,700,000		24 months		
	448	10580	520	Line-CARTHAGE REC POD-ROCK Hill 138 kV upgrade ct	R2	-	06/01/14		\$100,000		6 months		
	449	10581	520	Line - Carthage - Rock Hill	R2	-	06/01/14		\$650,000				
20000	450	10582	520	Multi - Flint Creek - Centerton 345 kV and Centerton- East Centerton 161 kV	R	06/01/14	06/01/14	02/13/08	\$2,000,000		60 months		Replaces Decatur-Centerton 345 kV project. Reconductoring Flint Creek-East Centerton 161 kV by 2010 defers the need for this 345 kV project until 2014.
	451	10583	520	Line - Chamber Springs - Farmington	R2	06/01/14	06/01/14		\$6,000,000		24 months		This upgrade would result in the Siloam Springs-Prairie Grove-Greenland 69 to 161 kV conversion and Greenland-South Fayetteville 161 kV line not being needed within the 10 year planning horizon.
20000	450	10584	520	Multi - Flint Creek - Centerton 345 kV and Centerton- East Centerton 161 kV	R	06/01/14	06/01/14	02/13/08	\$9,500,000				
20000	450	10585	520	Multi - Flint Creek - Centerton 345 kV and Centerton- East Centerton 161 kV	R	06/01/14	06/01/14	02/13/08	\$23,685,000		60 months		
	452	10586	520	XFR - Whitney 138/69 kV	R2	-	06/01/14		\$300,000		18 months		Re-rating autotransformers. However, leave this row in because switches will need to be replaced.
	454	10588	520	Line - Bartsville Southeast - North Bartlesville 138 kV	R2	-	06/01/14		\$10,000,000		24 months		
	456	10592	524	Line - Ft Smith - Akoma	R2	-	06/01/14		\$107,000		6 months		Replace 1200A terminal equipment to 2000A.
	457	10593	524	Line - Ada OC Pump - Ada OC Pump Tap 69 kV	R2	-	06/01/14		\$1,640,000		24 months		
	458	10594	524	Line - Franklin SW - Midwest TP 138 kV	R2	-	06/01/14		\$400,000		12 months		
	459	10595	524	Line - Earlsboro - Fixico 69 kV	R2	-	06/01/14		\$150,000		8 months		
	460	10596	524	Line - Wildhorse - Ratliff 69 kV	R2	-	06/01/14		\$75,000		8 months		
	463	10599	536	Line - East Manhattan - SW Manhattan 115kV	R2	-	06/01/14		\$3,337,500		18 months		Timing is based on voltage
	463	10600	536	Line - East Manhattan - JEC 230kV	R2	-	06/01/14		\$20,250,000		24 months		
	463	10601	536	XFR - East Manhattan 230/115 kV #2	R2	-	06/01/14		\$3,100,000		18 months		
	463	10602	536	Line - East Manhattan - Mcdowell 115 kV - 230 kV conversion	R2	-	06/01/14		\$1,000,000		12 months		
	467	10603	536	Line - Gill - Interstate 138 kV Uprate	R2	06/01/14	06/01/14		\$50,000		18 months		
	468	10604	536	Line - Arkansas City - Paris	R2	06/01/14	06/01/14		\$501,000		12 months		
	473	10609	546	Line - James River - Twin Oaks 69 kV	R2	06/01/14	06/01/14		\$979,000		24 months		
	473	10610	546	Line - James River - Seminole	R2	06/01/16	06/01/14		\$1,600,000		24 months		
Year 2015													
	477	10614	520	Line - Baldwin - Karmack Tap	R2	-	06/01/15		\$4,300,000		12 months		
	478	10615	520	Line - Forbing Tap - S Shreveport	R2	-	06/01/15		\$200,000		18 months		
	479	10616	520	Line - Georgia Pacific - Keatche - 138 kV	R2	-	06/01/15		\$7,000,000		24 months		
	481	10618	520	Multi - Bonanza - North Huntington 69kV	R2	-	06/01/15		\$6,000,000		36 months		
	481	10619	520	Multi - Bonanza - North Huntington 69kV	R2	-	06/01/15		\$5,300,000		36 months		
	481	10620	520	Multi - Bonanza - North Huntington 69kV	R2	-	06/01/15		\$180,000		36 months		
	481	10621	520	Multi - Bonanza - North Huntington 69kV	R2	-	06/01/15		\$2,500,000		36 months		
	481	10622	520	Multi - Bonanza - North Huntington 69kV	R2	-	06/01/15		\$2,300,000		36 months		
	481	10623	520	Multi - Bonanza - North Huntington 69kV	R2	-	06/01/15		\$1,000,000		36 months		
	481	10624	520	Multi - Bonanza - North Huntington 69kV	R2	-	06/01/15		\$7,000,000		36 months		
	482	10625	524	Line - 5 Tribes - Hancock	R2	-	06/01/15		\$3,300,000		24 months		
	484	10627	524	Line - Osage - Continental Blacks 69 kV	R	-	06/01/15		\$200,000		24 months		
	485	10628	524	Line - Kilgore - VBI 69 kV	R2	-	06/01/15		\$90,000				
	487	10630	526	XFR - Bowers 115/69 kV #2	R2	-	06/01/15		\$1,260,000		24 months		This needs additional study
	490	10635	536	Line - Bismark - Midland	R2	06/01/15	06/01/15		\$1,950,000		18 months		
	491	10636	536	Line - Bismark - COOP	R2	06/01/15	06/01/15		\$1,087,500		18 months		
	492	10637	536	Line - Gill Energy Center - Oatville 69 kV	R2	-	06/01/15		\$920,000		18 months		
	493	10638	536	Line - Jarbalo - Stranger Creek	R2	-	06/01/15		\$8,050,000		18 months		
	493	10639	536	Line - Stranger Creek - NW Leavenworth	R2	-	06/01/15		\$9,050,000		18 months		
	495	10640	536	Line - LawrenceHill-Mockingbird_115.idv	R2	-	06/01/15		\$2,377,448		18 months		
	471	10607	544	Line - SUB 368 - DADEVILLE EAST - SUB 217 - FAIRPLAY EAST	R2	-	06/01/15		\$1,660,986		18 months		
	472	10608	544	Line - SUB EXPLORER SPRING CITY TAP - SUB 389 - JOPLIN SOUTHWEST 1	R2	-	06/01/15		\$1,550,000		12 months		
	496	10641	544	Line - SUB 64 - JOPLIN 10TH ST. - SUB 145 - JOPLIN WEST 7TH 1	R2	-	06/01/15		\$55,000		6 months		
	498	10643	544	Line - SUB 376 - MONETT CITY SOUTH J2 - SUB 376 - MONETT CITY SOUTH	R2	-	06/01/15		\$56,400		12 months		
	536	10681	544	Line - Monett City South - Monett City East 69 kV	R2	-	06/01/15		\$275,000		12 months		
	537	10685	544	Line - SUB 383 - MONETT 161kV - MONETT 5 161kV	R2	-	06/01/15		\$7,369,319		48 months		
	537	10686	544	XFR - MONETT 5 161kV - Monett City South 69kV	R2	-	06/01/15		\$8,000,000		36 months		
Year 2016													
	503	10648	520	Line - Perdue - Diana	R2	-	06/01/16		\$750,000		15 months		
	504	10649	520	Line - Brown Lee - North Market	R2	-	06/01/16		\$3,300,000		18 months		
	505	10650	520	Line - SW Shreveport - Western Electric 138 kV	R2	-	06/01/16		\$2,000,000		18 months		
	506	10651	520	Line - Broken Arrow North - South Tap 138 kV	R2	-	06/01/16		\$5,000,000		18 months		

Southwest Power Pool
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		507	10652	520	Line - Arsenal Hill - Fort Humbug 138 kV	R2	-	06/01/16	\$4,750,000		18 months		
		509	10654	520	Line - Centerton Station conv	R2	-	06/01/16	\$1,600,000		24 months		
		510	10655	520	Line - Maud - Fixco Tap	R2	-	06/01/16	\$8,900,000		24 months		
20000		511	10656	520	Multi - Centerton - Osage Creek 345 kV	R	06/01/16	06/01/16	02/13/08	\$12,000,000	60 months		
		512	10657	520	Line - Ellerbe Road - Forbing Tap	R2	-	06/01/16	\$1,400,000		18 months		
		513	10658	520	Line - N Mineola- Outman	R2	-	06/01/16	\$150,000		15 months		
20000		511	10659	520	Multi - Centerton - Osage Creek 345 kV	R	06/01/16	06/01/16	02/13/08	\$13,500,000	60 months		
20000		511	10660	520	Multi - Centerton - Osage Creek 345 kV	R	06/01/16	06/01/16	02/13/08	\$32,000,000	60 months		
		516	10661	523	XFR - Coffeyville 138/69 kV	R2	-	06/01/16	\$1,260,000		24 months		
20002		518	10663	524	Line - HSL East - HSL West 69 kV	R	-	06/01/16	\$250,000		12 months		
		519	10664	524	Line - Elm Creek - Little River Lake	R2	-	06/01/16	\$750,000		12 months		
		520	10665	524	Line - Park Lane 138 kV	R2	06/01/16	06/01/16		\$500,000	12 months		
		521	10666	524	Line - Brown - Explorer Tap 138 kV	R2	-	06/01/16	\$75,000		12 months		
		522	10667	524	Line - Brown Tap - Explorer Tap 138 kV	R2	-	06/01/16	\$100,000		12 months		
		524	10669	525	Line - Gypsum - Russell 69kV	R2	06/01/16	06/01/16		\$900,000	18 months		
		525	10670	526	Line - DF Smith - DS #21 115 kV	R2	-	06/01/16	\$6,480,000		36 months		Invalid contingency - 2008 STEP Mitigations will provide additional information
		526	10671	526	XFR - DF Smith 230/115 kV	R	-	06/01/16	\$2,250,000		30 months		Transformer capable of 65Deg. C - checking on rating
20004		527	10672	526	Line - South Georgia Interchange - Osage Switching Station 115kV	R	06/01/16	06/01/16	02/13/08	\$1,300,000	30 months		Line to be re-rated to 100 degree C rating.
		533	10678	536	XFR - Auburn Road 230/115 kV	R2	-	06/01/16	\$4,500,000		24 months		
		534	10679	536	XFR - Halstead 138/69 kV #1	R2	06/01/15	06/01/16		\$1,400,000	24 months		
		540	10688	546	Line - Grand - Main	R2	-	06/01/16	\$1,000,000		24 months		SPRM does not think project is needed (not in MDWG models); Needs further study
		541	10689	546	Multi - Battlefield - Sunset 161 kV & 161/69 kV XF	PL	06/01/16	-			36 months	Cancelled	
		541	10690	546	Multi - Battlefield - Sunset 161 kV & 161/69 kV XF	PL	06/01/16	-	\$8,550,000		36 months	Cancelled	SPRM does not plan to build this project; Delete project from spreadsheet
Year 2017													
		542	10691	520	Line-Okmulgee -East Central Henryetta138 kV Reconnector	R2	-	06/01/17	\$12,800,000		24 months		
		543	10692	520	Line - Longwood Oak Pan - Harr REC 138 kV	R2	-	06/01/17	\$1,530,000		18 months		
		545	10694	520	Line - South Shreveport - Southwest Shreveport Tap	R2	-	06/01/17	\$200,000		15 months		
		546	10695	520	Line - Hobart Junction - Carnegie	R2	-	06/01/17	\$18,300,000		36 months		Replaces AEP Snyder-WFEC Snyder Project
		546	10696	520	Line - Carnegie - Fort Cobb	R2	-	06/01/17	\$7,500,000		36 months		Replaces AEP Snyder-WFEC Snyder Project
		546	10697	520	Line - Fort Cobb - SW Station	R2	-	06/01/17	\$2,300,000		36 months		Replaces AEP Snyder-WFEC Snyder Project
		549	10698	523	Line - Maid - Pryor Foundry South	R2	-	06/01/17	\$370,530		12 months		Needs additional study
		550	10699	523	Line - Maid - Redden	R2	-	06/01/17	\$370,530		12 months		Needs additional study
		551	10700	524	Multi-3rd-Massard convert 69-161kV	R2	-	06/01/17	\$570,000		24 months		
		551	10701	524	Multi-3rd-Massard voltage confersion	R2	-	06/01/17	\$2,850,000		24 months		
		552	10702	525	Line - Mooreland - Woodward 69 kV	R2	06/01/17	06/01/17		\$300,000	12 months		
		553	10703	525	XFR - Mooreland 138/ 69 kV XF	R2	06/01/17	06/01/17		\$705,000	24 months		
		554	10704	526	Line - Dalhart - Channing	R2	06/01/10	06/01/17			30 months		
		554	10705	526	Line - Channing - Tascosa	R2	06/01/10	06/01/17	\$27,452,677		30 months		
		554	10706	526	Line - Tascosa - Northwest	R2	06/01/10	06/01/17			30 months		
		557	10707	526	XFR - Lynn County 115/69 kV 3rd XF	R2	-	06/01/17	\$1,375,000		18 months		Response to 2008 STEP Mitigations will show proposed Brownfield Interchange Project , which mitigates this issue.
		558	10708	526	Line - Lyntegar REC-Brownfield 69 kV - Terry County Interchange 69 kV	R2	-	06/01/17	\$1,420,000		30 months		Response to 2008 STEP Mitigations will show proposed Brownfield Interchange Project , which mitigates this issue.
		559	10709	536	Line - Canal - Rutan	R2	-	06/01/17	\$498,000		12 months		
		560	10710	536	XFR - Creswell 135/69 kV #1	R2	06/01/17	06/01/17		\$850,000	24 months		
		561	10711	536	Line - Evans S4-Lakeridge4 upgrades	R2	06/06/17	06/01/17		\$200,000	6 months		
		562	10712	536	XFR - Creswell 135/69 kV #2	R2	06/01/17	06/01/17		\$850,000	24 months		
		563	10713	536	Multi - Litchfield - Aquarius - HudsonJct. 69 kV Uprate	R2	06/01/17	06/01/17		\$30,000	12 months		
		563	10714	536	Multi - Litchfield - Aquarius - HudsonJct. 69 kV Uprate	R2	06/01/17	06/01/17					
		565	10715	540	Line - Clinton 161 - Clinton Green St 69 kV	PL	06/01/17	-	\$441,000		12 months		TO Zonal/local upgrade. Not for SPP reliability.
		565	10716	540	Line - Clinton 161 - Clinton Plant 69 kV	PL	06/01/17	-	\$450,000		12 months		TO Zonal/local upgrade. Not for SPP reliability.
		566	10717	541	Line - Merriam - Roeland Park 161 kV	R2	-	06/01/17	\$1,890,000		12 months		
		567	10718	541	Line - Martin City - Southtown 161 kV	R2	-	06/01/17	\$3,600,000		12 months		
		568	10719	541	Line - Sunflower - West Gardner 161 kV	PL	-	-	\$3,000,000		24 months		TO Zonal/local upgrade. Not for SPP reliability.
		569	10720	544	Line - SUB 217 - FAIRPLAY EAST - SUB 602 - BOLIVAR PLANT 1	R2	-	06/01/17	\$2,636,153		18 months		

Non - SPP Tariff Projects													
Year 2006													
19988		2	10002	515	XFR - Norfork 161/69 kV	RN	09/01/06	06/01/06	02/02/07	\$1,300,000			
Year 2007													
		34	10038	502	Line - Pineville - Shady Oaks 138 kV	PL	12/01/07	-		\$1,900,000	\$1,900,000	9 months	
		35	10039	515	Line - SPA Hilltop - EES Hilltop 161 kV	PL	07/30/07	-		\$8,600,000			
		36	10040	515	Line - Springfield - Brookline 161 kV	TS	06/01/07	06/01/08		\$390,000			

Southwest Power Pool
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NTC_ID	PID	UID	Area	Project Name	Project type EXP	Project Owner Indicated In-Service Date	RTO Determined Need Date	Letter of Notification To Construct issue date	Cost Estimate	Final Cost	Project Lead Time	Project Status	Project Status Comments
		37	10041	515	Line - Sub 109 - Atlas Jct. - Carthage 161 kV	TS	05/01/07	06/01/07	\$88,000				
Year 2008													
		99	10123	502	XFR- Carroll 230/138 kV	RN	06/01/08	06/01/08	\$960,000		6 months		
				502		RN	06/01/12	06/01/08	\$2,175,000		24 months		There is a mitigation plan to install a Phase shifting transformer at Ivanhoe to reduce the flow on the Bayou Warehouse to Moril 138 kV line, this would eliminate the overload. MVA This line is a tie line between Cleco and Entergy. It is believed by Cleco that the limiting element of the line exists at the Bayou Warehouse substation (Entergy). Cleco internal studies do not indicate a need for this upgrade until possibly 2012
		100	10124		Line - Bayou Warehouse-Ivanhoe 138 kV								Mitigation Plan provided.
		101	10125	515	XFR - Eufaula #2	RN	06/01/09	06/01/08	\$2,625,000				
		102	10126	515	XFR - NIXA 161/69	RN	06/01/08	06/01/08	\$1,500,000				
		103	10127	515	Line - Brown - Brown 138kV	RN	06/01/08	06/01/08	\$50,000				
		104	10128	515	Line - Springfield - Brookline 161 kV	TS	06/01/08	06/01/08	\$300,000				
20004		145	10184	Lea	Line - Lea County Fort - Lea County Higgins 69 kV	RN	-	06/01/08	\$1,563,000				Not an SPS Transmission Facility. It's Lea County Electric Cooperatives facility and they are considering a new delivery point to correct the overload identified
		211	10270	545	Line - SUB I - Shrank Road	RN	06/01/08	06/01/14	\$675,000	\$506,208	12 months		
Year 2009													
		213	10272	502	XFR - Cocodrie 230/138 kV	RN	06/01/10	06/01/09	\$3,000,000		18 months		Temporary alternative to this project is to redispatch Evangeline units to reduce overload until transformer upgrade can occur
				502		RN	06/01/12	06/01/09	\$21,542,750				The mitigation for this overload is to reduce generation at the Rodemacher Power Station. This overload only occurs with the Alexandria DG Hunter units 3 and 4 online, the DGH units are online in the base cases to provide enough generation to meet load since the firm transactions are not in place for future year cases. But in actual operational situations, these units do not run. i.e. This problem has a redispatch solution.
		214	10273		Line - E Leesville - Rodemacher 230kV								
				502		RN	06/01/12	06/01/09	\$2,520,000				The mitigation for this overload is to reduce generation at the Rodemacher Power Station. This overload only occurs with the Alexandria DG Hunter units 3 and 4 online, the DGH units are online in the base cases to provide enough generation to meet load since the firm transactions are not in place for future year cases. But in actual operational situations, these units do not run. i.e. This problem has a redispatch solution.
		215	10274		XFR - Leesville 230/138 kV								
Year 2010													
		283	10367	330	Multi - Blackberry - Chouteau - GRDA 1	PL-AECI	06/01/10	-					
		283	10368	330	Multi - Blackberry - Chouteau - GRDA 1	PL-AECI	06/01/10	-	\$57,000,000				
		283	10369	330	Multi - Blackberry - Chouteau - GRDA 1	PL-AECI	06/01/10	-					
Year 2011													
		284	10370	351	Line - Grandview - Osage	RN	06/01/11	06/01/09	\$6,000,000		36 months		
		342	10439	515	Line - BULL SHOALS - BULL SHOALS 161KV	RN	06/01/11	06/01/11	\$2,000,000				
		384	10497	545	XFR - Sub M 161/69 kV	RN	-	06/01/11	\$6,600,000				Master Plan study being done by consultant also looking at other options
Year 2012													
		405	10528	Tri-County	XFR- Texas County Interchange 115/69 kV	RN	-	06/01/12	\$1,500,000		24 months		Xfmr owned by Tri-County Electric Cooperative
		405	10529	Tri-County	XFR- Texas County Interchange 115/69 kV	RN	-	06/01/12	\$1,500,000		24 months		Xfmr owned by Tri-County Electric Cooperative
		406	10530	Lea	XFR - Lea County REC 115/69 kV	RN	-	06/01/12	\$1,125,000		24 months		Xfmr owned by Lea County Electric Cooperative
		423	10550	545	Line - Eckless - SIBLEY 161kV	RN	-	12/01/12	\$3,500,000		12 months		Master Plan study being done by consultant also looking at other options
Year 2013													
		438	10568	330	Line - Boston East - Richland 69 kV	R2	-	06/01/13	\$325,000		6 months		
Year 2014													
		444	10576	515	Line - Nixa - Nixa DT Rebuild	RN	-	06/01/14	\$660,000		12 months		
Year 2015													
Year 2016													
		500	10645	515	XFMR - Springfield 16/69kV #3	RN	-	06/01/16	\$825,000		24 months		
Year 2017													

Southwest Power Pool
Project Tracking Report

Blue	Complete.
Green	On Schedule 4 Year Horizon.
Light Green	On Schedule beyond 4 Year Horizon.
Yellow	Behind schedule, interim mitigation provided or project may change but time permits the implementation of project.
Red	Delayed beyond the RTO Determined need date and no mitigation plan provided.
\$ / months	Project lead time and cost estimated by SPP staff
R	Reliability project that SPP Recommends to the BOD for Authorization to Construct
R2	Reliability project not within budgeting cycle
PL	Transmission Owner Planned Project
NC3	Transmission Owner Planned Project for NERC TPL-003_0
OC-R	Out of Cycle Reliability project
RN	Reliability project not under SPP tariff
EU	Economic Upgrade
GI	Generation Interconnect
IA	Interconnection Agreement
TS	Transmission Service with signed contract
PT	Project Tracking

NTC_ID	PID	UID	Area	Project Name	Project Type EXP	Project Owner Indicated In-Service Date	RTO Reliability Need Date	Letter of Notification To Construct Issue date	Cost Estimate	Final Cost	Project Lead Time	Project Status	Project Status Comments
SPP Tariff Projects													
Year 2006													
19999	30000	50000	520	Device - Arsenal Hill	R	06/01/06	06/01/06	02/02/07	\$432,000				
19999	30001	50001	520	Device - Catoosa	R	06/01/06	06/01/06	02/02/07	\$394,000				
	30002	50002	524	Device - Chickasaw	PL	07/31/06	-	-	\$455,263				
	30003	50003	524	Device - Caney Creek	PL	12/31/06	-	-	\$532,263				
	30004	50004	534	Device - Ruleton3	PL	12/31/06	-	-	\$500,000				
19986	30005	50005	536	Device - Mulbery	R	03/31/06	02/02/06	02/02/07	\$324,398				
19986	30005	50006	536	Device - Clearwater	R	12/31/06	12/31/06	02/02/07	\$490,583				
	30005	50007	539	Device - East Liberal	PL	09/01/06	-	-	\$600,000				
19994	30005	50008	539	Device - Plainville	R	10/01/06	06/01/05	02/02/07	\$3,000,000				
	30005	50009	540	Device - Warrensburg East	PL	08/01/06	-	-	\$600,000				
Year 2007													
	47	50011	520	Multi - Tulsa Project	PL	07/01/07	-	-	-				Cost Included with Branch_Xfr
	47	50012	520	Multi - Tulsa Project	PL	07/01/07	-	-	-				Cost Included with Branch_Xfr
	30007	50013	520	Device - South Fayetteville	PL	08/01/07	-	-	\$700,000				
	30008	50014	520	Device - Pryor Creek	PL	09/01/07	-	-	-				
	30009	50015	524	Device - Various	PL	12/31/07	-	-	\$3,711,300				
	30010	50016	524	Device - Osage	PL	12/01/07	-	-	\$336,089				
	30011	50017	524	Device - Woodring	PL	12/31/07	-	-	\$336,089				
19985	30012	50018	525	Device - Rush Springs 69 kV	R	11/01/08	06/01/06	02/02/07	\$90,000		8 months		Shed load at Rush Springs Substation (up to 5MW in 2007 Summer Peak). MW values mentioned are typical for a Summer Peak case. Mitigation Plan under review by SPP staff.
19985	30013	50019	525	Device - Snyder	R	12/01/07	04/01/07	02/02/07	\$100,000		12 months		
	30015	50021	526	Device - Carlisle Interchange	TS	01/01/07	06/01/07	-	\$750,000	\$608,726			
	30016	50022	526	Device - Chaves County Interchange	PL	04/01/08	-	-	\$1,524,955				
19987	30017	50023	526	Device - Bowers	R	11/01/07	06/01/08	02/02/07	\$350,000	\$327,462			
	30018	50024	526	Device - Lubbock South Interchange	TS	05/18/07	06/01/07	-	\$600,000	\$573,380			
19986	30020	50026	536	Device - UDALL 2	R	01/31/07	12/31/06	02/02/07	\$391,422				
	30021	50027	536	Device - Wathena	R	06/30/07	06/01/12	-	\$525,000		18 months		
19986	30022	50028	536	Device - NE Parsons	R	12/31/07	06/01/07	02/02/07	\$1,000,000				
19986	30023	50029	536	Device - Parsons	R	01/07/08	06/01/07	02/02/07	\$949,847				
	30024	50030	540	Device - St Joe 161 kV cap	PL	10/01/07	-	-	\$500,000				
	30025	50031	540	Device - Nashua 161 kV cap	PL	10/01/07	-	-	\$500,000				
19990	30026	50032	541	Device - South Waverly	R	10/01/07	06/01/07	02/02/07	\$619,854	\$619,854			
	30027	50033	546	Device - Sunset	PL	06/01/07	-	-	\$550,000		24 months		
Year 2008													
	30029	50035	520	Figure Five	PL	10/30/08	-	-	\$873,000				
	30030	50036	520	Hull Tap	PL	12/01/08	-	-	\$500,000				
	30031	50037	520	Mow-Way	PL	12/01/08	-	-	-		6 months		
20003	30035	50041	525	Device - Frederick Cap 69 kV	R	06/01/09	06/01/08	02/13/08	\$0				WFEC will move ahead line project: Cache to Grandfield to mitigate voltage problem. Short term mitigation until line can be built will be transferring load from Frederick Substation to Snyder Substation
20003	30036	50042	525	Device - Marietta Cap 138 kV	R	11/01/08	06/01/08	02/13/08	\$675,000		12 months		WFEC will move load to Russett Substation to relieve loading in case of low voltage
20003	30037	50043	525	Device - Sweet Water Cap 69 kV	R	03/01/08	06/01/08	02/13/08	\$243,000		10 months		
20003	30038	50044	525	Device - East Kingfisher 69 kV	R	06/01/09	06/01/08	02/13/08	\$0				138kV interconnect with KAMO under study at SPP to mitigate voltage problems in area, new line from Dover SW to Kingfisher Junction will mitigate voltage problem until 138kV interconnect is complete
20003	30039	50045	525	Device - Esquandale Cap 69 kV	R	06/01/09	06/01/08	02/13/08	\$0				WFEC will move ahead line project: Cache to Grandfield to mitigate voltage problem. Short term mitigation until line can be built will be transferring load from Hulon Substation to Empire and Duncan Substations
20003	30040	50046	525	Device - Blanchard Cap 69 kV	R	06/01/15	06/01/08	02/13/08	\$0				WFEC will provide a long term mitigation solution by transferring load from Blanchard to Goldsby in case of low voltage
19985	30041	50047	525	Device - Comanche	R	06/01/12	06/01/12	02/02/07	\$350,000		12 months		
20003	30043	50049	525	Device - Twin Lakes Cap 69 kV	R	06/01/08	06/01/08	02/13/08	\$108,000				
20003	30044	50050	525	Device - Gypsum Cap 69 kV	R	04/01/09	04/01/08	02/13/08	\$81,000		12 months		Mitigation: Transfer load from Gypsum Substation to Duke Substation

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NTC_ID	PID	UID	Area	Project Name	Project Type EXP	Project Owner Indicated In-Service Date	RTO Reliability Need Date	Letter of Notification To Construct Issue date	Cost Estimate	Final Cost	Project Lead Time	Project Status	Project Status Comments
20003	30045	50051	525	Device - Grandfield Cap 69 kV	R	06/01/09	06/01/08	02/13/08	\$0				WFEC will move ahead line project: Cache to Grandfield to mitigate voltage problem. Short term mitigation until line can be built will be transferring load from Indianoma Substation to Cache Substation
20004	30046	50052	526	Device - Plainview Cap 69 kV	R	11/07/08	06/01/08	02/13/08	\$336,393				Project expected to be complete in fall 2008.
20004	30047	50053	526	Device - LC SOL Cap 115 kV	R	-	06/01/08	02/13/08	\$311,040				The justification for this project is an invalid contingency based on SPS response dated 4-4-08. Please review the email "SPS mitigations for SPP NTC Letter dated Feb 13, 2008"
20004	30048	50054	526	Device - Cox Interchange Cap 115 kV	R	12/01/08	06/01/08	02/13/08	\$400,000		24 months		
	30049	50055	526	Device - Tuco Interchange	TS	02/01/08	06/01/07		\$1,251,333		24 months		
	30030	50056	526	Device - Tuco Interchange	TS	06/01/08	06/01/08		\$10,240,300		24 months		
20004	30052	50058	526	Device - Bailey Co Earth Cap 115 kV	R	-	06/01/08	02/13/08	\$311,040		24 months		The justification for this project is an invalid contingency based on SPS response dated 4-4-08. Please review the email "SPS mitigations for SPP NTC Letter dated Feb 13, 2008"
20004	30053	50059	526	Device - Bowers Cap 69 kV	R	11/01/07	06/01/08	02/13/08	\$350,000	\$327,462	24 months		
20004	30054	50060	526	Device - Booker Cap 69 kV	R	-	06/01/08	02/13/08	\$200,000		24 months		
20006	30055	50061	536	Device - East Manhattan Cap 115 kV	R	-	06/01/08	02/13/08	\$1,000,000		18 months		Pending further study; WR cannot reproduce the low voltage identified; Large scale analysis of Manhattan area is under way; Check to ensure that McDowell Creek 230-115 kV transformer tap is correctly modeled.
20006	30056	50062	536	Device - Seneca Cap 115 kV	R	06/01/10	06/01/08	02/13/08	\$588,600		18 months		Second capacitor bank identified for TransCanada; Addition of Knob Hill - S Beatrice 115 kV identified for TransCanada
19986	30057	50063	536	Device - Nortonville 69 kV Cap	R	12/31/08	06/01/07	02/02/07	\$715,000		18 months		
20006	30058	50064	536	Device - Caney Cap 69 kV	R	-	04/01/08	02/13/08	\$270,000		18 months	Cancelled	Project not needed; 13.3 Mvar fixed shunt at Dearing, when turned on during the contingency, relieves the overload.
20006	30059	50065	536	Device - Richland Cap 69 kV	R	-	06/01/08	02/13/08	\$427,000		18 months		
19986	30060	50066	536	Device - Sunset 69 kV - 10 Mvar	R	-	06/01/07		\$1,220,913				
19986	30082	50088	536	Device - 3rd & VanBuren	R	11/15/08	06/01/11	02/02/07	\$500,000		18 months		
20007	30061	50067	539	Device - Pratt Cap 115 kV	R	08/01/08	06/01/08	02/13/08	\$1,200,000				Currently in engineering design and cost review. Mitigation is to have City of Pratt generate to raise voltage.
20007	30062	50068	539	Device - Harper Cap 138 kV	R	10/01/09	06/01/08	02/13/08	\$1,000,000				Currently in engineering design and cost review. Current schedule should have construction completed by winter of 2009. No mitigation available
20008	30064	50070	540	Device - East Cap 161 kV	R	06/01/10	06/01/08	02/13/08	\$432,000		6-12 months		This project is under re-consideration. It was proposed due to an error in the models.
20009	30065	50071	541	Device - Riley Cap 161 kV	R	-	06/01/08	02/13/08	\$1,350,000				kcpcl declines project due to scenario case dispatch; SPP staff to review the need for this project.
20010	30067	50073	544	Device - Quapaw Cap 69 kV	R	12/01/09	06/01/08	02/13/08	\$1,500,000		18 months		Project under study, will be complete once 2008 series models are released. Dist. Xfmr taps to be adjusted accordingly to serve load adequately until the project can be implemented/energized
Year 2009													
	30070	50076	520	Sugar Loaf	PL	07/01/10	-		\$500,000				
20001	30071	50077	523	Device - Sallisaw Cap 69 kV	R	06/01/09	06/01/08	02/13/08	\$374,000				This cap bank won't be in service until summer of 2009. In the event of a contingency, the voltage falls to 0.89pu and in reality we would max out voltage regulators and let this ride, unless we received concerns from our customer and then we would have to shed load.
20001	30072	50078	523	Device - Afton Cap 69 kV	R	06/01/10	06/01/08	02/13/08	\$800,000		18 months		This voltage violation is at an NEO/REC substation that is on the end of a NEO/REC radial line out of the Afton substation. In the event of a voltage violation that cannot be mitigated with regulators we would shed this load.
20001	30073	50079	523	Device - Pyramid Corners Cap 69 kV	R	06/01/10	06/01/08	02/13/08	\$300,000				Northeastern Oklahoma Rural Coop responsibility, SPP staff established contact with project owner.
20001	30074	50080	523	Device - Tahlequah West Cap 69 kV	R	06/01/09	06/01/08	02/13/08	\$779,000				Replaces Tahlequah City#1 and City #2 Cap 69. In the event of a contingency that caused a true voltage violation which regulators would not mitigate we would shed load in the city of Talequah.
			523	Device -Chelsea Cap 69 kV	PL	06/01/09	06/01/09	02/13/08	\$586,000				New Project 14.4 Mvar cap bank
20009	30077	50083	541	Device - Craig Cap 161 kV	R	06/01/09	06/01/08	02/13/08	\$864,000		12 months		project budgeted for 2009; mitigation plan will change summer transformer taps to 0.975 tap. SPP staff to review RTO reliability need date for the project.
20010	30078	50084	544	Device - Riverside Sub Cap 69 kV	R	12/01/10	06/01/09	02/13/08	\$2,600,000		24 months		Project under study, will be complete once 2008 series models are released. Dist. Xfmr taps to be adjusted accordingly to serve load adequately until the project can be implemented/energized
Year 2010													
20003	30079	50085	525	Device - Carter Cap 69 kV	R	06/01/10	06/01/10	02/13/08	\$324,000		12 months		
20003	30080	50086	525	Device - Twin Lakes Cap #2 69 kV	R	06/01/10	06/01/10	02/13/08	\$0				69kV to 138kV conversion in area and interconnect with OG&E from Twin Lakes to Crescent under study, 138kV line expected to be complete by 2010
20004	30081	50087	526	Device - Crosby Cap 69 kV	R	-	06/01/10	02/13/08	\$500,000		24 months		Needs further 69 kV analysis to see if complete Plainview-Floyd-Crosby trans. project mitigates it SPP Reliability project. Required by June 2010 as per 2007 Expansion Plan.
20006	30083	50089	536	Device - Florence Cap 115 kV	R	-	06/01/10	02/13/08	\$1,000,000		18 months		Project may be modified due to TransCanada load addition
20009	30084	50090	541	Device - Hawthorn Cap 161 kV	R	-	06/01/10	02/13/08	\$1,350,000				kcpcl declines project due to scenario case dispatch; SPP staff to review the need for this project.
	30085	50091	546	Device - Mentor Substation	PL	06/01/10	-		\$3,500,000		24 months		
Year 2011													
20001	30086	50092	523	Device - Jay Cap 69 kV	R	06/01/11	06/01/11	02/13/08	\$800,000		18 months		
20006	30088	50094	536	Device - Cities Service Cap 115 kV	R	-	06/01/11	02/13/08	\$840,000		18 months		
20006	30089	50095	536	Device - Edwardsville Cap 115 kV	R	-	06/01/11	02/13/08	\$1,000,000		18 months		
20007	30090	50096	539	Device - Russell 115 kV	R	-	06/01/11	02/13/08	\$259,000		12 months		Currently in engineering design and cost review. Request City of Russell to generate to raise voltage.
Year 2012													
20002	30092	50098	524	Device - Kolache 69 kV Capacitor	R	-	06/01/12	02/13/08	\$81,000		12 months		
20003	30093	50099	525	Device - Latta Cap 138 kV	R	06/01/12	06/01/12	02/13/08	\$324,000		12 months		
20003	30094	50100	525	Device - Mustang Cap 69 kV	R	06/01/12	06/01/12	02/13/08	\$152,000		12 months		
20006	30096	50102	536	Device - Eudora Cap 115 kV	R	06/01/12	06/01/12	02/13/08	\$550,000		18 months		
20006	30097	50103	536	Device - Vaughn Cap 115 kV	R	-	06/01/12	02/13/08	\$1,000,000		18 months		
20007	30098	50104	539	Device - Plainville Cap 115 kV	R	-	06/01/12	02/13/08	\$1,500,000		12 months		
20009	30099	50105	541	Device - Centerville Cap 161 kV	R	-	06/01/12	02/13/08	\$600,000		12 months		kcpcl declines project due to scenario case dispatch; SPP staff to review the need for this project.
20009	30100	50106	541	Device - West Gardner Cap 161 kV	R	-	06/01/12	02/13/08	\$1,000,000		12 months		kcpcl declines project due to scenario case dispatch; SPP staff to review the need for this project.
20010	30091	50097	544	Device - Aurora Cap 69 kV	R	06/01/12	06/01/11	02/13/08	\$2,420,000		12 months		
20010	30101	50107	544	Device - Republic East Cap 69 kV	R	06/01/12	06/01/12	02/13/08	\$500,000		12 months		
Year 2013													
	30104	50110	534	Device - N Cimarron 115 kV	R2	12/31/08	06/01/13		\$1,000,000		12 months		

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NTC_ID	PID	UID	Area	Project Name	Project Type EXP	Project Owner Indicated In-Service Date	RTO Reliability Need Date	Letter of Notification To Construct Issue date	Cost Estimate	Final Cost	Project Lead Time	Project Status	Project Status Comments
20006	30105	50111	536	Device - Springhill Cap 115 kV	R	-	06/01/13	02/13/08	\$1,000,000		18 months		
20006	30106	50112	536	Device - Sedgwick Co Koch Cap 69 kV	R	-	06/01/13	02/13/08	\$162,000		18 months		
	30076	50082	540	Device - Warsaw 2 69.0	R2	-	06/01/13		\$409,900		12 months		VAR compensations were done in the distribution system in the area. Project required by June 2013 as per 2007 Expansion plan.
20011	30107	50113	546	Device - Cox Cap 69 kV	R	-	06/01/13	02/13/08	\$750,000		24 months		The addition of Southwest #2 generator defers the need for this project.
20011	30108	50114	546	Device - Main Cap 69 kV	R	-	06/01/13	02/13/08	\$750,000		24 months		The addition of Southwest #2 generator defers the need for this project.
20011	30109	50115	546	Device - Mill Cap 69 kV	R	-	06/01/13	02/13/08	\$750,000		24 months		The addition of Southwest #2 generator defers the need for this project.
20011	30110	50116	546	Device - Norton Cap 69 kV	R	-	06/01/13	02/13/08	\$750,000		24 months		The addition of Southwest #2 generator defers the need for this project.
Year 2014													
	30116	50122	536	Device - Oxford 138 kV Cap	R2	-	06/01/14		\$1,000,000		18 months		
	30117	50123	536	Device - McDowell	R2	-	06/01/14		\$810,000		18 months		
	30118	50124	536	Device - Dearing 138 kV	R2	-	06/01/14		\$540,000		18 months		
	30119	50125	536	Device - CRRM (Sunflower)	R2	-	06/01/14		\$500,000		18 months		
	30120	50126	536	Device - Altamont 138 kV Cap	R2	-	06/01/14		\$1,000,000		18 months		
Year 2015													
	30125	50131	524	Device - Lula 138 kV	R2	-	06/01/15		\$375,000		12 months		
	30126	50132	524	Device - County Line 69 kV	R2	-	06/01/15		\$150,000		12 months		
	30127	50133	524	Device - Various	PL	12/31/07			\$200,000				
	30129	50135	544	Device - Bolivar	R2	06/01/15	06/01/15		\$1,500,000		24 months		
	30130	50136	546	Device - Twin Oaks	PT	06/01/15			\$750,000		24 months		This project name refers to a 69 kV cap bank.
	30131	50137	546	Device - Golden	PL	-			\$550,000		24 months		Related to SW2 being added to the models; This will go to the review committee. This is a TO planned project.No ISD provided.
Year 2016													
	30133	50139	526	Device - McClellan Cap	R2	-	06/01/16		\$135,000		24 months		Needs further study on voltage of 115 kV line and power factor improvement
	30134	50140	531	Device - St John Cap	R2	-	06/01/16		\$864,000		12 months		
	30135	50141	531	Device - Hitschmann	R2	-	06/01/16		\$216,000		12 months		
Year 2017													

Non - SPP Tariff Projects													
Year 2006													
Year 2007													
	30006	50010	502	Device - Mary	RN	12/31/07	06/01/07		\$200,000		12 months		
Year 2008													
	30028	50034	502	Device - Oakdale 138 kV	RN	06/01/09	06/01/08		\$486,000		6 months		Install 28.8 MVA cap bank as soon as possible
	30051	50057	Lea County	Device - Lea County San Andreas Interchange	RN	-	03/01/08		\$1,350,000				
Year 2009													
	30069	50075	502	Device - Natchitoches	RN	06/01/09	06/01/09		\$5,000		2 months		This project is complete. This project has changed from adding a cap bank at Clarence to increasing the No-load tap at Clarence to 2.5% boost and letting the Natchitoches LTC adjust for the distribution system. SPP Reliability project.
Year 2010													
Year 2011													
Year 2012													
	30102	50108	545	Device - Blue Valley 161 kV	RN		12/01/12	-	\$1,200,000		12 months		Project under review along with other options considered in INDN Master Plan Study.
Year 2013													
Year 2014													
	30113	50119	515	Device - Glencoe	RN	06/01/14	06/01/17		\$540,000		12 months		
Year 2015													
Year 2016													
Year 2017													
	30137	50143	515	Device - Table Rock 161 kV	RN		06/01/17	-	\$675,000		12 months		
	30138	50144	515	Device - Nixa 161 kV	RN		06/01/17	-	\$675,000		12 months		
	30139	50145	515	Device - Tupelo 138 kV	RN		06/01/17	-	\$675,000		12 months		
	30140	50146	515	Device - China 69 kV	RN		06/01/17	-	\$135,000		12 months		