2012 SPP Transmission Expansion Plan Report

January 31, 2012

Engineering

SPP Southwest Power Pool

Revision History

Date	Author	Change Description
01/08/2012	Staff	Version Draft
01/18/2012		MOPC Endorsed
01/24/2012	Staff	Posted for BOD with changes from MOPC
01/31/2012		BOD Approved

Table of Contents

Executive Summary

The Southwest Power Pool (SPP) Engineering Organization plays a key role in helping SPP perform it's mission of "Helping our members work together to keep the lights on…today and in the future". Engineering staff works closely with members, regulators, and neighbors whose systems adjoin with ours to plan future transmission system expansion needs and provide transmission and generation interconnection service necessary to facilitate reliable and efficient delivery of generation resources to end-use customers. This work facilitates the provision of a robust transmission system critical to "keeping the lights on" in SPP and surrounding regions.

The 2012 STEP consists of 492 upgrades with a total cost of $7.1 billion. Figure 1 illustrates the cost distribution of the 2012 STEP based on upgrade type. More detail of the total portfolio is listed in Appendix A.

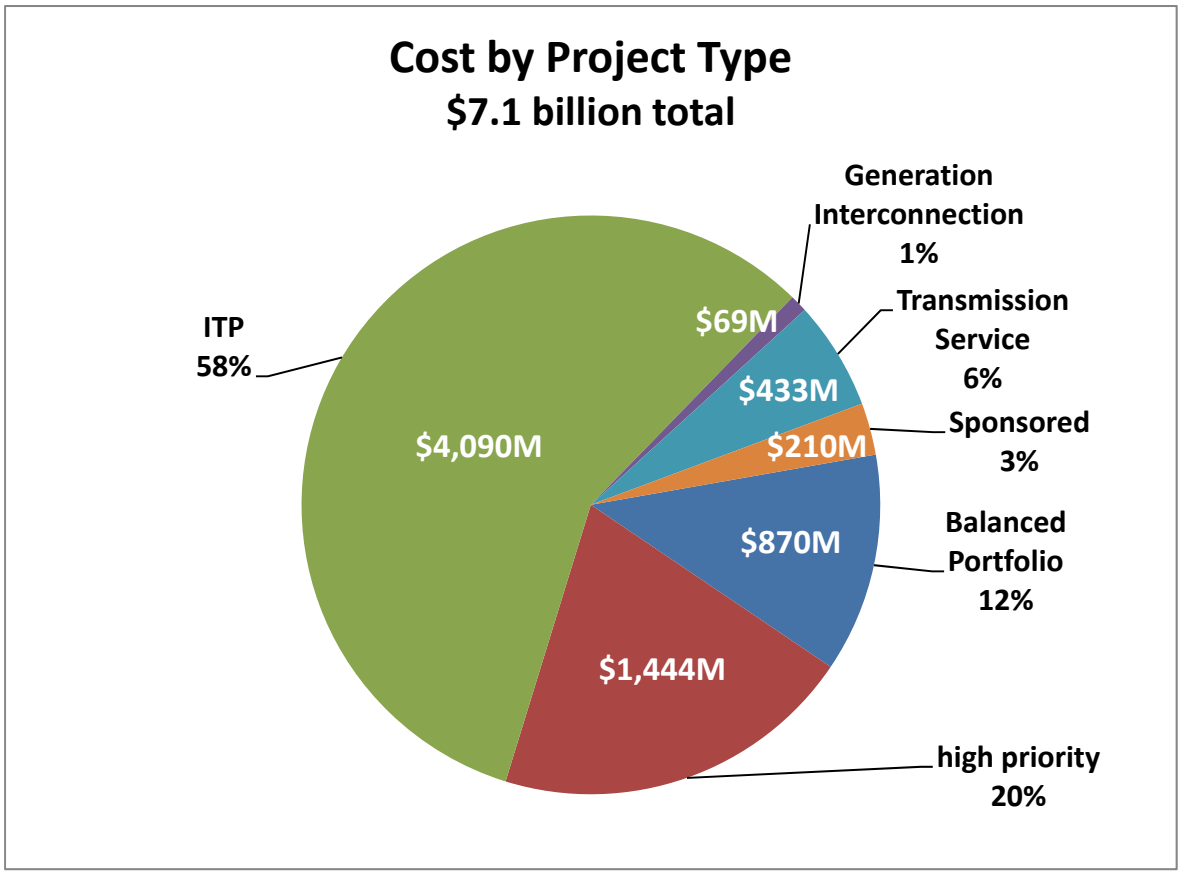


Figure 1: 2012 STEP Cost by Upgrade Type

(APPENDIX A includes a breakdown of projects in the 20-year horizon)

The 2012 SPP Transmission Expansion Plan (STEP) summarizes 2011 activities that impact future development of the SPP transmission grid. Seven distinct areas of transmission planning are discussed in this report, each of which are critical to meeting mandates of either the 2011 SPP Strategic Plan or the nine planning principles in FERC Order 890. These areas are Integrated Transmission Planning, Tariff Studies, Sub-regional and Local Area Planning, Transmission Congestion and Top Flowgates, Interregional Coordination, Project Tracking, and Public Policy Impacts. As a Regional Transmission

Organization (RTO) of the Federal Energy Regulatory Commission (FERC), SPP must meet requirements of FERC and the SPP Open Access Transmission Tariff (OATT).

2012 Integrated Transmission Planning (ITP)

The ITP process was designed to maintain reliability and provide economic benefits to the SPP region in both the near and long-term, enabling SPP and its stakeholders to better facilitate the development of a robust transmission grid that will give regional customers improved access to the SPP region's diverse resources. The first phase of this new process, the ITP20, was conducted in 2010. This study recommended a long-term transmission plan for a 20-year horizon, incorporating a proposed extra high voltage backbone supply system.

The second phase of the ITP assessment, the ITP10, was conducted in 2011. ITP10 resulted in a recommended portfolio of projects for comprehensive regional solutions, local reliability upgrades, and the expected reliability and economic needs of the studied 10-year horizon.

The third phase of ITP assessment, the (ITPNT), was also conducted in 2011. ITPNT evaluated the reliability of the SPP Transmission system and identified needed upgrades. The ITPNT reviewed the transmission needs of the system for the 6-year planning horizon.

Tariff Studies

In 2011, transmission expansion projects identified as needed to meet Transmission Service Requests totaled $430 million, and projects needed to meet Generation Interconnection requests totaled $69 million.

Attachment AQ defines a process through which delivery point additions, modifications, or abandonments can be studied without having to go through the Aggregate Study process. During 2011, 84 delivery point requests were made; of which nine required full studies.

Attachment AR defines a screening process used to evaluate potential Long-Term Service Request (LTSR) options or proposed Delivery Point Transfers (DPT). During 2011, two DPT requests were made and granted service. Fifteen LTSR studies were requested; of which thirteen were posted and two were withdrawn.

Sub-regional and Local Area Planning

Each year SPP holds a series of local planning meetings to discuss local transmission user needs.

- SPP held a sub-regional planning meeting in Dallas, TX.
- SPP representatives attended a local planning meeting hosted by Southwestern Public Service Company (SPS) in Amarillo, TX.
- SPP attended other local meetings with member cooperatives and American Electric Power

2011 Transmission Congestion and Top Flowgates

SPP monitors congestion on the transmission grid and identifies the region's top 10 congested flowgates. When projects from SPP's study processes are built, the new facilities often lower production costs and reduce congestion. SPP provides a list of projects that are expected to provide some positive mitigation for the annual top 10 congested flowgates.

Interregional Coordination: In addition to regional planning, SPP conducts interregional planning with neighboring systems. Activities included:

- In June 2011, the joint study team consisting of transmission planning engineers from Entergy, SPP ICT, and SPPRTO shared the results of the 2010 Entergy/SPP Regional Planning Process (ESRPP) study efforts.

- In the August 2011 ESRPP meeting, an overview of intial results for the stakeholder's regional 2011 economic studies were presented.
- AECI participated on many of the SPP TWG and ESWG calls. AECI worked closely with SPP staff and stakeholders on Branson area project studies, as well as provided input on other seams projects connecting to their territory.
- MISO and SPP increased coordination regarding data sharing to ensure that each organization is modeling the other's system appropriately.
- In preparation for the 2013 ITP20 SPP and MISO have been working to develop a set of assumptions for a future which will be studied by both SPP and MISO
- SPP has worked with WAPA in the ITP10 planning cycle, specifically regarding projects in Nebraska which could impact WAPA facilities.
- The Eastern Interconnection Planning Collaborative (EIPC) represents the entire Eastern Interconnection and was initiated by a coalition of NERC-registered regional Planning Authorities.

Project Tracking
After the Board approves transmission expansion projects, or once appropriate agreements are filed with FERC, SPP issues Notifications to Construct (NTC) letters to appropriate Transmission Owners. In 2011, SPP issued 21 NTC letters with estimated construction costs of $854.4 million.

SPP actively monitors the progress of approved projects by soliciting feedback from project owners. In 2011, 99 upgrades were completed.

Public Policy Impacts
From a policy perspective, initiatives such as smart grid, renewable targets and mandates, demand response penetration, and new environmental regulations will continue to impact how the transmission system is planned and operated. In addition to policy implications, NERC and regional standards continue to be written and revised. Other environmental impacts have influenced SPP's recent decisions, and as the transmission grid continues to expand, SPP should be prepared to consider these environmental issues when planning future transmission projects.

Summary of Network Upgrades
The 2012 STEP summarizes transmission planning efforts including ITP10, ITPNT, local reliability, Generation Interconnection, Transmission Service, Balanced Portfolio, and Priority Projects. This summary also includes information from previous STEP reports which identified projects that are currently in the project tracking stages.

SPP has major 345 kV projects in various stages of approval or sponsorship that were studied during the 2012 Attachment O processes:

- American Electric Power to construct:
  - 33 miles of 345 kV transmission line from Turk in southwest Arkansas to Northwest Texarkana in northeast Texas
  - 76 miles of 345 kV transmission line from Northwest Texarkana to Valliant in southeast Oklahoma
  - 18 miles of 345 kV transmission line from Flint Creek to Shipe Road in northwest Arkansas

  - 55 miles of 345 kV transmission line from Shipe Road to Osage Creek (passing near East Rogers) in northwest Arkansas
  - 55 miles of 345 kV transmission line from Welsh to Lake Hawkins in northeast Texas
- American Electric Power and Oklahoma Gas & Electric Company to construct:
  - 93 miles of 345 kV transmission line from Elk City to Gracemont in western Oklahoma
- Associated Electric Cooperative to construct:
  - 108 miles of 345 kV transmission line from Blackberry in southwest Missouri to Sportsman in northeast Oklahoma
- Kansas City Power & Light to construct:
  - 30 miles of 345 kV transmission line from Iatan to Nashua in northwest Missouri
- KCP&L Greater Missouri Operation Company and Omaha Public Power District to construct:
  - 181 miles of 345 kV transmission line from Sibley to Maryville to Nebraska City in northwest Missouri and southeast Nebraska
- ITC Great Plains to construct:
  - 19 miles of 345 kV transmission line from Hugo Power Station to Valliant in southeast Oklahoma
  - 90 miles of 345 kV transmission line from Spearville to Post Rock (Knoll) in west Kansas
  - 114 miles 345 kV double circuit transmission line from Spearville to Clark Co to Thistle in southwest Kansas
- ITC Great Plains and Nebraska Public Power District to construct:
  - 125 miles of 345 kV transmission line from Post Rock (Knoll) in west Kansas to Axtell in southern Nebraska
- ITC Great Plains and Westar Energy to construct:
  - 58 miles of 345 kV transmission line from Elm Creek to Summit in north central Kansas
- Nebraska Public Power District to construct:
  - 222 miles of 345 kV transmission line from Gentleman to Cherry County to Holt County in northwestern Nebraska
  - 40 miles of 345 kV transmission line from Neligh to Hoskins in north central Nebraska
- Prairie Wind Transmission to construct:
  - 78 miles double circuit 345 kV transmission line from Thistle to Wichita in south Kansas
- Oklahoma Gas and Electric Company and Prairie Wind Transmission to construct:
  - 110 miles of double circuit 345 kV transmission line from Thistle to Woodward District EHV in northwest Oklahoma and southwest Kansas
- Oklahoma Gas and Electric and Westar Energy to construct:

  - 106 miles of 345 kV transmission line from Rose Hill in central Kansas to Sooner in central Oklahoma
- Oklahoma Gas and Electric to construct:
  - 36 miles of 345 kV transmission line from Sooner to Cleveland in central Oklahoma
  - 120 miles of 345 kV transmission line from Hugo to Sunnyside in southern Oklahoma
  - 100 miles of 345 kV transmission line from Seminole to Muskogee in central Oklahoma
  - 5 miles of 345 kV transmission line from Arcadia to Redbud in central Oklahoma
  - 126 miles of 345 kV transmission line from Woodward District EHV to Tatonga to Mathweson to Cimarron in northwestern Oklahoma
- Oklahoma Gas and Electric and Southwestern Public Service Company to construct:
  - 250 miles of 345 kV transmission line from Woodward District EHV in west Oklahoma to Oklahoma/Texas Stateline to Tuco in west Texas
  - 122 miles of double circuit 345 kV transmission line from Hitchland to Woodward EHV in northwest Oklahoma
- Southwestern Public Service Company to construct:
  - 15 miles of 345 kV transmission line from Tuco to New Deal in west Texas
  - 167 miles of 345 kV transmission line from Tuco to Amoco to Hobbs in west Texas

As transmission usage and generation changes, proposed and approved projects are subject to evaluation. Appendix A projects can be re-evaluated by the SPP RTO for “best” regional and/or local area solutions. Even though many are approved, Network Upgrades listed in Appendix A are not considered beyond the scope of re-evaluation. Transmission Network Upgrades approved for construction have the opportunity for additional review on a case-by-case basis. The goal of re-evaluation is to investigate viable alternatives considering new information and then determine if a more regionally-beneficial solution exists. This also takes into account long-term strategy and regional needs.

Section 1: Integrated Transmission Planning

1.1: What is Integrated Transmission Planning?

The Integrated Transmission Plan (ITP) is a three-year study process which assesses the SPP region's transmission needs in the long and near-term with the intention of creating a cost-effective, flexible, and robust transmission network that will improve access to the region's diverse generating resources. Along with the Highway/Byway cost allocation methodology, the ITP process as described in the SPP Attachment O, approved by the FERC in July 2010, promotes transmission investment that will meet reliability, economic, and public policy needs[1]. This report documents analysis of the ITP process, which focused on planning for SPP's near-term regional reliability needs.

ITP development was driven by the Synergistic Planning Project Team (SPPT), which was created by the SPP Board of Directors (BOD) to address gaps and conflicts in all of SPP's transmission planning processes including Generation Interconnection and Transmission Service; to develop a holistic, proactive approach to planning that optimizes individual processes; and to position SPP to respond to national energy priorities. The ITP is based on the SPPT's planning principles, which emphasize the need to develop a transmission backbone large enough in both scale and geography to provide flexibility to meet SPP's future needs. The first phase of the ITP process was completed with the BOD's acceptance of the ITP20 Report on January 25, 2011. The next phases of the ITP process were developed concurrently (ITP10 and ITPNT) as required by OATT Attachment O Section III.4 and III.5.

1.2: 2012 ITP Near-Term (ITPNT)

The 2012 ITPNT analyzes the SPP region's immediate transmission needs. The goals of the ITPNT are to not only preserve grid reliability, in compliance with NERC Reliability Standards and individual transmission owner planning requirements, but to also efficiently bridge SPP's 10-year and 20-year plans that meet public policy objectives and provide access to more economic energy sources. The ITPNT assesses: (a) regional upgrades required to maintain reliability in accordance with the NERC Reliability Standards and SPP Criteria in the near term horizon, (b) zonal upgrades required to maintain reliability in accordance with more stringent individual Transmission Owner planning criteria in the near term horizon, and (c) coordinated projects with neighboring Transmission Providers.

ITPNT projects are reviewed by SPP's Transmission Working Group (TWG), Markets and Operations Policy Committee (MOPC) and approved by the Board. Following Board approval, staff will issue Notification to Construct (NTC) letters for projects needed within the four-year financial commitment timeframe. Currently NTC letters direct the start of construction and qualify for full cost recovery of any costs expended for an upgrade. Since the Conditional Notification to Construct[2] (CNTC) Business Practice is under development, SPP recommends an interim procedure for the 2012 ITPNT projects that qualify for CNTCs (above 100 kV and cost estimate over $20 million). SPP will issue NTCs for these projects with language initiating a refined cost estimate analysis, but not directing the start of construction. SPP will send the NTCs to the incumbent Transmission Owner(s) for each project. Projects for which financial commitment is not required within the four-year window will receive an Authorization to Plan (ATP), which authorizes a TO to plan for a project but does not allow any cost

[1] The Highway/Byway cost allocation approving order is *Sw. Power Pool, Inc.*, 131 FERC ¶ 61,252 (2010). The approving order for ITP is *Sw. Power Pool, Inc.*, 132 FERC ¶ 61,042 (2010).

[2] The Conditional Notifications to Construct concept was developed by the Project Cost Task Force as part of their whitepaper. The whitepaper was approved in July 2011.

recovery through the SPP OATT. A list of ATP projects will be posted on the SPP website contingent upon approval of the ATP Business Practice. Once the ATPs are posted, SPP will include them in future SPP Aggregate Study models in the appropriate model year.

SPP developed models for the 2012 ITPNT analysis based on the SPP Model Development Working Group (MDWG) models, for which transmission owners and balancing authorities provided generation dispatch and load information. The study scope – approved by the TWG in November 2010 –contains:

- The years and seasons to be modeled, including 2012-2017
- Treatment of upgrades in the models
- Scenario cases to be evaluated
- Description of the contingency analysis and monitored facilities
- Any new special conditions that are modeled or evaluated for the study

SPP performed reliability analyses identifying potential bulk power system problems. These findings were presented to Transmission Owners and stakeholders to solicit transmission solutions. Also considered were transmission options from other SPP studies, such as the Aggregate Study and Generation Interconnection processes. From the resulting list of potential solutions, staff identified the best regional solutions for potential reliability violations. Staff presented these solutions for member and stakeholder review at SPP's July and September 2011the planning summits. Through this process, SPP developed a final list of 69 kV and above solutions necessary to ensure the reliability in the SPP region in the near-term.

Figure 2 summarizes Engineering and Construction (E&C) cost estimates for new and modified reliability projects needed in the years 2012-2017, totaling $251 million. This is in addition to the upgrades previously approved by the Board and does not include $190 million in upgrades with active NTCs that need to be withdrawn.

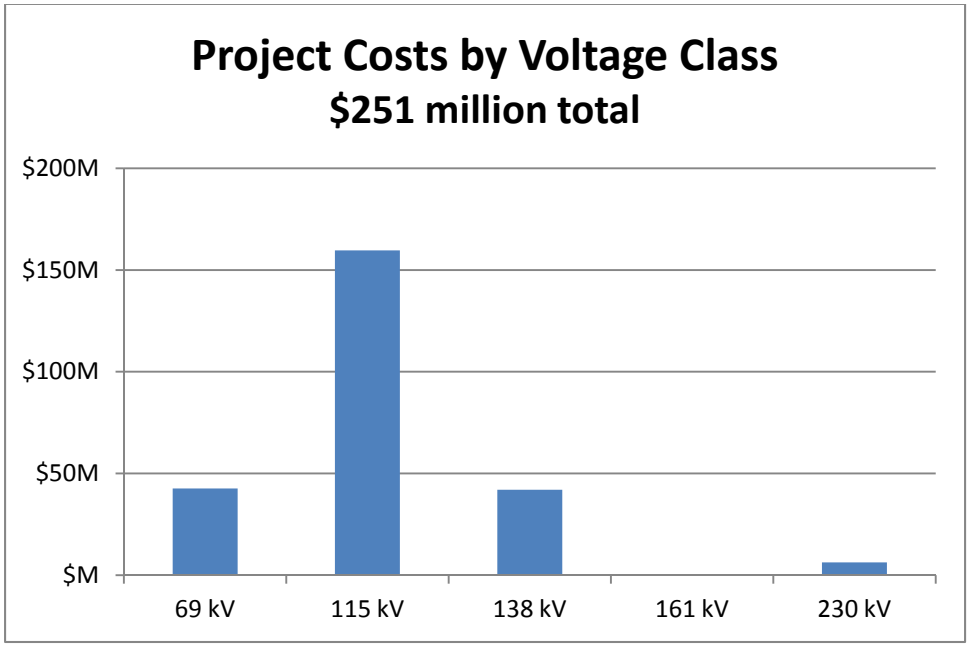


Figure 2: 2012 ITPNT Cost summary by Voltage Class

1.3: 2012 ITP10

The second phase of the ITP study process included the first ITP 10-Year (ITP10) and ITP Near-Term (ITPNT) Assessments performed under the requirements of OATT Attachment O, Section III. The study process for this ITP10 utilized a diverse array of power system and economic analysis tools to evaluate the need for 100 kV and above facility projects that satisfy needs such as:

a) resolving potential criteria violations;
b) mitigating known or foreseen congestion;
c) improving access to markets;
d) staging transmission expansion; and
e) improving interconnections.

The recommended portfolio included projects ranging from comprehensive regional solutions to local reliability upgrades to address the expected reliability, economic, and policy needs of the studied 10-year horizon.

Two distinct futures were considered to account for possible variations in system conditions over the assessment's 10-year horizon.

1. **Business As Usual**: This future utilized today's current state and utility renewable goals and targets for 2022, current generation resource plans, and current load forecasts.
2. **EPA Rules with Additional Wind**: This future utilized anticipated increases above the current state renewable targets and approximated the impact of proposed EPA rulemaking (as of April 1, 2011) by imposing retirements on small coal plants[3].

The futures were approved by the Strategic Planning Committee (SPC) and further refined by the Economic Studies Working Group (ESWG), using data from a Cost Allocation Working Group (CAWG) renewables survey. The Transmission Working Group (TWG) provided oversight on the analysis details and reliability needs.

The recommended 2012 ITP10 portfolio shown in the figure below was estimated at $1.5 billion engineering and construction cost and includes projects needed to meet potential reliability, economic, and policy requirements. Within this portfolio, economic projects, estimated at $206 million engineering and construction cost with a total estimated net present value revenue requirement of $302 million, are expected to provide net benefits of approximately $596 million over the life of the projects under a Future 1 scenario containing 10 GW of wind capacity. Project need dates were identified as early as 2014 and as late as 2022. Several projects were identified for ATP status and one project for NTC status. The remaining projects were identified to receive CNTCs.

Nine projects make up the greater part of the portfolio:

- Lake Hawkins – Welsh 345 kV line with a 345/138 kV transformer at Lake Hawkins
- Elk City – Gracemont 345 kV line with a 345/230 kV transformer at Elk City
- Woodward – Tatonga – Cimarron 345 kV line, a second circuit
- Summit – Elm Creek 345 kV line with a 345/230 kV transformer at Elm Creek
- Neligh – Hoskins 345 kV line with a 345/115 kV transformer at Neligh
- Gentleman – Cherry Co. – Holt Co. 345 kV line with two substations

[3] In June 2011, the EPA approved the Cross-State Air Pollution Rule (CSAPR) which imposes new restrictions on emissions. This ruling was well after the start of the 2012 ITP10 analysis and therefore, impacts of this ruling were not incorporated into this study. SPP is currently assessing how to best assess the impact of this rule.

- Eastowne Transformer 345/161 kV
- Moundridge Transformer 138/115 kV
- Tuco – Amoco – Hobbs 345 kV with 345/230 kV transformers at Amoco and Hobbs

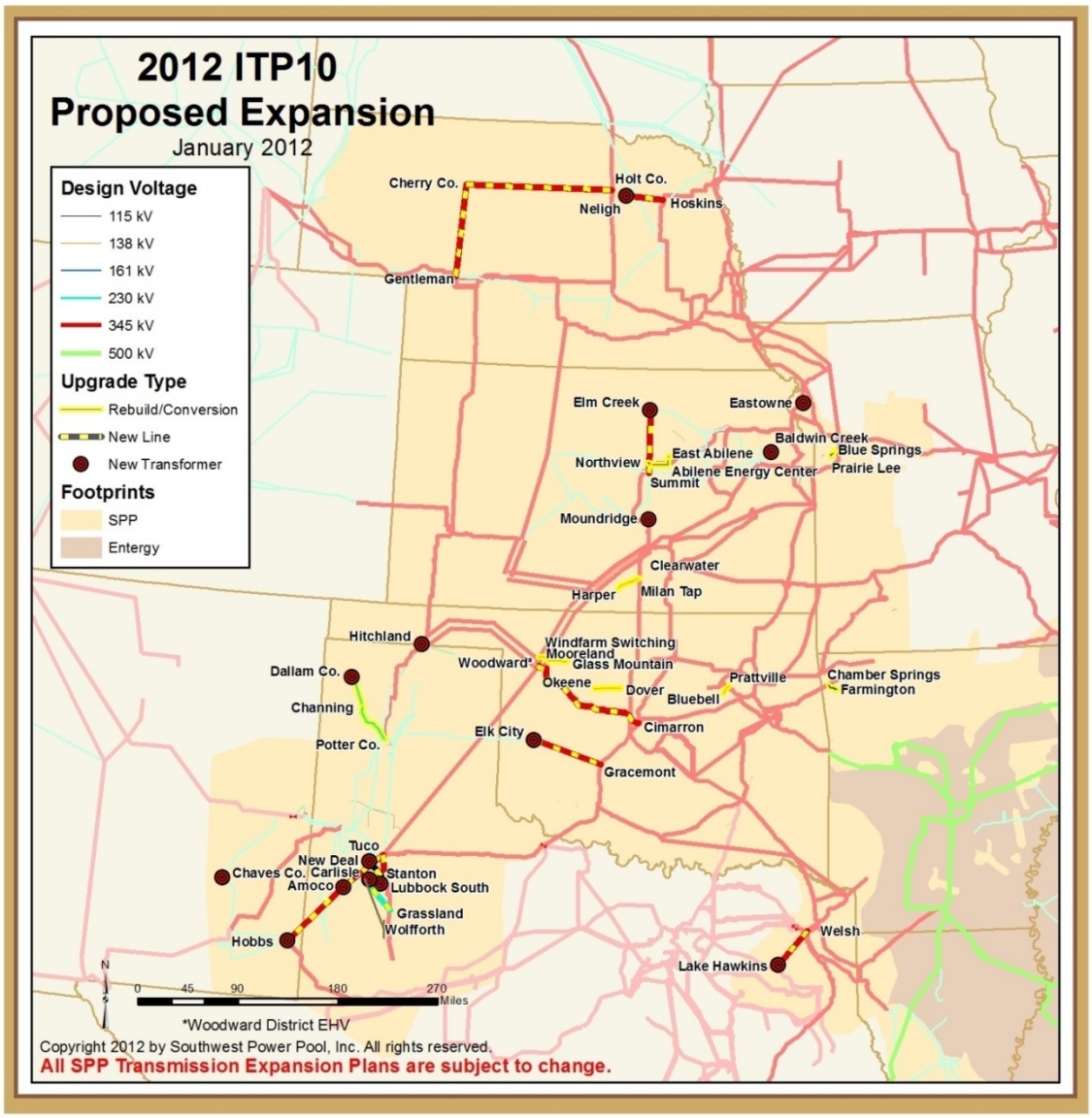


Figure 3:2012 ITP10 Proposed Expansion

Historical Evolution of the ITP

The 2012 ITP10 incorporated elements from key studies performed by SPP will continue to mature through each successive ITP10 cycle. Past SPP studies such as the EHV Overlay, Wind Integration Task Force, Balanced Portfolio, Priority Projects, and 2010 ITP20 were designed by the organization's stakeholders to improve planning and operational aspects of the SPP grid. These studies shared several key goals that have been incorporated into the ITP10 study process as part of the Synergistic Planning Project Team's vision.

SPP staff and stakeholders approached the ITP10 with goals of improving grid flexibility and cost-effectiveness, increasing reliability, preparing for future needs, and integrating SPP's western and eastern sections by developing a robust transmission system.

How Does the ITP10 Compare to the ITP20

The 2012 ITP10 was similar to the 2010 ITP20 . The 2010 ITP20 futures were used as a guide for development of the futures most likely to occur within the current 10-year horizon.

Economic and reliability analysis were utilized to define required projects. Economic analysis determined those projects that are the best project alternatives for the 10-year plan. Projects were placed in the economic model and a full economic assessment was performed. The results from the analysis were used to calculate benefit metrics.

Projects from the economic assessment were coupled with the results of the reliability assessment to determine optimal solutions. Issues identified that are not resolved with 100 kV and above solutions will be deferred and addressed in the ITPNT for resolution.

2010 ITP20

The SPP BOD voted to approve the ITP20 Report on January 25, 2011. The cost of the plan was estimated at $1.8 billion through the construction of 1,494 miles of 345 kV lines along with 11 various - 345 kV step-down transformers. The full report is available on www.spp.org. [4].

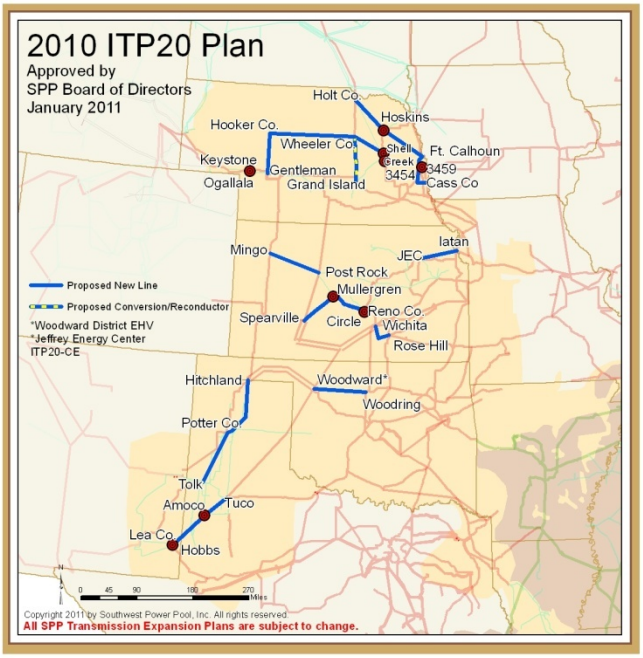


Figure 4:2010 ITP20 Plan

[4] SPP.org > Engineering > Transmission Planning > 2010 ITP20 Report

Section 2: Tariff Studies

Staff conducts studies to determine if the SPP transmission system can accommodate activity over and above that which is currently in use. Whenever new transmission transactions, modifications to existing transmission transactions, and applicable generation interconnection requests are made, SPP performs tariff studies, including feasibility, system impact, and facilities studies in accordance with SPP's Aggregate Transmission Study and Generation Interconnection study processes. SPP notifies the requestor of SPP's approval or denial of the transmission service request.

A cost estimate summary of all Transmission Service Request (TSR) and Generation Interconnection (GI) projects with filed service agreements documented in the 2012 STEP report is shown below:

Upgrade Type	2012 STEP ($ Million)	2010 STEP ($ Million)	2009 STEP ($ Million)
(TSR) transmission service*	$433	$550	$455
(GI) Generation Interconnection	$69	$103	$81
TSR/GI Sub Total	**$502**	**$653**	**$536**

*Regional reliability upgrades associated with transmission service are included in the ITP subtotal in this report

2.1: Transmission Service 2011 Overview

During 2011, SPP's Tariff Studies staff posted Aggregate Facility Studies to meet 60-day study completion deadlines and posted Facilities Studies to meet FERC Order 890 metric requirements. Order 890 requires Transmission Providers to file notice with FERC if more than 20% of the System Impact and Facilities studies in any two consecutive calendar quarters are not completed in the 60-day study window. In 2011, the following percentages were late:

Quarter 1 – 0%

Quarter 2 – 0%

Quarter 3 – 0%

Quarter 4 – 0%

SPP was not required to file with FERC, as there were no two consecutive quarters in which more than 20% of the studies were late, due in large part to the timely submission of documentation by Transmission Owners. As of December 31, 2011, SPP has posted 12 Aggregate Studies. SPP also posted two delivery point transfer screening studies, which led to transmission service.

2.2: Generation Interconnection 2011 Overview

As of October 30, 2011, SPP received 64 GI requests, similar to the 55 received through the same period in 2010. As of that date, there were 74 active queue requests for 12,006MW under study.

The approval of Priority Projects has facilitated the study process for Generation Interconnection. About 6,500MW of additional generation interconnection agreements were approved based on the existence of Priority Projects and Balanced Portfolio.

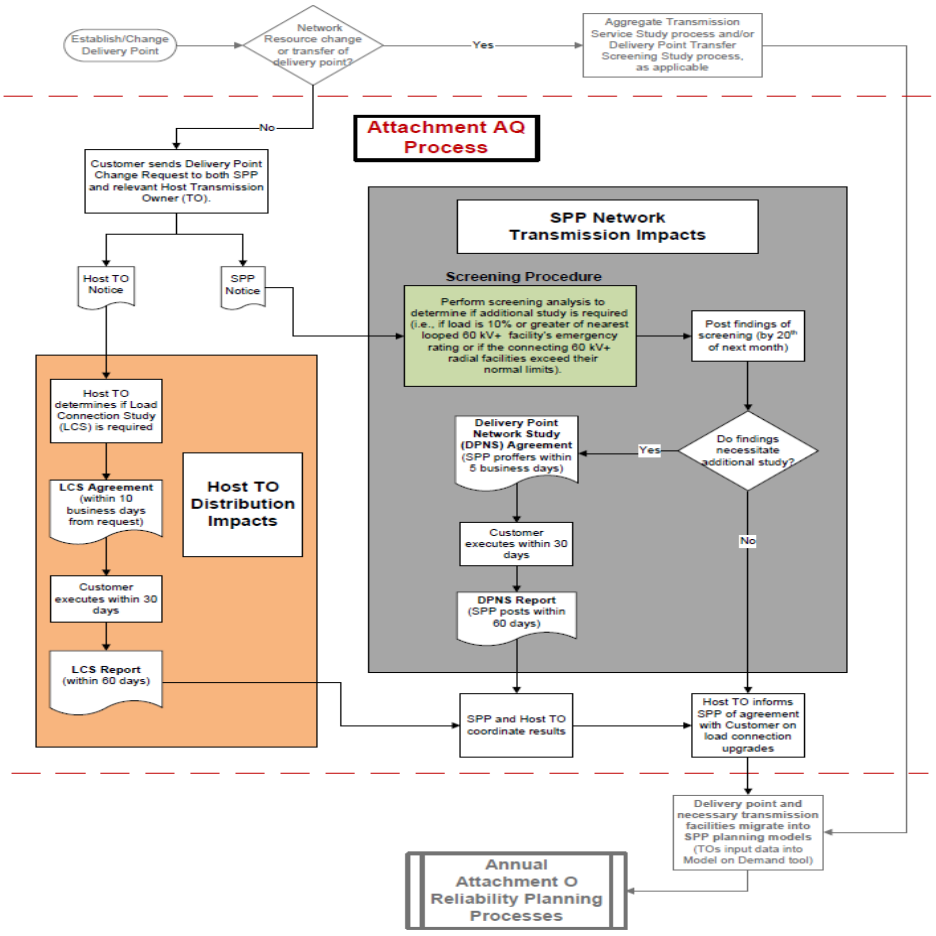
2.3: Area Generation Connection Task Force 2011 Overview

In April 2010 MOPC created the Area Generation Connection Task Force (AGCTF) to develop policy to guide SPP staff in determining the optimum method of interconnecting generation, considering the many complex situations including multiple generation developers in a concentrated area that may or may not have nearby transmission lines. At its April 2011 meeting, the MOPC accepted the AGCTF's recommendation to institute a policy of designating generation collector hubs for more efficent planning of the transmission system. The MOPC acceptance was conditioned on the AGCTF working with the applicable working groups for tariff language and business practices as well as following up with the CAWG for cost allocation. AGCTF work is ongoing.

2.4: Tariff Attachments AQ and AR

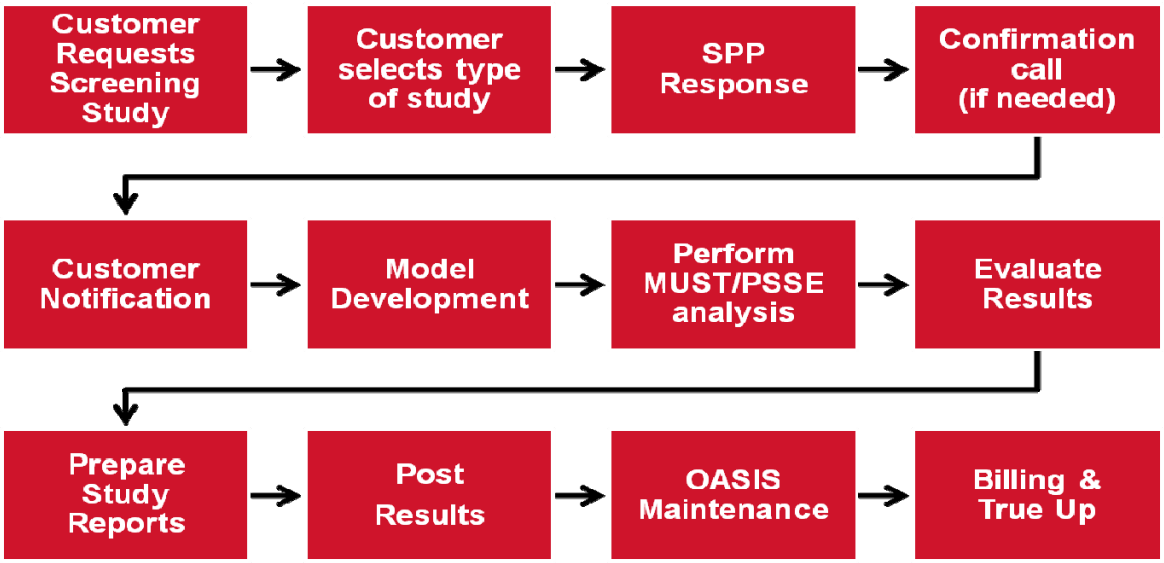
During 2010, SPP Tariff attachments AQ and AR were approved by FERC. Attachment AQ became effective in May 2010. Attachment AQ defines a process through which delivery point additions, modifications, or abandonments can be studied without having to go through the Aggregate Study process. Delivery points submitted through the process are examined in an initial assessment to determine if a project is likely to have a significant effect on the transmission system. If necessary, a full study is then performed on the requested delivery points to determine any necessary upgrades. During 2011, 84 delivery point requests were made; of which nine required full studies.

Flow chart diagram for AQ Studies



SPP Tariff attachment AR became effective in February 2010. Attachment AR defines a screening process used to evaluate potential Long-Term Service request (LTSR) options or proposed Delivery Point Transfers (DPT). The LTSR option provides customers with a tool to determine which LTSR to pursue in the Aggregate Study process. The DPT option enables customers to implement a DPT via issuance of a service agreement more expediently pending the results of the screening. Both of these screening tools allow for a more streamlined aggregate study process by reducing the number of requests in the studies. During 2011, two DPT requests were made and granted service. Fifteen LTSR studies were requested; of which thirteen were posted and two were withdrawn.

Flow Chart for AR process



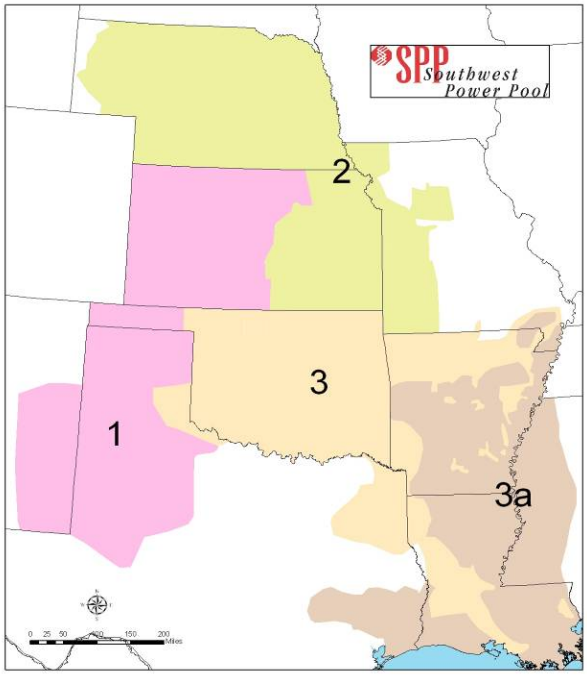
Section 3: Sub-Regional Planning

Based on FERC Order 890 and Section III.2.b of Attachment O of the OATT, sub-regional areas were defined and local area planning meetings were held during 2011. To reduce travel requirements on members, all SPP sub-regional meetings were conducted in conjunction with the SPP planning summits. In addition, SPP staff attended local meetings held by members.

The purpose of local area planning meetings is to identify unresolved local issues and transmission solutions at a more granular level than can be accomplished at general regional planning meetings. Local area planning meetings provide stakeholders with local needs the opportunity to give advice and recommendations to the Transmission Provider and Transmission Owners. Local area planning meetings are open, coordinated, and transparent, providing a forum to review local area planning criteria as specified in Section II of the OATT, Attachment O. Feedback offered at each sub-regional meeting is taken into consideration by SPP staff when developing the regional reliability plan.

3.1: Stakeholders Process and Forums

Notices for the sub-regional planning meetings are posted on SPP.org and distributed to email distribution lists. Sub-regional planning meetings are open to all entities. Any regulatory agency having utility rates or services jurisdiction over an SPP member is invited and encouraged to fully participate.



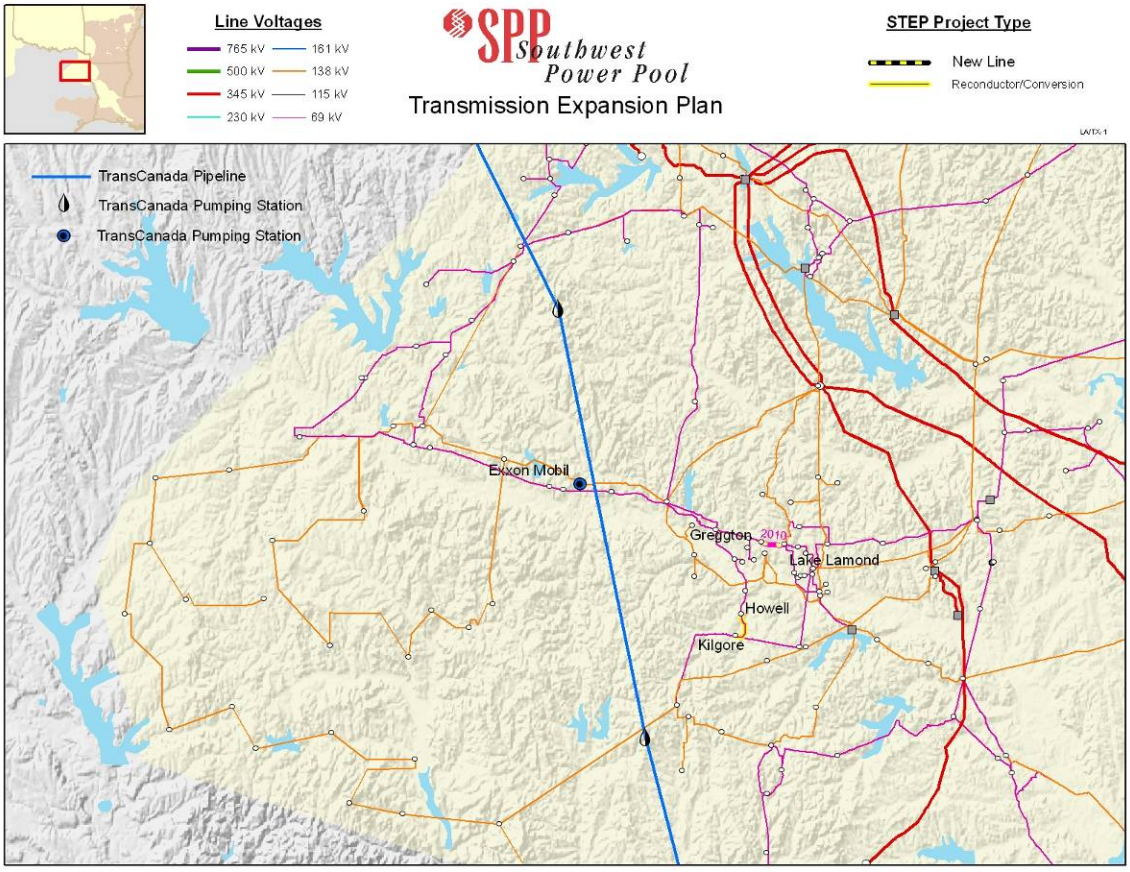
The map above represents the SPP region broken into three local areas. Local Area 3 has two components (3 and 3a) – the SPP RTO and SPP Independent Coordinator of Transmission (Entergy) footprints.

3.2: 2011 Sub-regional Meetings

On July 21, 2011, SPP held a sub-regional planning meeting in Dallas, TX. Meetings for all sub-regions were held concurrently after the SPP spring planning summit. Subject matter experts from SPP staff were present at all of the meetings to receive suggestions, answer questions, and discuss any concerns that stakeholders had about the transmission needs in their respective region.

On September 15, 2011, SPP representatives attended a local planning meeting hosted by Southwestern Public Service Company (SPS) in Amarillo, TX. SPS representatives provided several presentations which included updates on their construction plans.

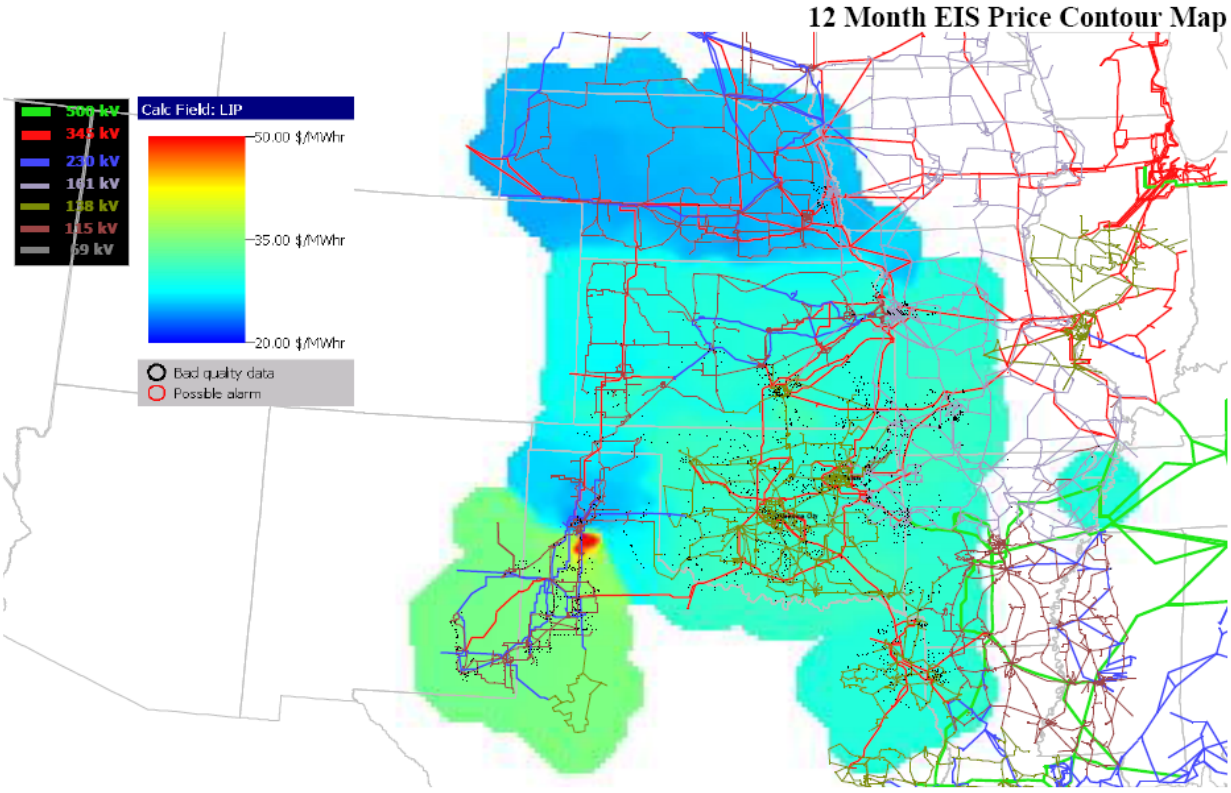
Two meetings were held with the East Texas Electric Cooperative on March 10, 2011 and on October 8, 2011. The meetings were attended by the member cooperatives, American Electric Power, and SPP staff. SPP staff provided an update on current SPP planning activities and fielded questions from meeting attendees.



Section 4: Transmission Congestion and Top Flowgates

4.1: SPP 2011 Transmission Congestion

SPP staff identifies congested areas by monitoring flowgates and analyzing their causes and effects. The graphic below is a typical Energy Imbalance Services market price contour map for the SPP footprint. The map is from the October 2011 Monthly State of the Market Report and shows the average Locational Imbalance Prices (LIPs) from November 2010 to October 2011. The regions with the brighter shades (red, orange, and yellow) have higher LIPs. The areas with transmission congestion, on this annual basis, occur at the points between different shades of colors. Note that market prices vary over time and that the graphic shows the average price at the nodes.



Congestion occurs for a variety of reasons in different parts of the SPP footprint depending on the time of year. One of the drivers of new and future congestion in the SPP footprint is increased wind generation. Wind currently represents about 4% of generation in the SPP region, and is continually developing. As wind farms in the western part of SPP continue to develop, the congestion in that region should increase until adequate transmission is in place.

Congestion in all parts of the footprint can sometimes be attributed to generation and line outages or general load growth. During the non-peak seasons, there are several scheduled transmission and generation outages for maintenance which contributes to localized congestion. For example congestion in the Texas Pandhandle was exacerbated by the outage of the Randall County Interchange – Palo Duro

line, which was being reconductored with a completion date at year-end. In general, the north to south flow on this flowgate can become greater with the fluctuating wind generation in the northern part of the Texas Panhandle.

Factors causing congestion in the Greater Kansas City area included transmission line outages due to scheduled maintenance in the region along with high external impacts. Another contributing factor was heavy north to south flows from Nebraska into the Kansas City area.

Some of the congestion in western Kansas was due to scheduled outages of transmission in the area along with unexpected forced generation outages in the area.

Much of the summer congestion in Oklahoma, near Oklahoma and Tulsa, was due to unplanned outages caused by strong storms coupled with high temperatures and high loads.

Some of the congestion on the Brookline transformers flowgate was due to winter weather that caused several 345 kV line outages in the region.

High north to south flow from inexpensive coal generation caused congestion in Western Nebraska.

4.2: SPP Top 10 Flowgates

SPP monitors more than 260 flowgates. From these, the 10 SPP flowgates with the highest "shadow price" over the previous twelve months are shown in SPP's Monthly State of the Market Reports posted on www.spp.org>Market and Operations>Market Reports. A shadow price is the amount of value, measured in dollars, of relieving a constraint by a small amount. The value of relieving a constraint is generally that lower-priced power can be used, so the value is reflected in the difference in Locational Imbalance Prices on either side of the constraint.

The table below shows the annual top 10 flowgates from the October 2011 Monthly State of the Market Report. This table includes a list of projects that are expected to provide some positive mitigation to the flowgates. This list of projects is sorted by the estimated in-service date. As described by the upgrade type, the upgrades were planned to provide one or more benefits, such as reliability or regional economic enhancements, but not necessarily to directly solve all congestion on the particular flowgate listed. SPP has directed project owners to begin construction on the projects shown in this table via NTCs. For more information about these projects, please refer to the Project Tracking & NTCs page on www.spp.org.

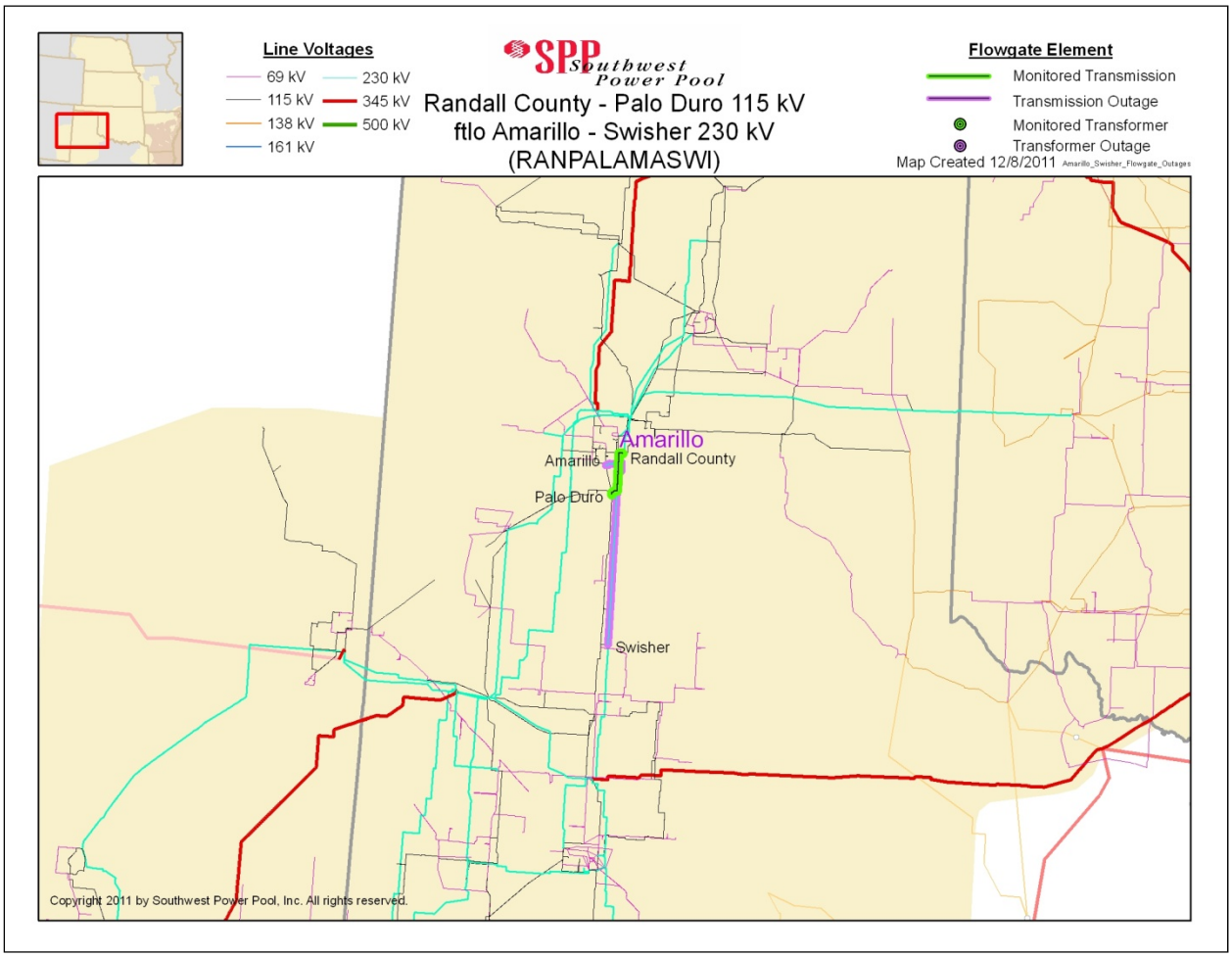
Region	Flowgate Name	Flowgate Location (kV)	Average Hourly Shadow Price ($/MWh)	Total % Intervals (Breached or Binding)	Projects Expected to Provide Some Positive Mitigation (Estimated In Service Date – Upgrade Type)
Texas Panhandle	**RANPALAMASWI**	Randall County - Palo Duro (115) ftlo Amarillo – Swisher (230) [SPS]	$ 44.13	29.0%	1. Rebuild Randall Co–Palo Duro 115 kV line (Dec 2011 - no NTC but is Sponsored) 2. Tuco Int. – Woodward 345 kV line (May 2014 - Balanced Portfolio) 3. Swisher Co. Int. – Newhart 230 kV line (April 2015 - Regional Reliability)
	OSGCANBUSDEA	Osage Switch - Canyon East [SPS] [(115) ftlo Bushland - Deaf Smith [SPS] (230)	$ 21.36	19.2%	1. Tuco Int. – Woodward 345 kV line (May 2014 - Balanced Portfolio) 2. Castro County Int. – Newhart 115 kV line (April 2015 - Regional Reliability)
Kansas City Area	**LAKALASTJHAW**	Lake Road – Alabama [GMOC] (161) ftlo St. Joe – Hawthorn [GMOC] (345)	$ 6.90	1.9%	1. Axtell – Post Rock – Spearville 345 kV line, two Spearville – Comanche – Thistle –Woodward 345 kV lines, and two Thistle – Wichita 345 kV lines (Dec 2014 - Balanced Portfolio/Priority Projects) 2. Iatan – Nashua 345 kV line (June 2015 - Balanced Portfolio) 3. Nebraska City – Maryville – Sibley 345 kV line (June 2017 - Priority Projects)
	IASCLKNASJHA	Iatan – Stranger Creek (345)[KCPL] ftlo Lake Road – Nashua (161), St. Joe – Hawthorne (345) [GMOC-KCPL]	$ 4.90	8.9%	1. Iatan – Nashua 345 kV line (June 2015 - Balanced Portfolio) 2. Nebraska City – Maryville – Sibley 345 kV line (June 2017 - Priority Projects)
SW Kansas	**HOLPLYHOLSPE**	Holcomb – Plymell Switch [SECI] (115) ftlo Holcomb - Spearville [SECI] (345)	$ 3.93	2.0%	1. Rebuild Holcomb – Plymell Switch 115 kV line (June 2012 - Regional Reliability)
Western Nebraska	**GENTLMREDWIL**	Gentleman to Red Willow (345) [NPPD]	$ 3.54	5.2%	1. Axtell – Post Rock – Spearville 345 kV lines (June 2013 - Balanced Portfolio)
Tulsa Area	**OKMHENOKMKEL**	Okmulgee – Henryetta (138) ftlo Okmulgee – Kelco (138) [CSWS]	$ 2.87	2.4%	1. Tap Pittsburg – Muskogee 345 kV line and add new Canadian River substation and 345/138 kV transformer (June 2013 – Regional Reliability) 2. Seminole – Muskogee 345 kV line (December 2013 – Balanced Portfolio)

Wichita Area	**ELPFARWICWDR**	El Paso – Farber [WR] (138) ftlo Wichita – Woodring [WR-OGE] (345)	$ 2.76	2.0%	1. Rose Hill – Sooner 345 kV line (June 2012 - Regional Reliability) 2. Two Woodward – Thistle – Wichita 345 kV lines (Dec 2014 - Priority Projects)
Western Oklahoma	**ELKXFRTUCOKU**	Elk City Transformer (230/138) ftlo Tuco – Oklaunion (345) [CSWS]	$ 2.27	6.2%	1. Elk City – Gracemont 345 kV line and Elk City 345/230 kV Transformer (March 2018 – ITP10) (pending Board
Southwest Missouri	**BRKXF1BRKXF2**	Brookline Xfmr Ckt1 (345/161) ftlo Brookline Xfmr Ckt2 (345/161) [SPA/AECI]	$ 2.14	0.4%	1. Flint Creek – Centerton – Osage Creek 345 kV line (June 2016 – Regional Reliability)

The annual top 10 flowgates as of October 2011 are detailed below.

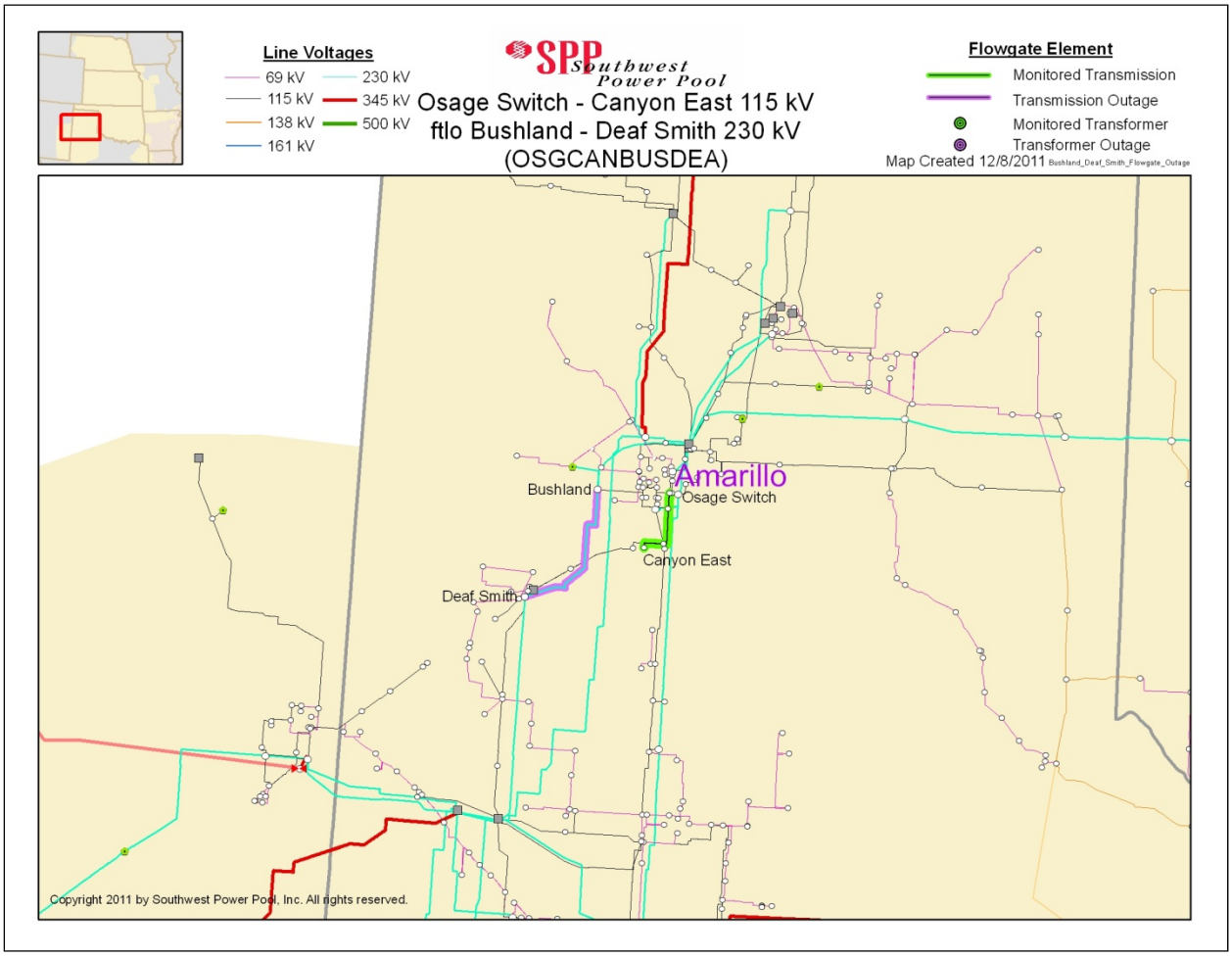
The **RANPALAMASAWI** flowgate, located in the Texas Panhandle, monitors the 115 kV transmission line from Randall County to Palo Duro for the loss of the 230 kV line from Amarillo to Swisher. The percentage of total intervals breached or binding over the last twelve months is 29%. This flowgate had an average shadow price of $44.13.

The Randall County to Palo Duro 115 kV line is being rebuilt with a larger conductor and this work is expected to be complete by the end of December 2011. This upgrade is expected to provide some positive mitigation for this congestion. Another project that is expected to provide some mitigation is the Tuco to Woodward 345 kV line, a new link between Texas and Oklahoma that is part of the Balanced Portfolio that should be in service in 2014. A third project expected to provide some mitigation is the Swisher County Interchange to Newhart 230 kV line in the southern part of the Texas Panhandle, a regional reliability upgrade that should be in service in 2015.



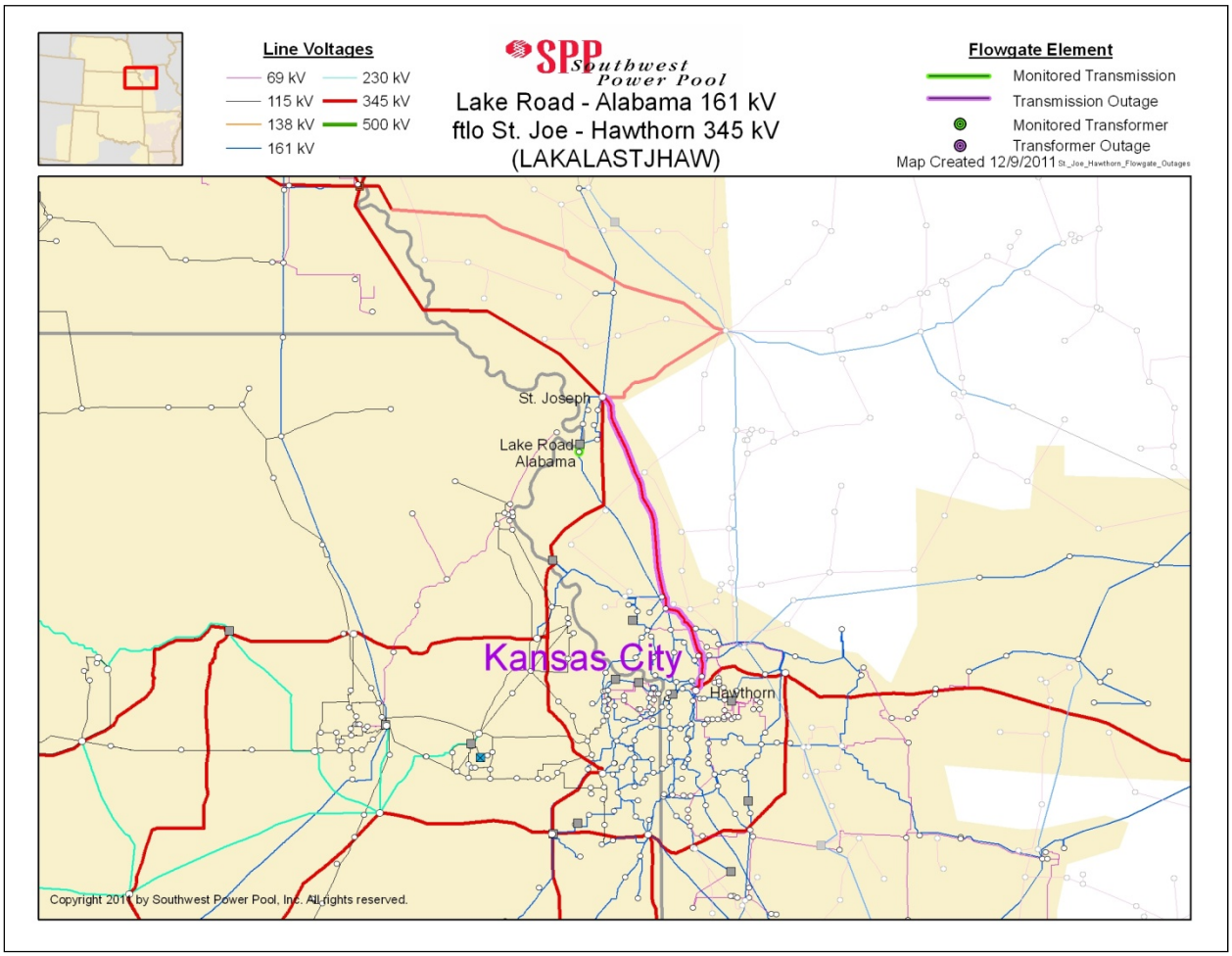
The **OSGCANBUSDEA** flowgate, located in the Texas Panhandle, monitors the 115 kV transmission line from Osage Switch to Canyon East for the loss of the 230 kV line from Bushland to Deaf Smith. The percentage of total intervals breached or binding over the last twelve months is 19.2%. This flowgate had the highest average shadow price at $21.36.

The Tuco to Woodward 345 kV line, a new link between Texas and Oklahoma that is part of the Balanced Portfolio, is expected to provide some positive mitigation for this congestion when it goes into service in 2014. Another project that is expected to provide some mitigation is the Castro County Interchange to Newhart 115 kV line in the southern part of the Texas Panhandle, a regional reliability project that should be in service in 2015.



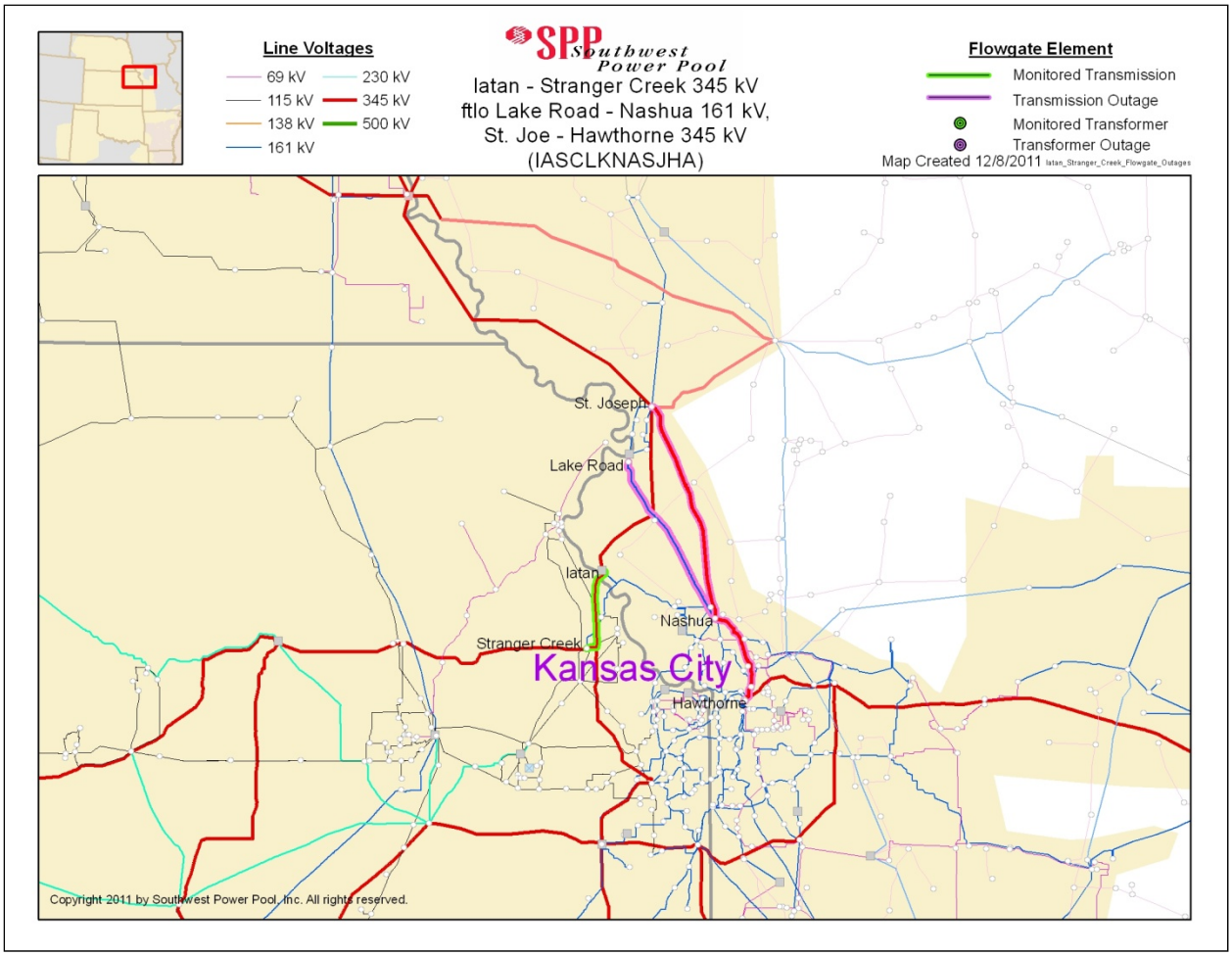
The **LAKALASTJHAW** flowgate, located in the Kansas City area, monitors the 161 kV transmission line from Lake Road to Alabama for the loss of the 345 kV line from St. Joe to Hawthorn. The percentage of total intervals breached or binding over the last twelve months is 1.9%. This flowgate had an average shadow price of $6.90.

Some Balanced Portfolio and Priority Project upgrades spanning Nebraska, Kansas, and Oklahoma are expected to provide some positive mitigation for this congestion when all are in service in 2014. These upgrades include the Axtell to Post Rock to Spearville 345 kV line, the Spearville to Comanche County to Thistle to Wichita double-circuit 345 kV, and Thistle to Woodward double-circuit 345 kV lines. Another project that is expected to provide some mitigation is the Iatan to Nashua 345 kV line north of Kansas City, part of the Balanced Portfolio that should be in service in 2015. Other projects expected to provide some mitigation are the Nebraska City to Maryville to Sibley 345 kV lines running from southeastern Nebraska to northwestern Missouri, a Priority Project which is estimated to be in service by 2017.



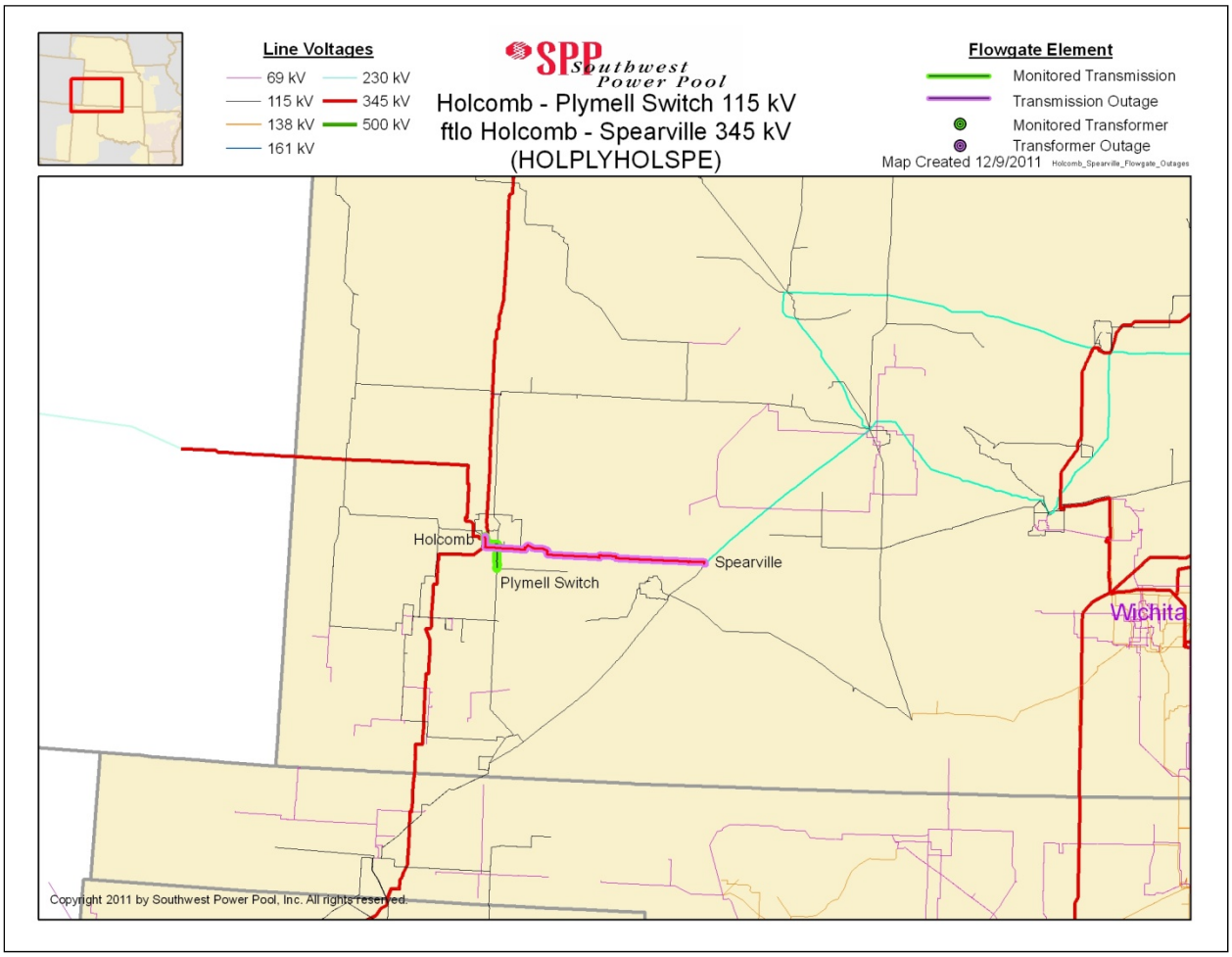
The **IASCLKNASJHA** flowgate, located in the Kansas City area, monitors the 345 kV transmission line from Iatan to Stranger Creek for the loss of the 161 kV line from Lake Road to Nashua and the 345 kV line from St. Joe to Hawthorn. The percentage of total intervals breached or binding over the last twelve months is 8.9%. This flowgate had an average shadow price of $4.90.

The Iatan to Nashua 345 kV line north of Kansas City, part of the Balanced Portfolio that should be in service in 2015, is expected to provide some positive mitigation for this congestion. Other upgrades that are expected to provide some mitigation are the Nebraska City to Maryville to Sibley 345 kV lines running from southeastern Nebraska to northwestern Missouri, a Priority Project which is estimated to be in service by 2017.



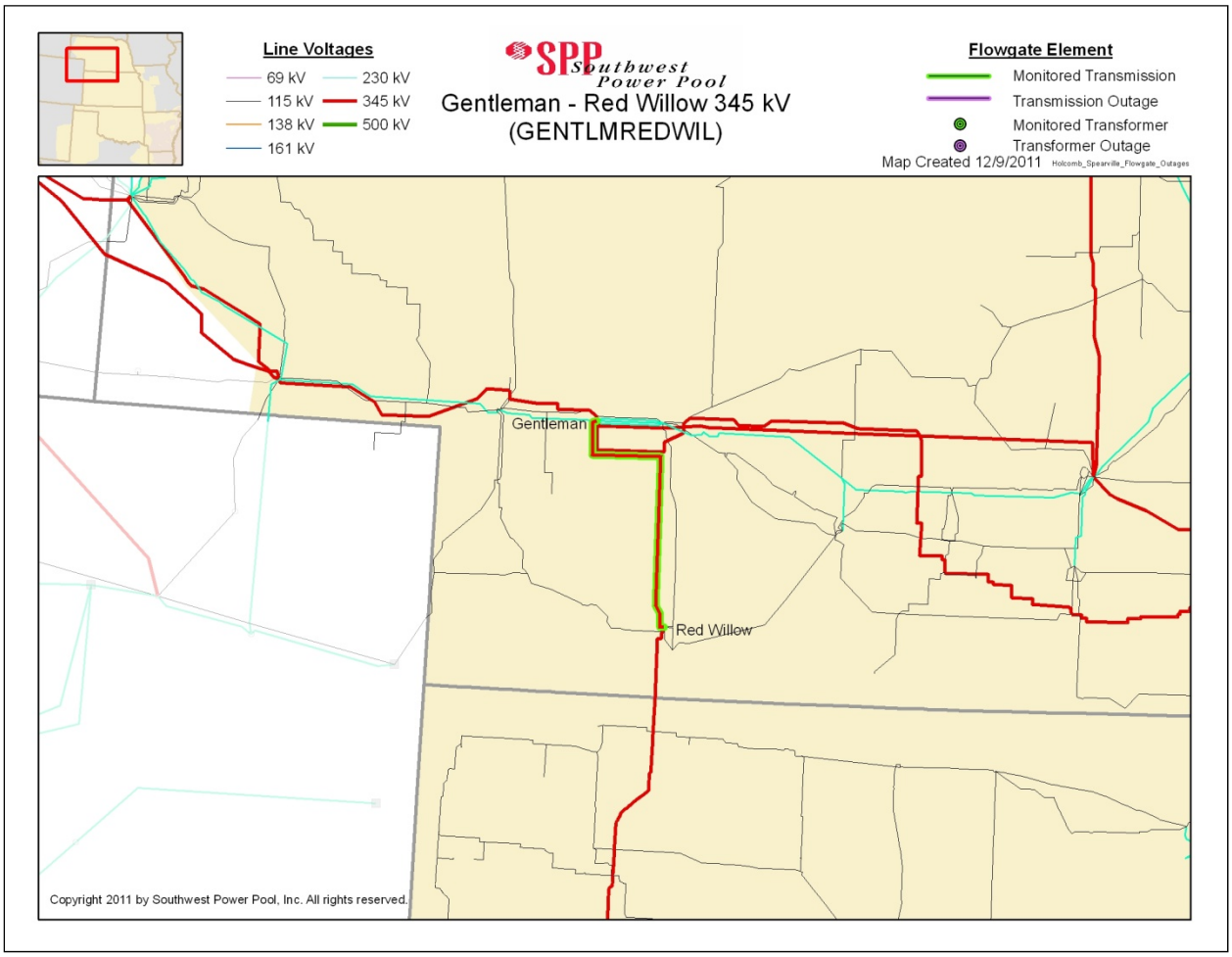
The **HOLPLYHOLSPE** flowgate, located in Southwest Kansas, monitors the 115 kV transmission line from Holcomb to Plymell Switch for the loss of the 345 kV line from Holcomb to Spearville. The percentage of total intervals breached or binding over the last twelve months is 2.0%. This flowgate had an average shadow price of $3.93.

The Holcomb to Plymell Switch 115 kV line will be rebuilt with a larger conductor in 2012 for regional reliability, which is expected to provide some positive mitigation for this congestion.



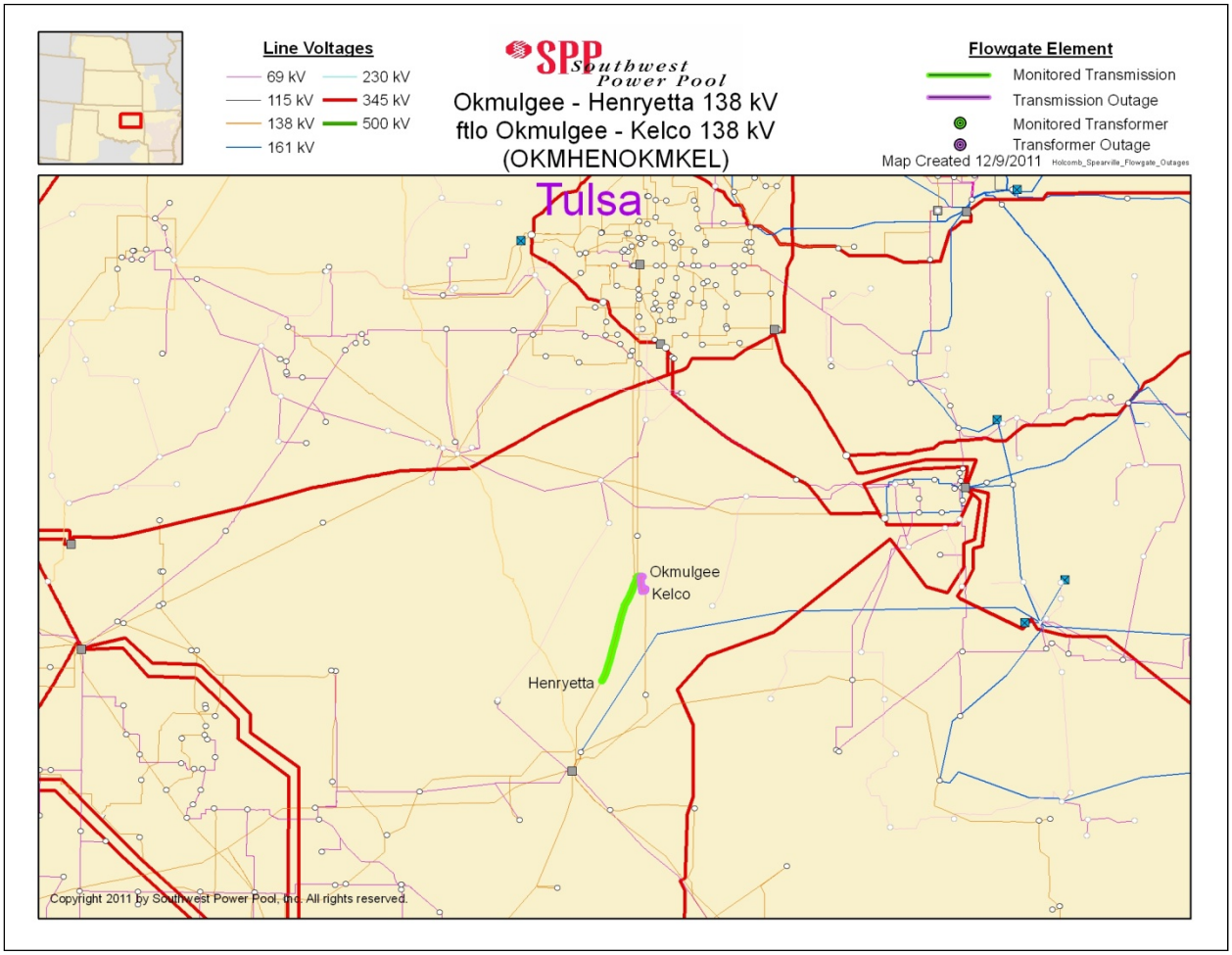
The **GENTLMREDWIL** flowgate, located in Western Nebraska, monitors the 345 kV transmission line from Gentleman to Red Willow. The percentage of total intervals breached or binding over the last twelve months is 5.2%. This flowgate had an average shadow price of $3.54.

The Axtell to Post Rock to Spearville 345 kV lines, part of the Balanced Portfolio that should be in service in 2013, are expected to provide some positive mitigation for this congestion. These lines will provide additional transmission capacity between southern Nebraska and Kansas.



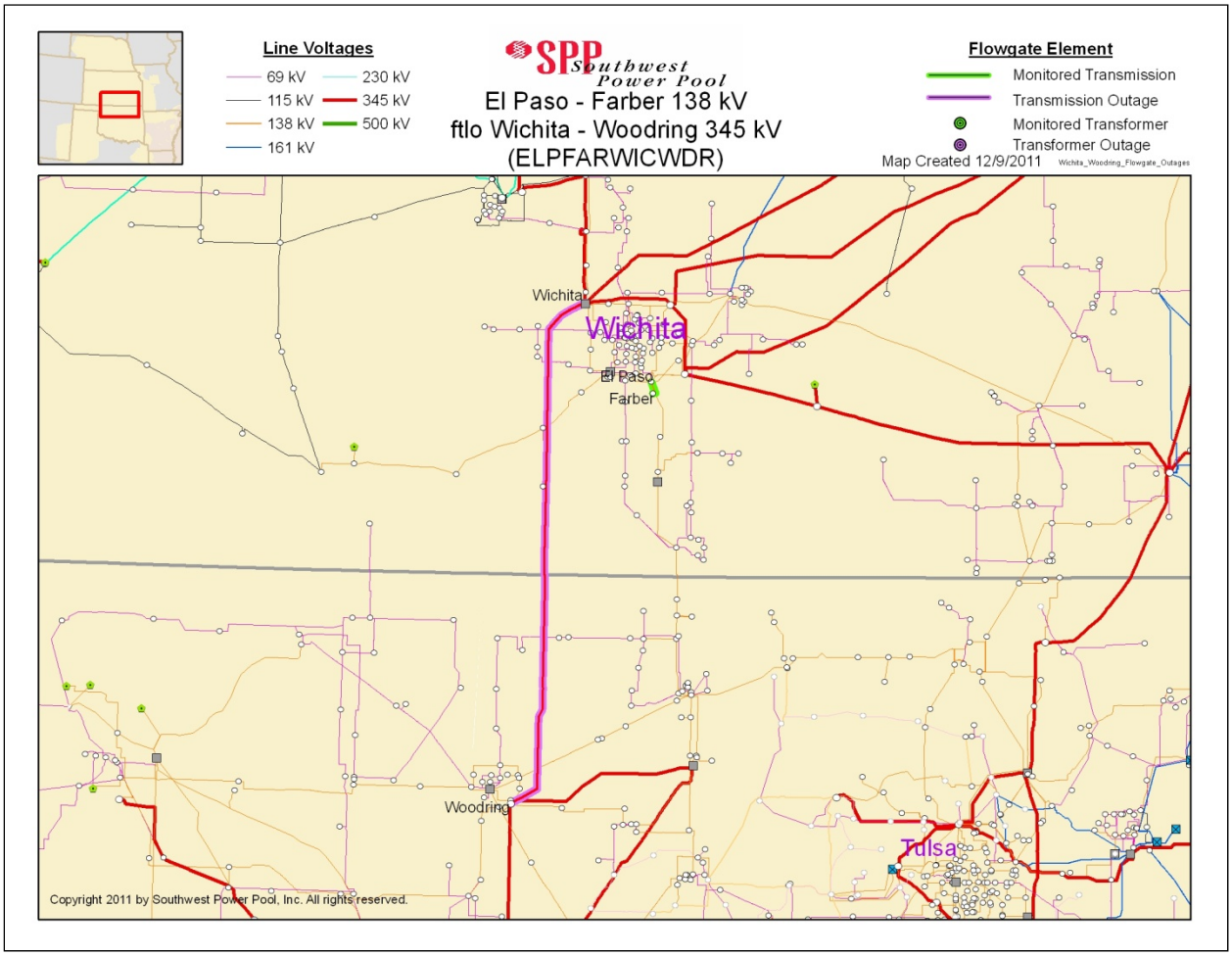
The **OKMHENOKMKEL** flowgate, located in the Tulsa area, monitors the 138 kV transmission line from Okmulgee to Henryetta for the loss of the 138 kV line from Okmulgee to Kelco. The percentage of total intervals breached or binding over the last twelve months is 2.4%. This flowgate had an average shadow price of $2.87.

The new Canadian River substation and 345/138 kV transformer that is being tapped into the Pittsburg to Muskogee 345 kV line is expected to provide some positive mitigation for this congestion. This is a regional reliability upgrade south of Tulsa with an in service date of 2013. Another upgrade that is expected to provide some mitigation is the new 345 kV line from Seminole to Muskogee in central Oklahoma, part of the Balanced Portfolio which is estimated to be in service by 2013.



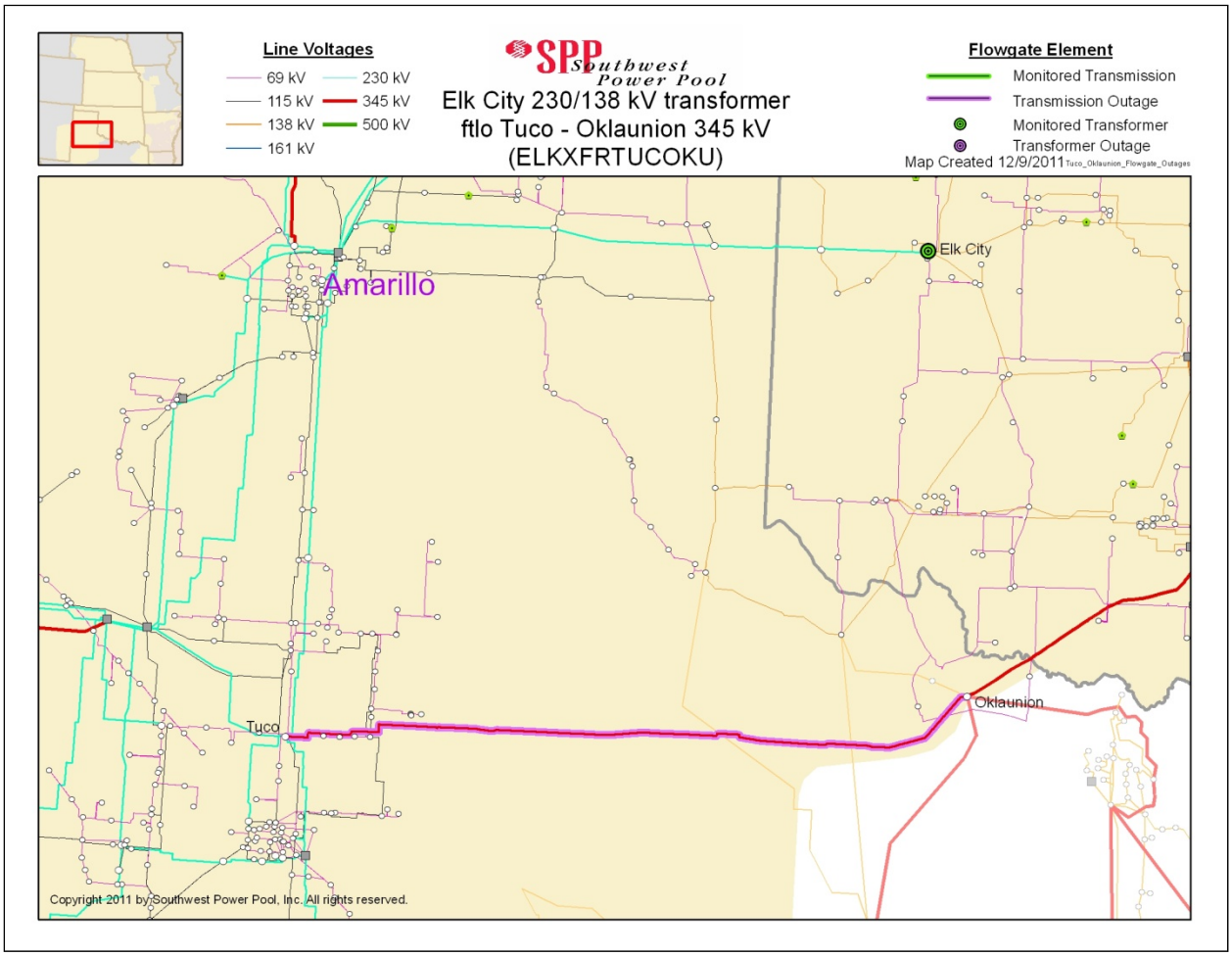
The **ELPFARWICWDR** flowgate, located in the Wichita area, monitors the 138 kV transmission line from El Paso to Farber for the loss of the 345 kV line from Wichita to Woodring. The percentage of total intervals breached or binding over the last twelve months is 2.0%. This flowgate had an average shadow price of $2.76.

The Rose Hill to Sooner 345 kV line, a regional reliability upgrade that crosses the Kansas/Oklahoma border, is expected to provide some positive mitigation for this congestion when it goes into service in 2012. Other upgrades that are expected to provide some mitigation are the double-circuit 345 kV lines from Woodward to Thistle to Wichita in northwestern Oklahoma and southern Kansas, part of the Priority Project upgrades which are estimated to be in service by 2014.



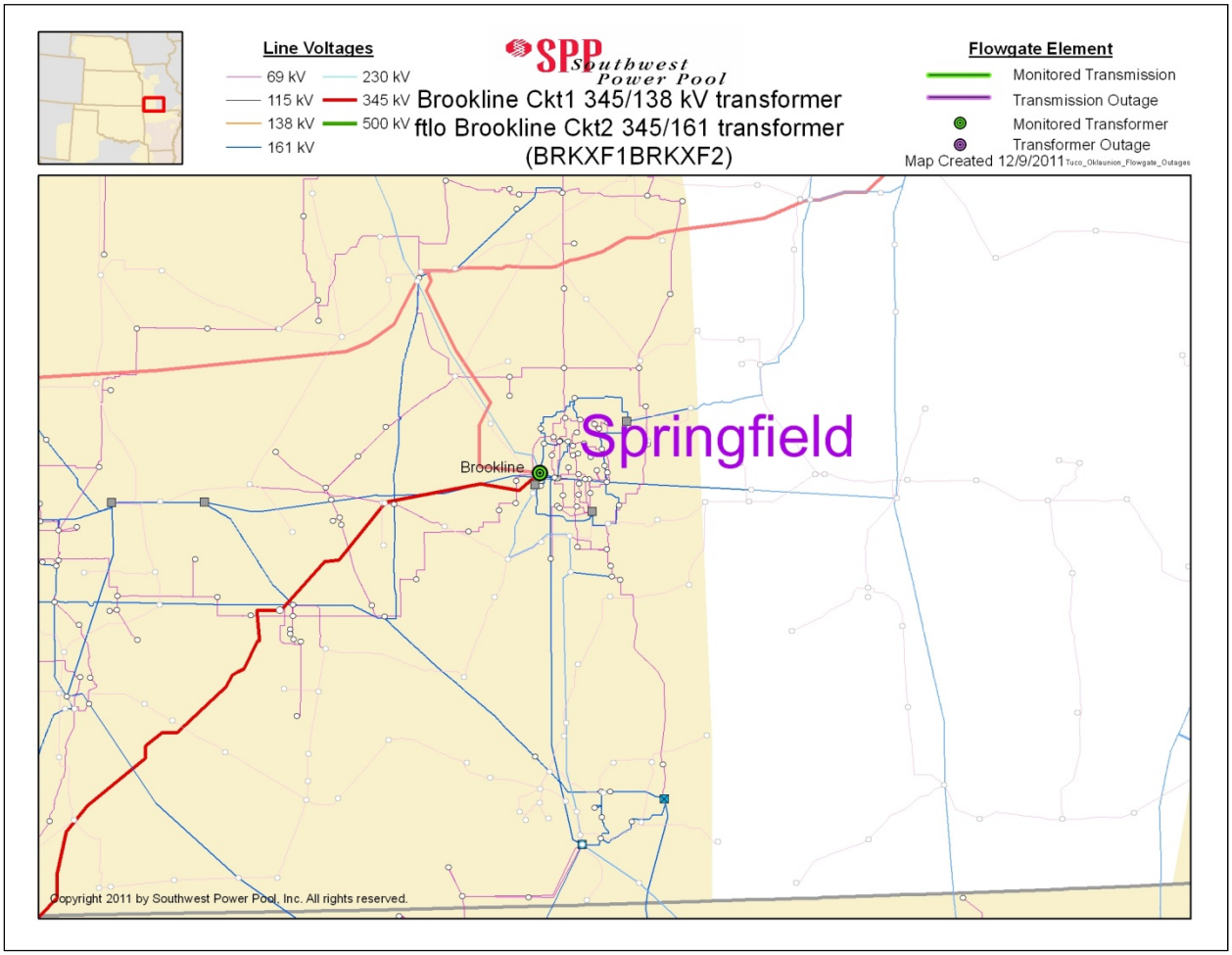
The **ELKXFRTUCOKU** flowgate, located in Western Oklahoma, monitors the 230/138 kV transformer at Elk City for the loss of the 345 kV line from Tuco to Oklaunion. The percentage of total intervals breached or binding over the last twelve months is 6.2%. This flowgate had an average shadow price of $2.27.

At this time, there are no approved upgrades expected to provide significant mitigation. However, a new 345 kV line from Elk City to Gracemont and a new 345/230 kV transformer at Elk City, would be expected to provide some positive mitigation. These upgrades are being proposed for approval as part of the 2012 ITP10 Portfolio and would go into service in 2018.



The **BRKXF1BRKXF2** flowgate, located in Southwest Missouri, monitors the first 345/161 kV transformer at Brookline for the loss of the second 345/161 kV transformer at Brookline. The percentage of total intervals breached or binding over the last twelve months is 0.4%. This flowgate had an average shadow price of $2.14.

The Flint Creek to Centerton to Osage Creek 345 kV lines, regional reliability upgrades in Northwestern Arkansas, are expected to provide some positive mitigation for this congestion when they go into service in 2016.



Section 5: Interregional Coordination

As SPP pursues its strategy of building a robust transmission system, coordination between SPP and systems neighboring our footprint will become increasingly critical. In 2010, MOPC formed the Seams Steering Committee (SSC) to provide direction regarding development and implementation of SPP's seams agreements. The SSC will continue to focus on further development of seams coordination, particularly improved modeling of neighboring transmission systems, coordinated development of interregional solutions, and sharing costs of projects that comprise interregional solutions.

To achieve a robust transmission grid, transmission expansion at or near SPP's seams will be necessary. Interregional funding will be necessary to achieve these objectives. SPP staff needs to be fully engaged in these efforts.

5.1: SPP RTO and Entergy ICT

As the Independent Coordinator of Transmission (ICT) for Entergy Services, Inc. (Entergy), SPP facilitates transmission planning for Entergy. The SPP RTO and ICT coordinate planning study conclusions and look for opportunities to collaborate on seams-related transmission improvements. These investigations include evaluation of third-party impacts identified from transmission service requests on both systems. The SPP RTO and ICT continue to work closely on the Joint Coordinated System Plan study, and both groups are involved in the SERC Reliability Corporation's planning processes.

5.2: Entergy/SPP Regional Planning Process

In accordance with FERC Order 890, SPP OATT Attachment O, and Entergy OATT Attachment K, the Entergy/SPP Regional Planning Process (ESRPP) was created to identify system enhancements that could relieve interregional congestion between Entergy and SPP, and to share system plans to ensure they are simultaneously feasible and otherwise use consistent assumptions and data.

Up to five high-level studies can be requested annually to provide screening to identify constraints and needed upgrades, and to approximate costs and timelines. Based on the results of these high level studies, stakeholders may request a more detailed study to be undertaken in the following planning cycle which will provide detailed cost estimates and timelines.

In June 2011, the joint study team consisting of transmission planning engineers from Entergy, SPP ICT, and SPP RTO, shared the results of the 2010 ESRPP study efforts. These five ESRPP studies were discussed:

- Transfer of 3000 MW from Arkansas IPPs (Hot Springs, Magnet Cove, and PUPP) to SPP South (AEP and OG&E)
- Transfer of 700 MW from AEPW to Entergy Arkansas
- Transfer of 700 MW from Entergy Arkansas to AEPW
- Transmission Upgrade: Messick 500/230 kV Transformer
- Transmission Upgrade: Turk – McNeil 345kV Line

The transfer analysis results were presented along with project cost estimates. For example, the total project cost to enable the transfer of 3000 MW from the Arkansas IPPs to SPP South was $815 million. The ESRPP projects developed from these analyses can be used to optimize the SPP ITP studies and the Entergy Construction Plan.

The ESRPP kicked-off its 2011 efforts at the same June 2011 meeting. Via email vote in July 2011, stakeholders chose the five regional economic studies to be performed in 2011 for either high-level studies or more detailed analyses:

Detailed Studies as a continuation from 2010 ESRPP;

- Transfer of 2408 MW from Arkansas IPPs (Hot Springs, Magnet Cove, and PUPP) to SPP South (AEP and OG&E)
- Transfer of 1117 MW from AEPW to Entergy Arkansas

New High-level Studies

- Transfer of 500 MW from Entergy to EMDE
- Transfer of 3000 MW from Nebraska to Entergy
- Transfer of 3000 MW from Entergy to Nebraska

In the August 2011 ESRPP meeting, an overview of the initial results for the stakeholders' regional 2011 economic studies was presented. At this meeting, the stakeholders provided modeling updates and feedback about how to better present the study results. In the first quarter of 2012, it is expected that the ESRPP 2011 Report will be completed and presented at an ESRPP meeting.

5.3: AECI Interaction

AECI participated on many of the SPP TWG and ESWG calls. AECI worked closely with SPP staff and stakeholders on Branson area project studies, as well as provided input on other seams projects connecting to their territory.

5.4: MISO Data Coordination

MISO and SPP increased coordination regarding data sharing to ensure that each organization is modeling the other's system appropriately. Since SPP and MISO use the same or similar modeling software, each RTO was able to simply send each other their modeling database. SPP incorporated the MISO data into the SPP model, increasing the confidence in the modeling of the seam between SPP and MISO.

In preparation for the 2013 ITP20, SPP and MISO are developing a set of assumptions for a future that will be studied by both SPP and MISO. This joint future will allow each RTO to examine the benefits of a transmission project while using the same assumptions.

5.5: WAPA- Basin Electric Interaction

SPP has worked with WAPA in the ITP10 planning cycle, specifically regarding projects in Nebraska that could impact WAPA facilities. One project in particular is recommended to interconnect with WAPA's 345 kV line from Ft. Thompson to Grand Island. SPP shared modeling data with WAPA and WAPA has performed analysis regarding the impact the SPP proposed project would have on WAPA's system.

5.6: Eastern Interconnection Planning Collaborative

The Eastern Interconnection Planning Collaborative (EIPC) represents the entire Eastern Interconnection and was initiated by a coalition of NERC-registered regional Planning Authorities. The EIPC was founded to be a broad-based, transparent collaborative process among all interested stakeholders:

- State and federal policy makers
- Consumer and environmental interests
- Transmission Planning Authorities
- Market participants within the Eastern Interconnection

The EIPC builds on the regional expansion plans developed each year by regional stakeholders in collaboration with their respective NERC Planning Authorities. This approach provides coordinated interregional analysis for the entire Eastern Interconnection guided by the consensus input of an open and transparent stakeholder process.

The EIPC represents a first of its kind effort to involve Eastern Interconnection Planning Authorities in modeling the impact on the grid of various policy options determined to be of interest by state, provincial, and federal policy makers and other stakeholders. This work will build on, rather than replace, current local and regional transmission planning processes developed by the Planning Authorities and associated regional stakeholder groups within the Eastern Interconnection. Those processes will be informed by EIPC efforts, including the interconnection-wide review of existing regional plans and development of transmission options associated with the various policy options.

The EIPC will establish processes for aggregating the entire Eastern Interconnection' s modeling and regional transmission plans. The EIPC will also establish processes for performing interregional analyses to identify potential opportunities for efficiencies between regions in serving the needs of electrical customers. This interconnection-wide analysis will also serve as the reference case for modeling alternative grid expansions based on scenarios guided by stakeholder input and consensus recommendations of a multi-constituency stakeholder steering committee. The analysis will aid states and other stakeholders in assessing interregional options and policy decisions.

The project will benefit power system stakeholders by providing modeling and analysis considering the entire Eastern Interconnection, identifying potential opportunities for efficiencies between regional transmission plans, providing coordinated analysis of scenarios of interest to policy makers and stakeholders, and developing potential transmission expansion options and cost estimates to inform their decisions.

SPP Engineering Involvement

The SPP Engineering department has been actively involved in multiple aspects of the EIPC effort. Having participated in the construction of the steady state load flow models, the Steady State Model Load Flow Working Group (SSMLFWG) submitted their work to the EIPC at the end of 2010. In 2011, SPP participated in quarterly Stakeholder Planning Committee (SPC) meetings and provided input and advice during the macroeconomic resource expansion analysis. This analysis produced more than 80possible scenarios, from which three were selected in 2011 for transmission build-out in 2012. In 2012, SPP will remain involved in EIPC process by participating in SPC meetings and assisting in the transmission build-out and production cost analysis studies.

Section 6: Project Tracking

Project Cost Overview
With the implementation of SPP's Highway/Byway cost allocation methodology, additional scrutiny is warranted in reviewing changes to regionally funded project cost estimates for projects that were a result of an SPP process. In the past, transmission cost estimates tended to remain internal to each member utility, subject only to the utility's internal review processes and any applicable obligations to its regulatory authorities. At its October 25, 2010, meeting, the SPP Regional State Committee (RSC) passed five motions to provide an evaluation of costs for regionally funded projects:

- *Motion 1:* SPP review what is the best manner to address significant cost increases and/or overruns of transmission projects that are regionally funded.
- *Motion 2:* SPP review the Novation Process and report to the RSC by April 2011.
- *Motion 3* SPP consider establishing design and construction standards for transmission projects at 200 kV and above that are regionally funded.
- *Motion 4:* SPP evaluate how cost estimates are established for transmission projects before cost benefit analyses are performed.
- *Motion 5:* CAWG to study various methods on how costs that exceed some standard can be addressed with different cost allocation mechanisms and recommend strategies to the RSC.

Project Cost Task Force (PCTF)
The MOPC formed the (PCTF) to address the RSC motions 1 and 4. The PCTF and SPP staff were charged with creating a standardized and transparent method for the development of transmission project cost estimates associated with regionally funded projects. The group developed multiple enhancements to the tracking and cost estimate processes for projects upon which SPP will perform cost benefit analyses.

The PCTF whitepaper that details the new cost estimation process and project tracking enhancements was approved by the MOPC at its July 2011 meeting. Any project that is issued an NTC or CNTC after this date is subject to the processes described within the whitepaper.

Design Best Practices and Performance Criteria Task Force (DBPPCTF)
The DBPPCTF was approved by the SPC to address RSC motion 3. The DBPPCTF was tasked with establishing Design Best Practices and Performance Criteria (DBP&PC) to be used by the SPP Transmision Owner (TO) in developing study estimates for SPP footprint projects rated at voltages at 100 kV and greater. The DBP&PC would be intended to promote consistency in TO study stage estimates.

With this charge, the DBPPCTF developed the SPP Design Best Practices, Performance Criteria and Scoping Guidelines for Transmission Facilities outline. In addition to the DBP&PC, the document also contains scoping guidelines for the conceptual and study estimate phases. These guidelines are intended to promote mutual understanding of the project definition between SPP and the TO as the project is developed and estimates are prepared for the applicable phase of the potential project.

The TO study estimate assumptions are detailed in the Standardized Cost Estimate Reporting Template (SCERT) as used by the SPP project cost tracking process.

Project Cost Working Group (PCWG)

The role of the PCWG was defined in the PCTF whitepaper as a stakeholder group that would be responsible for reviewing projects that have experienced a cost variance that exceeds a specified bandwidth. Initially, the PCWG will review only projects rated with a voltage at 300 kV and above and a cost estimate greater than $20 million. After the process is refined,the criteria will expand to include projects rated with a voltage at 100 kV and above and a cost estimate greater than $20 million.

If the PCWG recommends a restudy and/or changes or revocation of an NTC, the recommendation to the MOPC would follow SPP's existing processes for approval to the BOD. The BOD will make the final determination on whether to restudy and/or change or revoke the NTC.

The PCWG is also responsible for maintaining the SCERT that was established in the PCTF whitepaper and the Study Estimate Design Guide (SEDG) that was developed by the DBPPCTF. In its first meeting on September 15, 2011, the PCWG reviewed a new version of the SCERT that consolidated the original version located in Appendix A of the PCTF whitepaper with the Study Estimate Scope Requirements listed in the SEDG. SPP Staff issued the updated SCERT for TOs to use for providing study estimates for potential ITP10 projects.

ITP10 Study Estimates

The cost data provided in ITP 10 is based on the Study Estimates received from the TOs that were designated to each project.

Should the BOD approve an ITP10 project with a voltage rating above 100 kV and with a study estimate greater than $20 million, SPP will issue that project's Designated Transmission Owner (DTO) a CNTC. The PCTF whitepaper defines the expected precision bandwidth of a study estimate to be +/- 30%. The CNTC issuance is an initiative to the DTO(s) to perform any cost estimate analysis not previously done to improve the accuracy of the study estimate such that the DTO(s) will be within a +/- 20% precision bandwidth. The updated cost estimate, referred to as the CNTC Project Estimate (CPE), should be submitted to SPP no later than four months prior to the start of the next ITP10 process cycle.

If the CPE variance bandwidth of +/- 20% does not exceed the study estimate variance bandwidth of -+/- 30%, the project's cost variance will be deemed acceptable and will be immediately issued an NTC by SPP staff. This will be the authorization for the DTO to proceed with the project.

If the CPE variance bandwidth exceeds the variance bandwidth of the study estimate, SPP staff will re-evaluate this project using the new cost estimate data and will make a recommendation to the BOD at its next scheduled quarterly meeting. SPP staff's recommendation could be but is not limited to one of the following actions:

1. Accept the cost variance and approve the project as is
2. Modify the existing project
3. Replace the project with an alternative solution
4. Cancel the project

The study estimate received from the DTO for these projects will be used as the initial baseline for measuring final project approval. If the cost variation of the CPE is accepted by the BOD, the CPE will be used as a final baseline for reporting all cost estimate changes during the project tracking process and will be the basis for determining project variance.

For approved ITP10 projects with a voltage rating below 100 kV or a Study Estimate less than $20 million, SPP will issue that project's DTO a NTC. If the DTO accepts the NTC, it shall respond as

prescribed in the NTC letter and provide SPP with a refined study cost estimate. This estimate is referred to as the NTC Project Estimate (NPE).

The NPE received from the DTO for these projects will be used as the final baseline for reporting all cost estimate changes during the project tracking process and will be the basis for determining project variance.

After the BOD approves a transmission project and a NTC is issued, SPP tracks and monitors the projects to ensure they continue to provide the best regional transmission solutions and, where applicable, are following cost recovery requirements under the OATT. SPP provides quarterly project status updates to the BOD on approved transmission projects.

NTC Letters Issued in 2011

The NTC, previously called a Letter of Authorization, informs transmission project owners of their responsibility for constructing BOD approved network upgrades. NTCs were requested by project owners to assist them in the regulatory and cost recovery process. In 2011, 21 NTCs were issued with current estimated engineering and construction costs of $854.4 million. Of this $854.4 million, $275.4 million was identified for regional reliability, $27.8 million for transmission service, $25.8 million for zonal reliability, and $1 million for generation interconnection. Two of the 21 NTCs were issued for Priority Projects with an estimated cost of $524 million, but these were modified NTCs to reflect the novation of projects to ITC Great Plains and Prairie Wind.

Projects Completed in 2011

As of the fourth quarter of 2011, 99 upgrades had been completed. Of the upgrades completed in 2011, 26 were identified for regional reliability, 35 for zonal- sponsored/reliability needs, 22 for transmission service, eight for generation interconnection agreements, four for interregional, three for regional reliability-non OATT, and the first Priority Project.

The total estimated engineering and construction cost for upgrades completed in 2011 was $410 million, with $159.7 million for regional reliability, $64.7 million for transmission service, $111.9 million for zonal-sponsored/reliability upgrades, $52.4 million for generation interconnection agreements, $14 million for interregional, $6.3 million for regional reliability-non OATT, and $960,895 for the Priority Project.

Section 7: Public Policy Impacts

Public Policy and Long-term Transmission Planning

Public policy initiatives related to RES and governmental regulation of emissions, environmental impacts, and public health could affect the future of long-term transmission planning. For instance, in June 2010, the Environmental Protection Agency (EPA) announced an emissions standard that will impact coal-fired electric generation facilities. Under this new standard, emissions from power plants and other industrial facilities will be required to meet a new "1-hour standard" designed to reduce short-term exposure to Sulfur Dioxide (SO_2). Additionally in 2010, the EPA opened rulemaking dockets to develop and implement standards to reduce the transfer of SO_2 and nitrogen oxide (NO_x) through the air and to regulate coal-ash, which is a by-product of traditional electric generation processes. These proposed rules, once implemented, will have an associated compliance cost that will be borne by industry participants and ratepayers.

SPP has sent two letters to the EPA regarding the pending regulation; the first was sent on July 19, 2011. This letter expressed the concern of SPP and its members regarding the multiple pending regulations. The regulations of concern that the letter addressed include: the Clean Air Transport Rule, now finalized as the Cross-State Air Pollution Rule (CSAPR); the Coal Combustion Residuals Rule; revisions to section 316(b) of the Clean Water Act; and the Hazardous Air Pollutants changes for the regulation of mercury emissions from electricity generation units.

The finalized CSAPR utilized the EPA's Integrated Planning Model (IPM), and a review by SPP found the model did not dispatch several key generators in the SPP footprint. The removal of those generators from the SPP region caused major reliability issues in SPP's current summer peak load flow models.

SPP sent a letter regarding these issues to the EPA on September 20, 2011. The reliability issues included N-1 contingency violations totaling 1047 circumstances where voltage was 90% of nominal on 167 different buses and 220 cases where line ratings exceeded the 100% applicable emergency rating. An even clearer representation of reliability violations was found by applying higher operability limits of 120% to the overloads, in which there were 16 such overloads on the system. Using a similar out of normal range, there were 93 circumstances where voltage dropped below 85% of nominal. These "clear-cut" examples of reliability standards violations represent well-founded concerns regarding the timeline with which the CSAPR would be instituted. In addition to these issues, there were 11 reliability cases that could not be solved in SPP's models. Such violations are clearly indicative of the EPA IPM's failure to account for reliability standard thresholds that SPP is required to maintain in accordance with Federal Energy Regulatory Commission approved standards.

SPP's members continue to evaluate and determine how they will individually comply with the CSAPR. Those individual compliance plans have not yet been evaluated from a SPP regional reliability perspective. SPP expects to evaluate those plans when they become available.

Pending climate change legislation may also impact the industry. According to a July 27, 2010, NERC report, *Reliability Impacts of Climate Change Initiatives*, "meeting carbon emission targets will have significant and varying regional impacts. In some cases, resource portfolios would be dramatically changed due to different energy supply characteristics, and regional resource availability and agreements, along with other aspects that are not under federal jurisdiction. System planners will need to change their approaches to ensure that operational flexibility is available to integrate variable plants, along with other location-constrained resources."

A recent United States Supreme Court opinion left open the question of whether individual parties and states may attempt to force regulation of greenhouse gas emissions in court under state nuisance law. In September 2010, attorneys general from several states, including Arkansas, Kansas, and Nebraska, filed a brief requesting that the Supreme Court review the decision of the U.S. Court of Appeals for the Second Circuit in Connecticut v. AEP,[5] in which the Second Circuit Court determined that state and private plaintiffs can seek abatement of greenhouse gas emissions from power plants under the "federal common law of nuisance." In its opinion, the Supreme Court determined that a lawsuit to abate emissions of greenhouse gases cannot be brought under the federal common law of nuisance because the Clean Air Act displaces the federal common law. However, the Supreme Court did not address the plaintiffs' alternative request for relief under state nuisance law, leaving the issue "open for consideration on remand."

On July 21, 2011, FERC issued Order No. 1000, *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities* (FERC Docket RM10-23). Order No. 1000 requires public utility transmission providers to:

(1) participate in a regional transmission planning process that produces a regional transmission plan;

(2) consider transmission needs driven by public policy requirements in local and regional transmission planning processes;

(3) remove from FERC-approved tariffs and agreements any language creating a federal right of first refusal for an incumbent transmission provider to construct certain transmission facilities that are identified in a regional transmission plan for purposes of cost allocation;

(4) improve coordination between neighboring transmission planning regions for new interregional transmission facilities; and

(5) adopt cost allocation methods for regional and interregional transmission facilities that comply with six cost allocation principles outlined in Order No. 1000.

With respect to public policy requirements, Order No. 1000 requires each local and regional transmission planning process to consider, at a minimum, transmission needs driven by public policies adopted in state and federal statutes and regulations. Each public utility transmission provider is required to submit compliance filings adopting the necessary tariff revisions to comply with the Order No. 1000 requirements or to demonstrate how existing tariff provisions comply. SPP's compliance filing to adopt reforms related to the regional requirements of Order No. 1000 is due on October 11, 2012, and its compliance filing to address the interregional requirements of Order No. 1000 is due on April 11, 2013.

The dialogue on these and numerous other public policy issues continues to evolve among legislators, businesses, state and federal regulators, industry organizations, and interested parties, all with different and often widely disparate views. The complexity of incorporating such considerations will be challenging. For instance, transmission providers, particularly RTOs serving multiple states, will be required to consider and balance the needs and interests of multiple and sometimes conflicting public policy mandates. Clarity in public policy is illusive, and this lack of clarity has resulted in minimal, if any, public policy impacts in the result of the 2011 STEP report.

[5] See Connecticut v. Am. Elec. Power Co., 582 F.3d 309 (2d Cir. 2009), petition for cert. filed, (U.S. Aug. 2, 2010) (No. 10-174).

Section 8: Appendix A

Appendix A includes a comprehensive listing of transmission projects identified by the SPP RTO. Not all projects in Appendix A have been approved by the Board, but all Board-approved projects are included in the list. Appendix A also includes Tariff study projects, economic projects, zonal projects, and associated interregional projects.

Projects in Appendix A are categorized in the column labeled "Project Type Exp" by the following designations:

Balanced Portfolio – Projects identified through the Balanced Portfolio process

Generation Interconnect – Projects associated with a FERC-filed Generation Interconnection Agreement

Interregional – Projects developed with neighboring Transmission Providers (Appendix A only)

High priority – Projects identified in the high priority process

ITP – Projects needed to meet regional reliability, economic, or policy needs in the ITP study processes

ITP – non-OATT – Projects to maintain reliability for SPP members not participating under the SPP OATT

Transmission service – Projects associated with a FERC-filed Service Agreement

Zonal Reliability – Projects identified to meet more stringent local Transmission Owner criteria

Zonal – sponsored – Projects sponsored by facility owner with no Project Sponsor Agreement

The complete Network Upgrade list includes two dates.

1. In-service: Date Transmission Owner has identified as the date the upgrade is planned to be in-service.

2. 2012 ITP Date: Date upgrade was identified as needed based on the 2012 ITPNT and ITP10 analyses.

   M: Upgrade was in the base load flow model,

The cost estimates highlighted in yellow were estimated by SPP.

Facility owner abbreviations used in Appendix A:

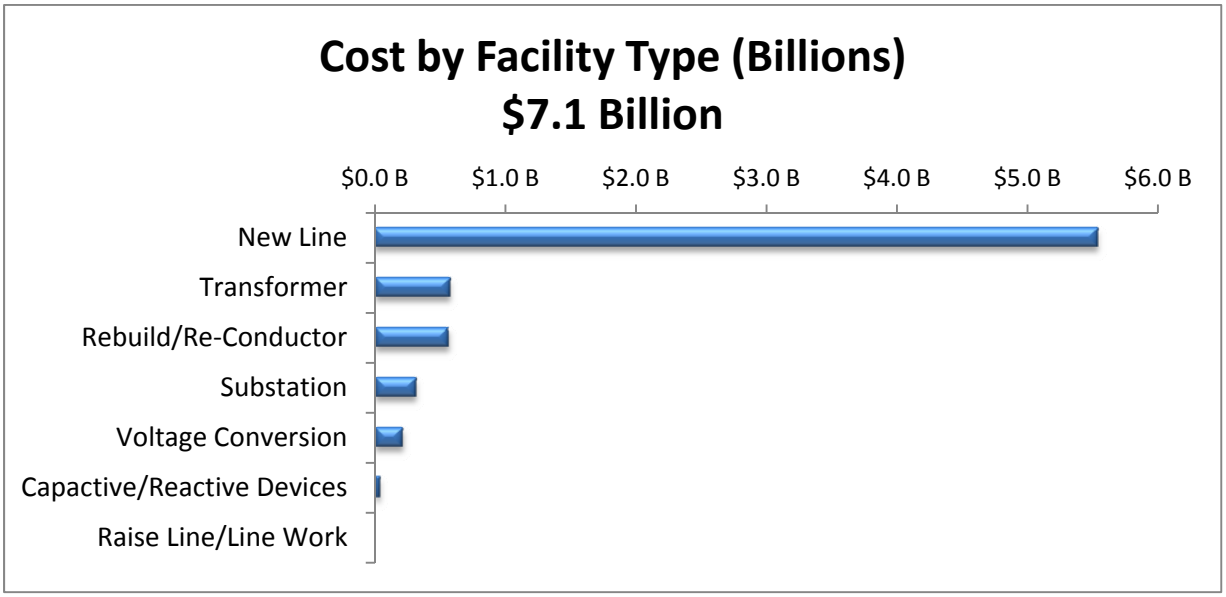
Abbreviation and Identification	
AECC	Arkansas Electric Cooperatives
AECI	Associated Electric Cooperative, Incorporated
AEP	American Electric Power
CUS	City Utilities, Springfield Missouri
DETEC	Deep East Texas Electric Cooperative
EDE	Empire District Electric Company
GMO	KCP&L Greater Missouri Operations Company
GRDA	Grand River Dam Authority
GRIS	Grand Island Electric Department (GRIS)
INDN	City Power & Light, Independence, Missouri
ITCGP	ITC Great Plains
KCPL	Kansas City Power and Light Company
LEA	Lea County Cooperative
LES	Lincoln Electric System
MIDW	Midwest Energy, Incorporated
MKEC	Mid-Kansas Electric Company
NPPD	Nebraska Public Power District
OGE	Oklahoma Gas and Electric Company
OMPA	Oklahoma Municipal Power Authority
OPPD	Omaha Public Power District
PW	Prairie Wind Transmission
RCEC	Rayburn Electric Cooperative
SEPC	Sunflower Electric Power Corporation
SPS	Southwestern Public Service Company
SWPA	Southwestern Power Administration
WFEC	Western Farmers Electric Cooperative
WR	Westar Energy

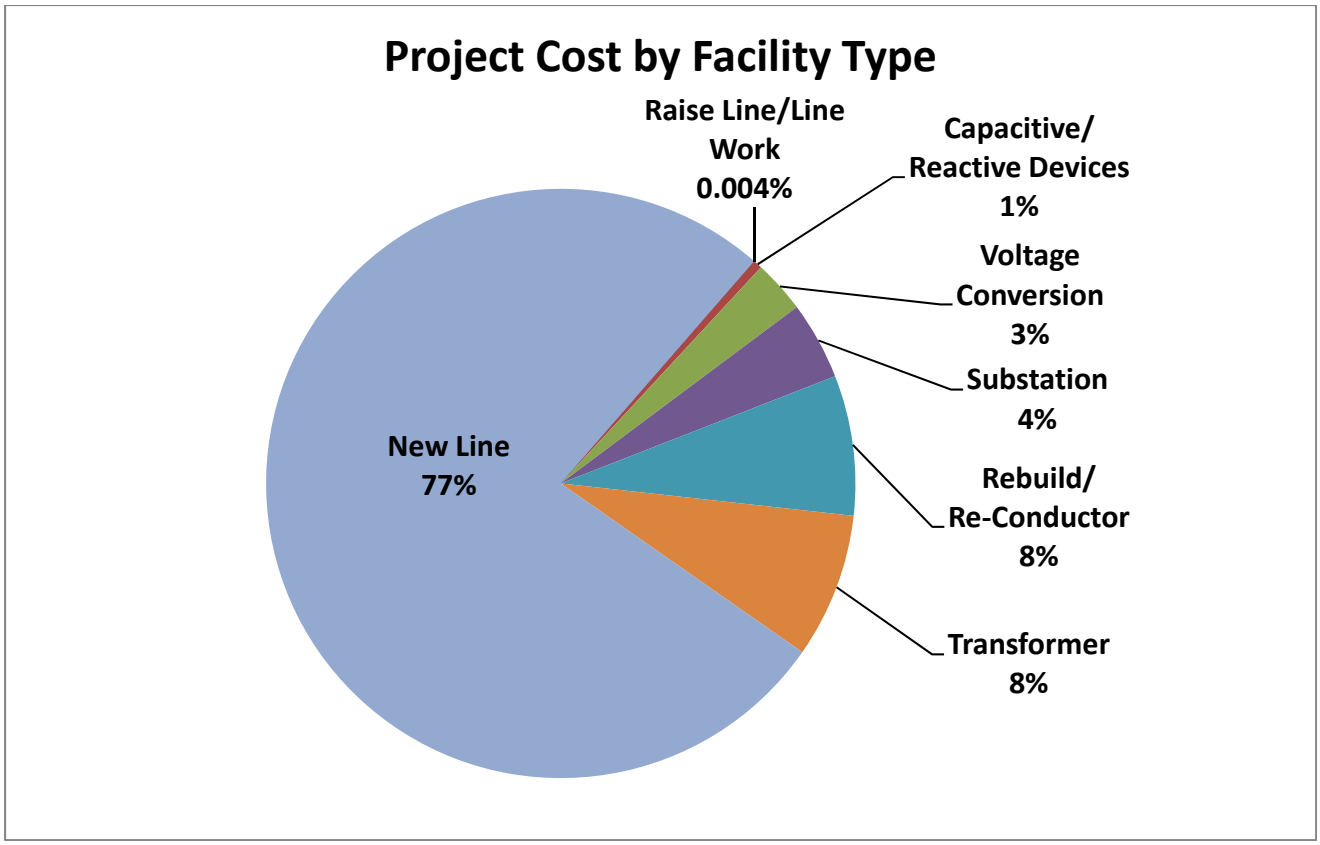
Appendix A Summaries

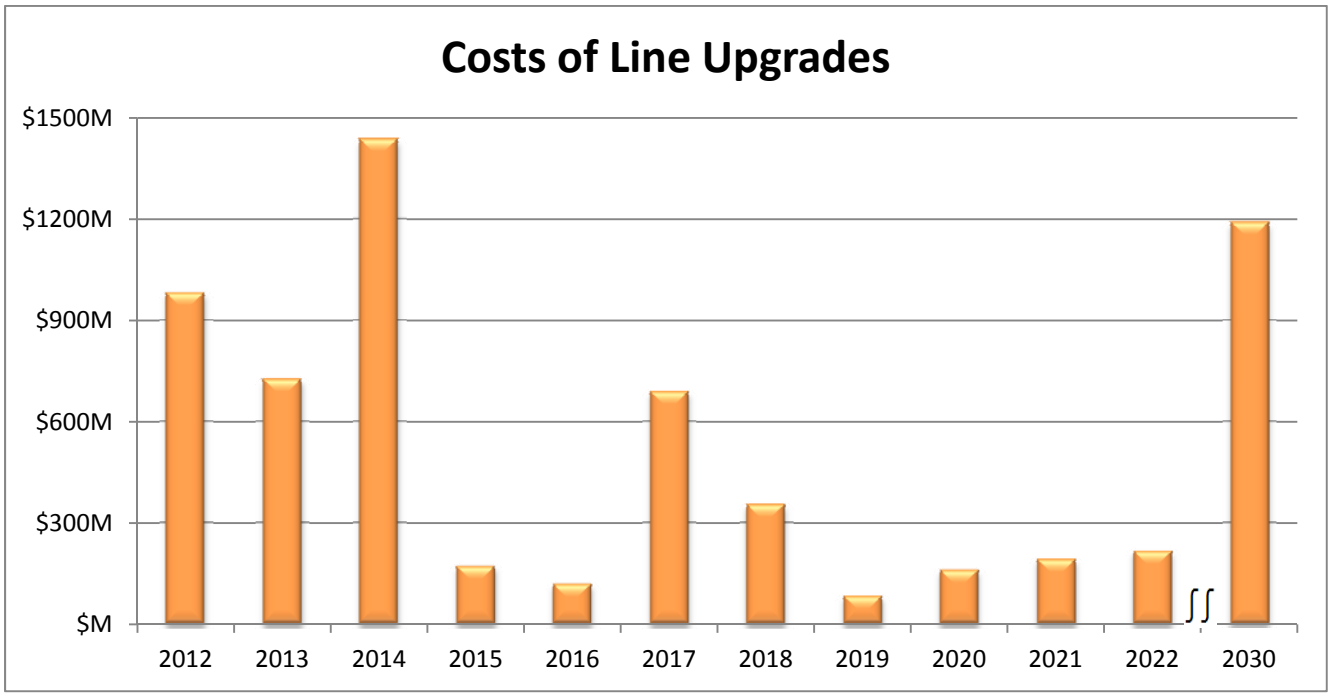
2012 STEP (Nearest 10 Million)	Upgrade Type
$1,440	2010 Priority Projects
$870	2009 Balanced Portfolio
$500	Transmission Service Request and Generation Interconnection Service Agreements
$2,500	ITP - Base Plan
$1,590	ITP - Other
$210	Sponsored Upgrades
$7.11B	SPP Subtotal
$120	non-OATT upgrades*
$7.23B	Appendix A - TOTAL

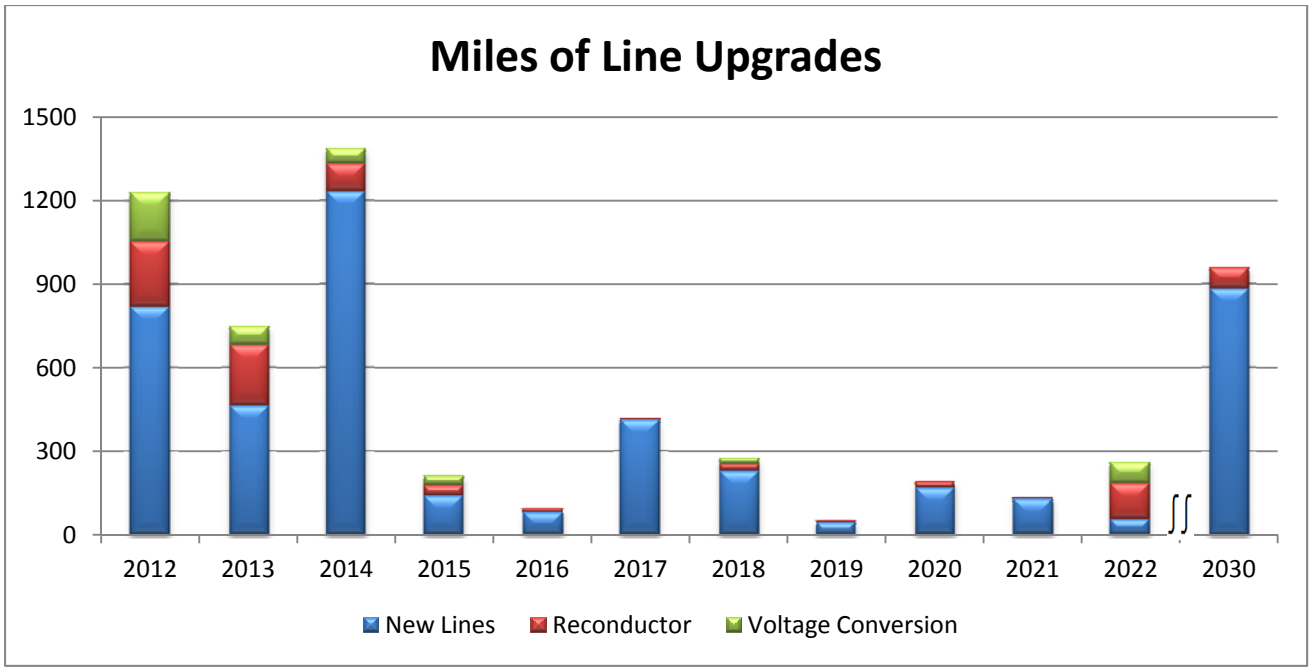
* Includes Southwestern Power Administration projects

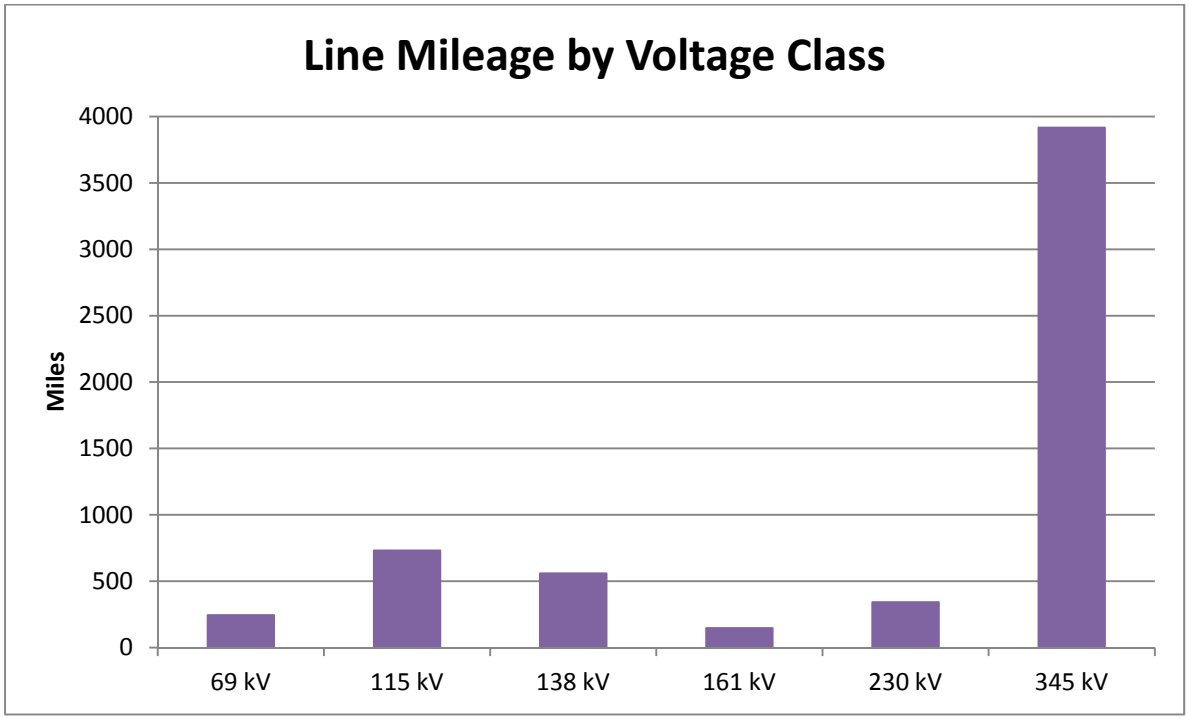
Has filed Service Agreement or is Board-approved

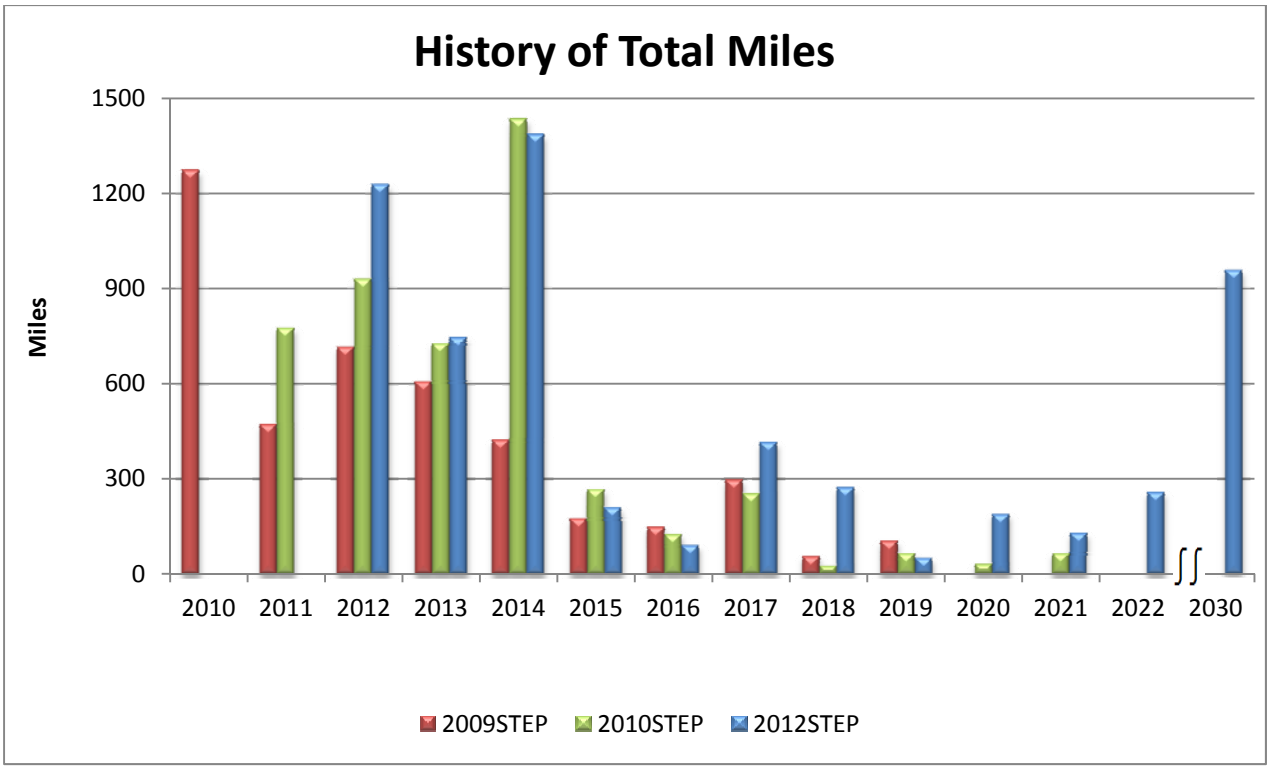


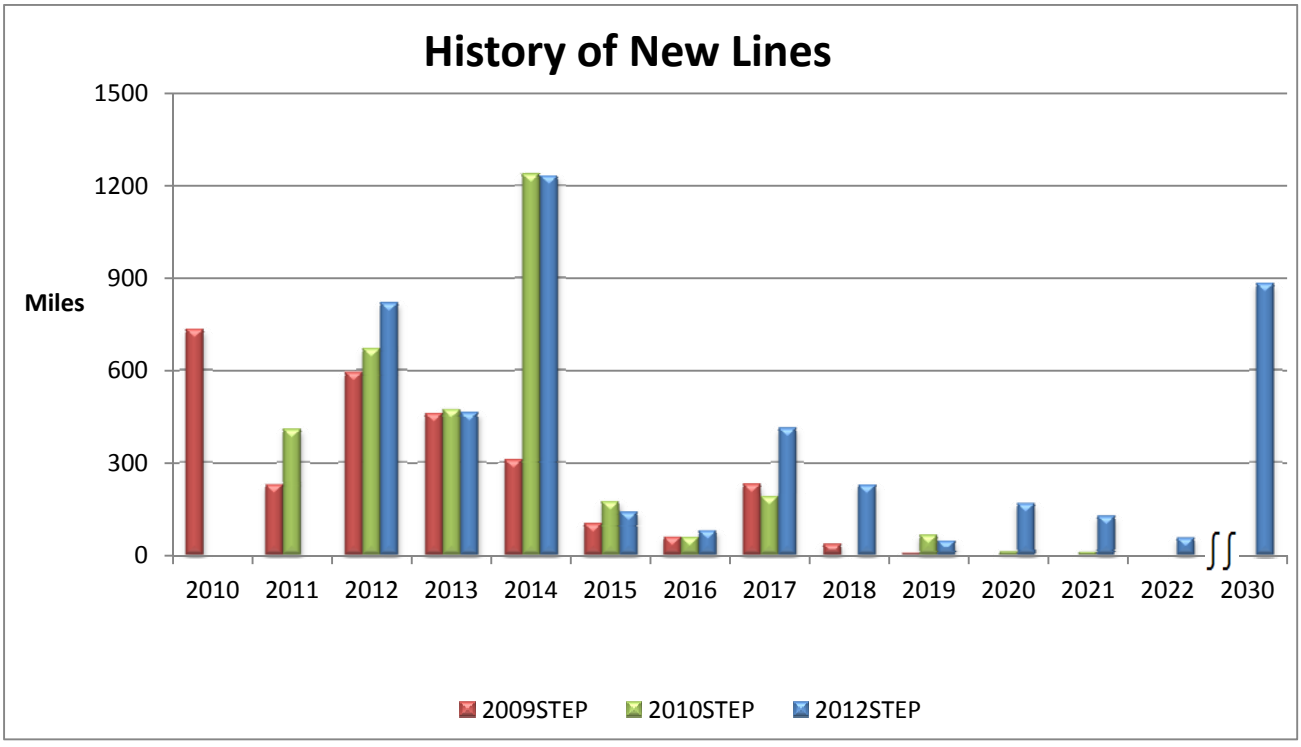

Project Cost by Facility Type
Raise Line/Line Work 0.004%
Capacitive/ Reactive Devices 1%
Voltage Conversion 3%
Substation 4%
Rebuild/ Re-Conductor 8%
Transformer 8%
New Line 77%

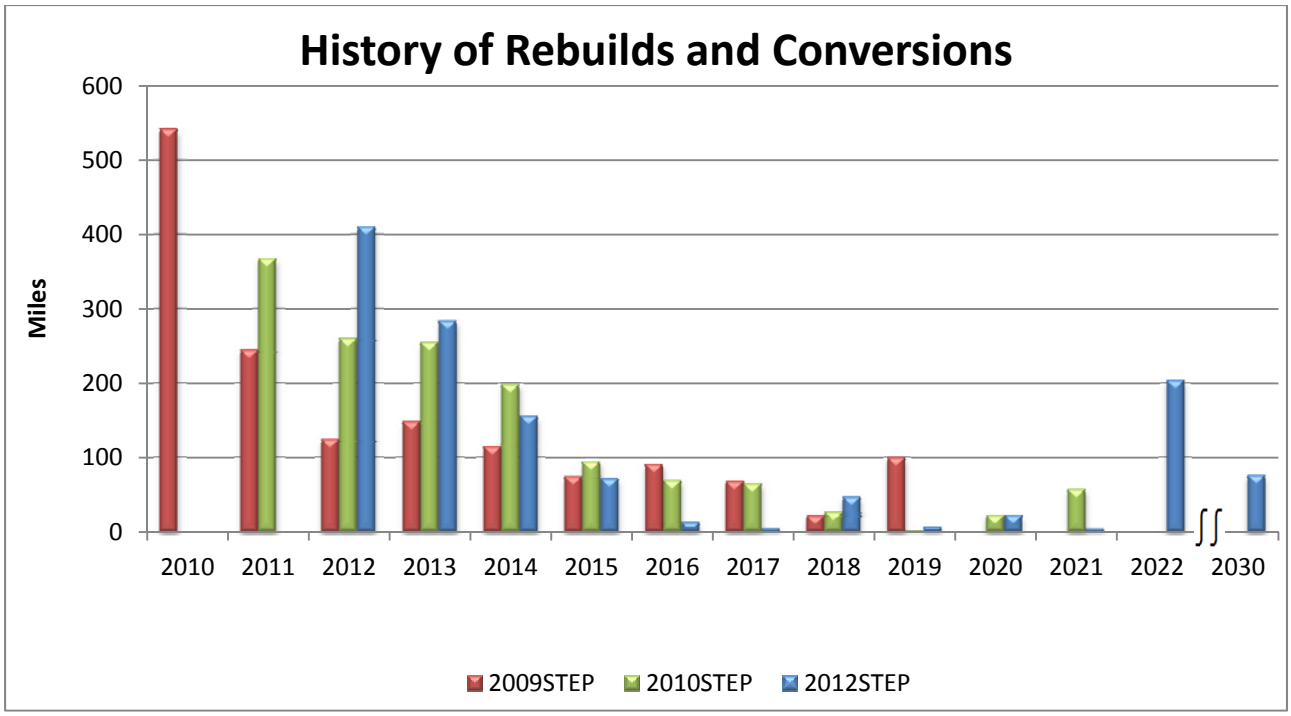

Costs of Line Upgrades
$1500M
$1200M
$900M
$600M
$300M
$M
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2030

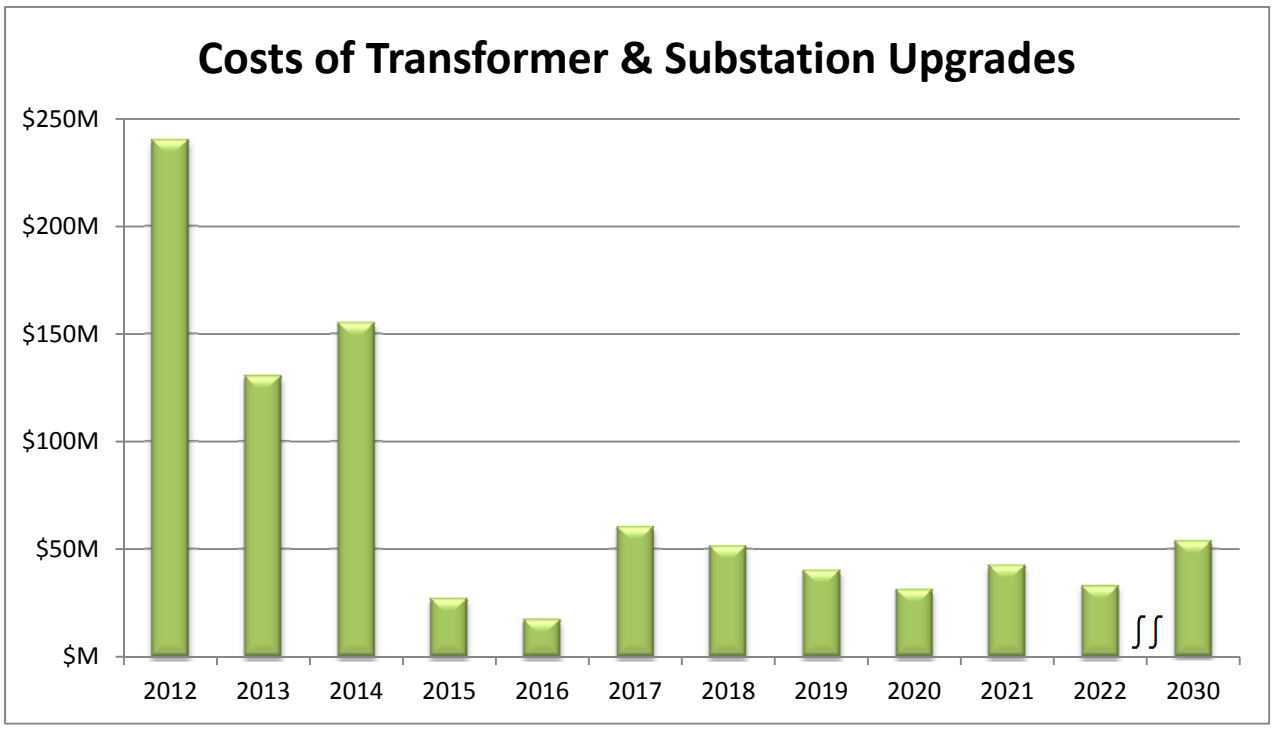

Miles of Line Upgrades
1500
1200
900
600
300
0
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2030
New Lines
Reconductor
Voltage Conversion

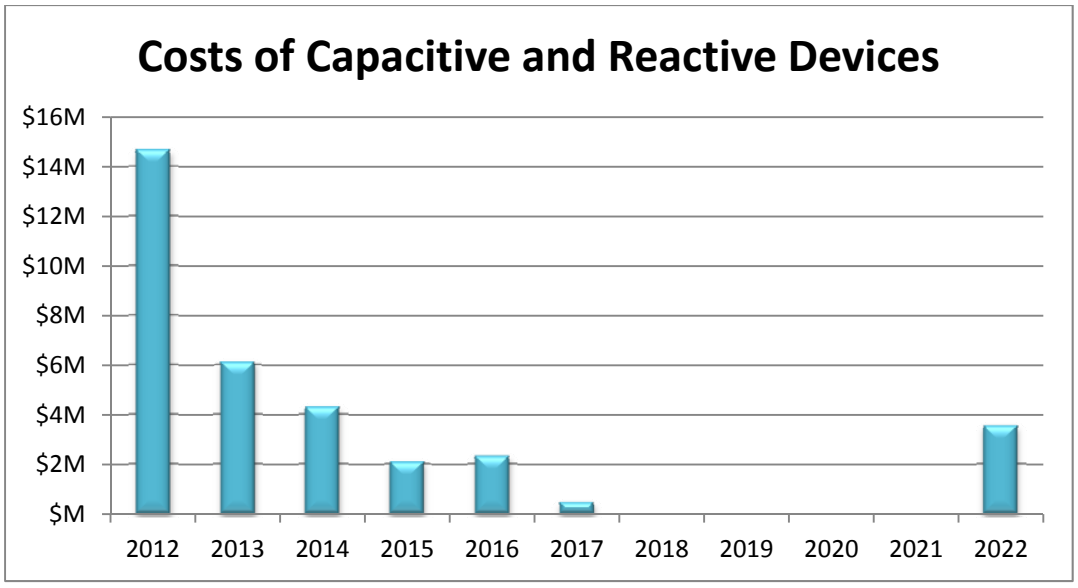

Line Mileage by Voltage Class
Miles
4000
3500
3000
2500
2000
1500
1000
500
0
69 kV
115 kV
138 kV
161 kV
230 kV
345 kV


History of Total Miles
Miles
1500
1200
900
600
300
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2030
2009STEP
2010STEP
2012STEP


History of New Lines
Miles
1500
1200
900
600
300
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2030
2009STEP
2010STEP
2012STEP


History of Rebuilds and Conversions
Miles
600
500
400
300
200
100
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2030
2009STEP
2010STEP
2012STEP


Costs of Transformer & Substation Upgrades
$250M
$200M
$150M
$100M
$50M
$M
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2030


Costs of Capacitive and Reactive Devices
$16M
$14M
$12M
$10M
$8M
$6M
$4M
$2M
$M
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022

Appendix A - Complete List of Network Upgrades

NTC ID	PID	UID	Facility Owner	2012 Project Type	Cost Estimate	Estimated Cost Source	Project Description/Comments	TO Projected In-Service	SPP Determined Need Date	Project Lead Time (Mo)	From Bus Number	From Bus Name	To Bus Number	To Bus Name	Circuit	Voltages (kV)	Miles of Reconductor	Miles of New Line	Miles of Voltage Conversion	Ratings
2012																				
20015	30143	50151	AECC	transmission service	$165,000	AECC	Upgrades to McNab Substation	4/1/2012	M		507456	Turk 115	504122	MCNAB REC	1	115				
	349	10448	AEP	Generation Interconnection	$1,773,000	AEP	Build new McNab-Turk 115 kV line	4/1/2012	M	60	504122	MCNAB REC	507456	Turk 115	1	115		1.5		150/174
20016	288	10374	AEP	transmission service	$3,840,000	AEP	Install 345 kV terminal equipment at Valliant substation.	4/1/2012	M	24	510911	VALLIANT 345KV				345				913/1140
20016	30155	50163	AEP	transmission service	$80,000	AEP	Replace 69 kV switches.	4/1/2012	M	12	507427	OKAY 69KV	507415	TOLLETTE	1	69				71/96
20000	113	10140	AEP	ITP	$9,480,000	AEP	Convert Red Point-Haughton to 138 kV, 1590 ACSR (includes Red Point terminal & Haughton station conversion).	6/1/2012	M	24	507736	HAUGHTON (BREMCO)	507751	RED POINT 138KV	1	138			3.2	368/512
20000	113	10141	AEP	ITP	$19,482,000	AEP	Convert Haughton-McDade to 138 kV, 1590 ACSR (includes McDade station conversion).	6/1/2012	M	24	507741	MCDADE (BREMCO)	507736	HAUGHTON (BREMCO)	1	138			11.3	368/512
20000	387	10505	AEP	ITP	$125,000	AEP	Replace wave trap at Okmulgee.	6/1/2012	M	15	509783	RIVERSIDE STATION 138KV	510898	OKMULGEE 138KV	1	138				202/235
20000	389	10507	AEP	ITP	$122,000	AEP	Replace 69 kV jumpers switches Texarkana 114/143 MVA	6/1/2012	M	15	508077	SE TEXARKANA 69KV	508086	TEXARKANA PLANT	1	69				114/143
20122	391	10509	AEP	ITP	$300,000	AEP	Replace 138 kV wavetraps at both ends. Reset CTs at Lone Star South. Reset relays at Pittsburg.	6/1/2012	M	15	508297	LONE STAR SOUTH 138KV	508313	PITTSBURG 138KV	1	138				303/354
20027	392	10510	AEP	ITP	$3,986,000	AEP	Rebuild 3.49 miles of Howell - Kilgore 69 kV 4/0 ACSR with 795 ACSR.	6/1/2012	M	18	508545	HOWELL	508546	KILGORE	1	69	3.49			52/69
20016	30152	50160	AEP	transmission service	$456,000	AEP	Replace 138 kV breaker, switches, and jumpers at Linwood. Replace circuit switcher at Powell Street.	6/1/2012	M	15	507748	POWELL STREET	507738	LINWOOD	1	138				260/304
200165	30340	50387	AEP	Generation Interconnection	$150,000	AEP	Replace transmission line relays protecting the terminal to a new WFEC 138 kV switching station being built for Windfarm66 LLC.	6/30/2012			511485	CLINTON JUNCTION 138KV				138				
20016	30156	50164	AEP	transmission service	$128,000	AEP	Change out the 500 Cu jumpers at Texarkana Plant.	7/1/2012	M	9	508077	SE TEXARKANA 69KV	508086	TEXARKANA PLANT	1	69				114/143
20016	30157	50165	AEP	transmission service	$8,193,000	AEP	Rebuild 5.92 miles of 266 ACSR with 795 ACSR. Replace 69KV switches, jumpers, and reset CTs and relays at Texarkana Plant	7/1/2012	M	24	508086	TEXARKANA PLANT	504117	SOUTH TEXARKANA REC	1	69	5.92			114/143
	231	10296	AEP	Generation Interconnection	$25,590,000	AEP	Build new 34 mile Turk - SE Texarkana 138 kV line and add SE Texarkana 138 kV terminal.	7/1/2012	M	48	507454	Turk 138	508078	SE TEXARKANA 138KV	1	138		34		368/512
200161	349	10456	AEP	transmission service	$7,310,000	AEP	Add Turk 345/138 kV transformer	7/1/2012	M	60	507454	Turk 138	507455	Turk 345	1	345/138				675/743
20016	30142	50148	AEP	transmission service	$48,580,000	AEP	Build approximately 33 miles of 2-954 ACSR from Turk to NW Texarkana.	9/1/2012	M	33	507455	Turk 345	508072	NORTHWEST TEXARKANA 345KV	1	345		33		1220/1758
20016	30142	50149	AEP	transmission service			Add 345 kV terminal at NW Texarkana	7/1/2012	M	33	508072	NORTHWEST TEXARKANA 345KV			1	345				133/1915
20016	30142	50150	AEP	transmission service			Add 345 kV terminal at Turk.	9/1/2012	M	33	507455	Turk 345			1	345				133/1915
20135	30317	50363	AEP	ITP	$150,000	AEP	Replace 3 2000 A switches at Knox Lee	12/31/2012	M	12	509092	Easton REC	508548	KNOX LEE 138KV	1	138				455/526
20135	30318	50364	AEP	ITP	$500,000	AEP	Replace Switch at Easton, and Breaker and Switch at Pirkey	12/31/2012	M	12	508562	PIRKEY 138KV	509092	Easton REC	1	138				461/526
	30346	50438	AEP	ITP	$19,998,928	AEP	Upgrade the Cornville 138 kV substation breaker scheme to breaker and half configuration in preparation for the 138 kV line conversion to Lindsay Water substation.		6/1/2012	12						138				
	30346	50392	AEP	zonal - sponsored	$9,585,000	SPP	Rebuild and convert the 17.04 mile Cornville to Alex Bradley 69 kV line to 138 kV.	12/31/2012		12	511450	CORNVILLE 69KV	511516	ALEX BRADLEY	1	138			17.04	320/444
	30346	50393	AEP	zonal - sponsored	$4,770,000	SPP	Rebuild and convert the 8.48 mile Alex Bradley to Texas Pump 69 kV line to 138 kV.	12/31/2012		12	511516	ALEX BRADLEY	511515	TEXAS PUMP	1	138			8.48	320/444
	30346	50394	AEP	zonal - sponsored	$911,250	SPP	Rebuild and convert the 1.62 mile Texas Pump to Phillips 69 kV line to 138 kV.	12/31/2012		12	511515	TEXAS PUMP	511514	PHILLIPS	1	138			1.62	320/444
	30346	50395	AEP	zonal - sponsored	$3,155,625	SPP	Rebuild and convert the 5.61 mile Phillips to Lindsay Water Flood 69 kV line to 138 kV.	12/31/2012		12	511514	PHILLIPS	511513	LINDSAY WATER	1	138			5.61	320/444
	287	10373	DETEC	zonal - sponsored	$8,864,000	SPP	Build 12 miles of 138 kV from Etoile - Chireno	6/1/2012			97813	Etoile 138 kV			1	138		12.5		215/225
20075	638	10839	EDE	ITP	$3,520,000	EDE	Reconductor 8.92 mile Nichols - Sedalia 69 kV with 556 ACSR and upgrade CTs.	6/1/2012	M	18	547542	SUB 170 - NICHOLS ST.	547529	SUB 80 - MARSHFIELD JCT.	1	69	8.92			54/65
20034	634	10830	GMO	ITP	$3,527,710	GMO	Tap the Montrose - LomaVista 161 kV Line into KC South 161 kV substation. This project is an alternative to replace the reconductor project of the Duncan Rd - COMPLETE Spring East and Martin City - Grandview East 161 kV lines.	6/1/2012	M	18	542998	LOMA VISTA EAST 161 KV	541245	KC South 161 KV	1	161		4		293/335
20034	650	10854	GMO	ITP	$3,281,565	GMO	Tap Stilwell - Archie Junction 161 kV line into South Harper 161 kV sub and make it two new 161 kV sections: Stilwell - South Harper and Archie Junction - South Harper.	6/30/2012		18	542969	STILWELL 161 KV	541207	Archie 161 KV	1	161		3.6		293/335
20001	301	10388	GRDA	ITP	$3,000,000	GRDA	Add second 161/69 kV 75 MVA autotransformer at Sallisaw	6/1/2012	M	24	512652	SALLISAW 69	505550	Sallisaw	2	161/69				75/84
	302	10389	GRDA	zonal - sponsored	$3,210,200	GRDA	Tap the GRDA 1-Flint Creek 345 kV line and build a 345/161 transformer at Toneece. Then build a 161 kV line down to Siloam Springs.	6/1/2012	M	24	512751	TONNECE161	512643	SILOAM CITY 161	1	161		7		347/347
	302	10390	GRDA	zonal - sponsored	$8,019,000	GRDA	Tap the GRDA 1-Flint Creek 345 kV line and build a 345/161 transformer. Then build a 161 kV line down to Siloam Springs.	6/1/2012	M	24	512750	TONNECE345	512751	TONNECE161	1	345/161				250/280
	549	10698	GRDA	ITP	$1,064,300	GRDA	Reconductor 1.4 69 kV Line from Maid-Pryor Foundry South to 795 ACSR and replace 600A switch with 1200A switch.		6/1/2012	12	512626	MAID69	512681	PRYOR FOUNDRY SOUTH 69	1	69	1.4			130/143
	550	10699	GRDA	ITP	$1,092,500	GRDA	Reconductor 1.3 miles Maid-Redden 69 kV Line to 795 ACSR and replace 600A switch with 1200A switch.		6/1/2012	12	512626	MAID69	512698	REDDEN 69	1	69	1.3			130/143
20028	30074	50080	GRDA	ITP	$779,000	GRDA	Install (3) 7.2 Mvar capacitors for a total of 21.6 Mvar at Tahlequah West 69 kV.	7/1/2012		12	300971	Tahlequah West				69				21.6 Mvar
20076	393	10511	GRDA	ITP	$3,000,000	GRDA	Add 50 MVA 161/69 kV transformer Ckt 2 at Afton.	12/1/2012	M	24	512632	AFTON 161	512633	AFTON 69	1	161/69				50/50
20040	698	10927	GRDA	Balanced Portfolio	$1,806,000	GRDA	Install terminal equipment at Cleveland Substation for new Cleveland to Sooner 345 kV line.	12/31/2012	M	24	514803	SOONER 345	512694	CLEVELAND 345	1	345				1195/1195

	30379	50459	GRDA	Generation Interconnection	$2,500,000	AFFECTED SYSTEMS FACILITIES CONSTRUCTION AGREEMENT	NEW GRDA SWITCHING SUBSTATION - NEW 138KV THREE BREAKER RING BUS SUBSTATION CONTAINING 3 138KV CIRCUIT BREAKERS, ASSOCIATED DISCONNECT SWITCHES, STRUCTURES, RELAYING, GROUNDING, FENCING, AND ALL ASSOCIATED AND MISCELLANEOUS EQUIPMENT. REQUIRED IN MITIGATION OF SPP AFFECTED FACILITIES FROM NEW AECI GI PROJECT LOCATED NEAR BURBANK, OK. SPP STUDY ID - ASGI-2010-006	12/31/2012			700001					138				
	30380	50460	GRDA	Generation Interconnection	$9,600,000	AFFECTED SYSTEMS FACILITIES CONSTRUCTION AGREEMENT	BUILD NEW FAIRFAX (AECI) - PAWNEE 138KV AND REBUILD EXISTING 69KV LINE FROM FAIRFAX - PAWNEE APPROXIMATELY 19.5 MILES WITH DOUBLE CIRCUIT TOWERS FOR DOUBLE CIRCUIT 138KV TRANSMISSION LINE; ONE SIDE OF WHICH WILL BE OPERATED AT 69KV. REQUIRED IN MITIGATION OF SPP AFFECTED FACILITIES FROM NEW AECI GI PROJECT LOCATED NEAR BURBANK, OK. SPP STUDY ID - ASGI-2010-006	12/31/2012			300139	Fairfax	700001		1	138		19.5		
	718	10955	GRIS	ITP - non OATT	$3,937,500	SPP	Adding 115 kV line from Sub F - Libory.	12/1/2012	M		642073	Sub - F	640353	St. Libory	1	115		7		160/160
	719	10956	GRIS	ITP - non OATT	$200,000	SPP	Upgrade line to 179 MVA.	4/1/2012	M		642066	Sub - H	642072	Sub - E	1	115				179/179
	639	10840	INDN	ITP - non OATT	$2,625,000	SPP	Build new 161 kV line from Blue Valley Plant to Sub M with 795 ACSR as a minimum and 1192 as a maximum.	6/1/2012	M	24	548807	Blue Valley 161 kV	548814	SUB M 161 kV	1	161		5		353/441
20018	313	10405	ITCGP	transmission service	$22,230,000	WFEC	Install new line from Valliant 345 kV to Hugo Power Plant with 19 miles of bundled 1590 ACSR conductior. Note that ITC is building the line from Valiant to Hugo.	4/1/2012	M	24	521157	HUGO UNIT 7	510911	VALLIANT 345KV	1	345		19		913/1140
20018	314	10406	ITCGP	transmission service	$6,328,605	WFEC	Install new 345/138 kV transformer	4/1/2012	M	24	521157	HUGO UNIT 7	520948	HUGO POWER PLANT	1	345/138				500/500
20018	30165	50173	ITCGP	transmission service	$6,620,096	WFEC	Install two 345 kV breakers at Hugo and 40 Mvar line reactor.	4/1/2012	M	36	521157	HUGO UNIT 7	515136	SUNNYSIDE 345	1	345				1195/1195
20046	707	10940	ITCGP	Balanced Portfolio	$77,703,351	ITCGP	Build new 345 kV line from Knoll to interception point of Spearville to Knoll line. Updated for approved route mileage; reflect addition of reactor at Post Rock (40Mvar)	6/1/2012	M		531469	SPEARVILLE	530583	POST ROCK 345 KV	1	345		90		1792/1792
20065	707	10941	ITCGP	Balanced Portfolio	$3,994,000	ITCGP	Build Post Rock substation to include a 600 MVA 345/230 kV auto transformer with 345 kV ring bus configuration	6/1/2012	M		530583	POST ROCK 345 KV	530584	POST ROCK 230 KV	1	345/230				373/373
20042	702	10934	KCPL	Balanced Portfolio	$2,171,096	KCPL	West Gardner 345kV bus cut-in to Swissvale-Stillwell 345 kV line	6/1/2012	M		542965	WEST GARDNER 345 KV				345				
	1135	11498	KCPL	ITP	$190,860	KCPL	Loma Vista East limit is 600/5 CT ratio; reset to 1200/5		6/1/2012	6	542998	LOMA VISTA EAST 161 KV	543009	WINCHESTER JUNCTION NORTH 161 KV	1	161				224/224
20116	30291	50329	KCPL	transmission service	$150,000	KCPL	Must upgrade Stilwell terminal equipment to 2000 amps	6/1/2012		6	542965	WEST GARDNER 345 KV	542968	STILWELL 345 KV	1	345				1000/1136
	823	11086	LEA	ITP - non OATT	$1,000,000	SPP	New substation and transformer 115/69 kV 44 MVA	6/1/2012	M	24	527362	Johnson Draw 115 kV	527361	Lea County Electric Cooperative Emergency Relief Point 69 kV	1	115/69				44/44
	823	11087	LEA	ITP - non OATT	$1,000,000	SPP	New Line 69 kV	6/1/2012	M		527361	Lea County Electric Cooperative Emergency Relief Point 69 kV	528772	Lea County REC-Ancell Tap 69 kV	1	69				67/88
	823	11088	LEA	ITP - non OATT	$1,000,000	SPP	New Line 69 kV	6/1/2012	M		527361	Lea County Electric Cooperative Emergency Relief Point 69 kV	528776	Lea County REC-Gaines 69 kV	1	69				67/88
	30344	50390	LES	zonal - sponsored	$2,372,000	LES	Rebuild 2.1 mile line	5/31/2012			650262	57th & Garland	650267	84th & Leighton	1	115	2.1			
20139	316	10410	MIDW	transmission service	$35,000	MIDW	Replace Wavetrap	6/1/2012	M	18	530553	SOUTH HAYS 115 KV	530562	HAYS PLANT 115 KV	1	115				80/99
20126	997	11311	MIDW	ITP	$2,000,000	SPP	New second Colby 115/34.5 kV transformer ckt 4	6/1/2012	M		530555	COLBY 115 KV	530646	COLBY 34.5 KV	3	115/34.5				25/28
20106	998	11312	MIDW	ITP	$325,000	MIDW	Reconductor Heizer - Mullergren 115kV, Install 115 kV bay at Heizer and update relaying equipment and operate normally closed	6/1/2012	M	12	530601	HEIZER 115 KV	539678	Mullergren 115 KV	1	115	0.03			165/178
20078	30176	50184	MIDW	ITP	$300,000	MIDW	Install 5 Mvar Cap at Kinsley 115 kV.	6/15/2012	M	18	530619	NORTH KINSLEY 115 KV				115				5 Mvar
20078	30190	50197	MIDW	ITP	$300,000	MIDW	Install 5 Mvar capacitor bank at Pawnee 115 kV.	6/15/2012	M	12	530621	PAWNEE 115 KV				115				5 MVar
	30383	50464	MIDW	Generation Interconnection	$13,508,966	GEN-2010-057 MIDW FACILITY STUDY	ALL WORK REQUIRED TO CONVERT RICE - CIRCLE 115KV TO 230KV OPERATION. INCLUDES NEW 230KV 3 BREAKER RING BUS, 230/115KV AUTOTRANSFORMER, AN EXTENSION OF THE 230KV FROM CURRENT RICE STATION TO NEW RICE SUBSTATION, AND ANY ADDITIONAL WORK REQUIRED FOR THE CONVERSION.	9/20/2012			700003	Rice 230 kV	532871	CIRCLE 230 KV	1	230		1	40	
	30383	50467	MIDW	Generation Interconnection			Install 230/115 kV transformer at Rice County.	9/20/2012		24	700003	Rice 230 kV	530623	RICE COUNTY 115 KV	1	230/115				
	30358	50411	MIDW	ITP	$3,351,728	MIDW	Install 8 miles of 115 kV from Rice to Bushton 115 kV. Install 115 kV breaker at Rice subastion and a terminal postion at Bushton Sub		6/1/2012	24	530623	RICE COUNTY 115 KV	530681	Bushton 115 kV	1	115		8		165/199
	30358	50448	MIDW	ITP	$16,107,869	MKEC	Build new 115 kV line from new Bushton substation to MIDW/MKEC interception point going towards Ellsworth.		6/1/2012	24	530681	Bushton 115 kV	539662	Ellsworth 115 KV	1	115		10		165/199
	30358	50409	MKEC	ITP			Build new 115 kV line from Ellsworth to MIDW/MKEC interception point going towards Bushton. New 115 kV terminal at Midwest Bushton Substation		6/1/2012	24	530681	Bushton 115 kV	539662	Ellsworth 115 KV	1	115		10		165/199
	30358	50410	MKEC	ITP			Install three breaker ring bus at Ellsworth Tap 115 kV		6/1/2012	12	539642	Ellsworth Tap				115				239/239
	30358	50449	MKEC	ITP			Expand Ellsworth Substation to include two new 115 kV breakers.		6/1/2012	24	539662	Ellsworth 115 KV				115				
	30347	50396	MKEC	ITP	$12,516,103	MKEC	Install 20.5 miles of 115 kV from Haggard to Ingalls 115 kV. Install two breakers at Haggard substation		6/1/2012	24	539667	Haggard 115 KV	531407	INGALLS	1	115		20.5		240/240
20107	1007	11323	MKEC	ITP	$674,280	MKEC	Construct approximately one mile of 115-kV transmission line from the Great Bend (Mullergren) generation station to Heizer Substation with 795 ACSR conductor	6/1/2012	M	18	530601	HEIZER 115 KV	539678	Mullergren 115 KV	1	115	1			165/178
20007	30098	50104	MKEC	ITP	$1,500,000	MKEC	Install 20 Mvar capacitor bank at Plainville 115 kV.	11/1/2012	M	12	539686	Plainville 115 KV				115				20 Mvar
20079	653	10858	MKEC	ITP	$14,825,136	MKEC	Rebuild 21.9 mile St. John - Pratt 115 kV line with 795 ACSR conductor.	12/31/2012	M	24	539696	St John 115 KV	539687	Pratt 115 KV	1	115	21.9			165/198
20067	903	11200	MKEC	transmission service	$6,063,189	MKEC	Rebuild 14.4 miles	12/31/2012	M	24	539656	Clifton 115 KV	539665	Greenleaf 115 KV	1	115	14.4			217/261
20107	1020	11342	MKEC	transmission service	$5,354,646	MKEC	Rebuild MKEC ownership of 20.9 mile Greenleaf- Knob Hill 115 kV line.	12/31/2012	M	24	539665	Greenleaf 115 KV	533332	KNOB HILL 115 KV	1	115	20.9			239/239

20119	1096	11440	MKEC	ITP	$100,000	MKEC	Replace CTs and relays at Pratt substation and St John substation	12/31/2012	M		539687	Pratt 115 KV	539696	St John 115 KV	1	115				165/198
	30386	50469	NPPD	zonal - sponsored	$9,000,000	SPP	Install a second 345/161 kV transformer at Cooper.	4/1/2012	M		640139	Cooper	640140	Cooper	1	345/161				300/300
20080	30206	50213	NPPD	ITP	$700,000	NPPD	Install a 9 Mvar capacitor bank at Gordon substation 115 kV bus.	6/1/2012	M	24	640192	Gordon				115				9 Mvar
20080	30236	50248	NPPD	ITP	$800,000	NPPD	Install a 36 Mvar capacitor bank at Kearney substation 115 kV bus.	6/1/2012	M	24	640250	Kearney				115				36 Mvar
20080	749	10986	NPPD	ITP	$1,749,395	NPPD	Uprate conductor and terminal equipment to 100 Degree rating.	6/1/2012	M	24	640265	Maloney	640287	North Platte	1	115				155/155
20080	818	11080	NPPD	ITP	$1,828,267	NPPD	Uprate conductor and terminal equipment to 100 Degree rating.	6/1/2012	M	24	640259	Loup City	640284	North Loup	1	115				137/137
20080	1128	11151	NPPD	ITP	$33,000,000	NPPD	Build new 5.5 mile 115 kV Ckt 1 from Twin Church to new South Sioux City substation. Rebuild Twin Church substation and new South Sioux City substation.	6/1/2012	M	48	640387	Twin Church	640424	South Sioux City	1	115		5.5		240/240
20080	1128	11152	NPPD	ITP			Build new 5.5 mile 115 kV Ckt 2 from Twin Church to new South Sioux City substation. Rebuild Twin Church substation and new South Sioux City substation.	6/1/2012	M	48	640387	Twin Church	640424	South Sioux City	2	115		5.5		240/240
	717	10954	NPPD	zonal - sponsored	$5,625,000	NPPD	Tap CENCITY7 - Silver Creek 115 kV at Clarks. Build new 115 kV line from Clarks - Central City North. Radial 115 kV line for TransCanada Keystone XL project.	11/1/2012	M	48	640436	Clarks	640434	Central City North	1	115		8.8		80/80
	732	10969	NPPD	zonal - sponsored	$16,031,250	NPPD	Build new line from Oneill to new Stuart South. Radial 115 kV line for TransCanada Keystone XL project.	11/1/2012	M	48	640305	O'Neill	640441	Stuart South	1	115		28.3		80/80
	738	10975	NPPD	zonal - sponsored	$19,687,500	NPPD	Build new line from Petersburg to new ERICSON7. Radial 115 kV line for TransCanada Keystone XL project.	11/1/2012	M	48	640318	Petersburg	640437	Ericson	1	115		35		174/174
	30199	50206	NPPD	zonal - sponsored	$364,500	SPP	Add one 9 Mvar cap at Oneill 69 kV	11/1/2012	M	24	640306	O'Neill				69				9 Mvar
20080	30201	50208	NPPD	ITP	$700,000	NPPD	Add a 18 Mvar capacitor bank at Clarks substation 115 kV bus.	11/1/2012	M	24	640436	Clarks				115				18 Mvar
20080	30202	50209	NPPD	ITP	$50,000	NPPD	Expand existing 9 MVAR bank to 15 Mvar capacitor bank at Ainsworth substation 115 kV bus.	11/1/2012	M	24	640051	Ainsworth				115				15 Mvar
20080	30203	50210	NPPD	ITP	$700,000	NPPD	Add a second 18 Mvar capacitor bank at Oneill 115 kV substation for a total of 36 Mvar at this location.	11/1/2012	M	24	640305	O'Neill				115				18 Mvar
20017	30161	50169	OGE	transmission service	$163,000,000	OGE	Add 345 KV line from Sunnyside to WFEC interception of 345KV line from Hugo, Install 345KV breaker, switches, and relays at Sunnyside	4/1/2012	M	42	521157	HUGO UNIT 7	515136	SUNNYSIDE 345	1	345		120		1792/1792
20017	30161	50171	OGE	transmission service			Add 2nd 345/138KV Auto Transformer	4/1/2012	M	24	515136	SUNNYSIDE 345	515135	SUNNYSIDE 138	2	345/138				448/493
	30291	50331	OGE	transmission service	$1,000,000	SPP	Install 2 stages of 25 Mvar reactor at Sunnyside	4/1/2012	M	12	515405	Sunnyside 13.8kv				13.8				-50 Mvar
20128	1095	11439	OGE	ITP	$112,500	OGE	Replace relay in OGE's Alva substation	6/1/2012	M	6	514792	ALVA 69	520806	ALVA	1	69				48/48
20055	523	10668	OGE	ITP	$48,000,000	OGE	New 345 kV line from Sooner to Oklahoma/Kansas Stateline or the interface with the Westar Energy line segment to achieve 3000 amp or greater emergency rating.	6/1/2012	M	42	514803	SOONER 345	532794	ROSE HILL 345 KV	1	345		53		956/52
20081	551	10701	OGE	ITP	$6,200,000	OGE	Convert 5.6 mile Johnson - Massard 69 kV line to 161 kV.	6/1/2012	M	24	515293	JONS0N 2	515343	MASSARD 161	1	161			5.6	226/259
20081	551	10837	OGE	ITP			Build 2 miles of 161 kV from Johnson to Oak Park and install terminal equipment at Oak Park.	6/1/2012	M	24	515315	OAK PARK 161	515293	JONS0N 2	1	161		2		226/259
20110	670	10876	OGE	transmission service	$13,500,000	OGE	Install third Arcadia 345/138 kV autotransformer.	6/1/2012	M	30	514908	ARCADIA 345	514907	ARCADIA 138	3	345/138				493/493
	30092	50098	OGE	ITP	$440,081	OGE	Add Mvar support at Kolache 69 kV substation to have a total of 9 Mvar at this location.		6/1/2012	12	515079	KOLACHE 69				69				6 Mvar
	30302	50346	OGE	ITP	$2,020,094	OGE	Increase size of Paoli 138/69 kV bus tie to full 50 MVA		6/1/2012	12	515100	PAOLI 138	515099	PAOLI 69	1	138/69				62/67
20128	30305	50347	OGE	ITP	$352,350	SPP	Install 6 Mvar capacitor bank at Little River Lake 69 kV	6/1/2012	M	22	514991	LITTLE RIVER LAKE 69				69				6 Mvar
	30357	50408	OGE	ITP	$605,551	OGE	Install 9 Mvar capacitor at Lula 69 kV.		6/1/2012	12	515191	LULA 69				69				9 Mvar
20041	699	10929	OGE	Balanced Portfolio	$69,000,000	OGE	Build new 345 kV line from Sooner to Cleveland. Install terminal equipment at Sooner	12/31/2012	M	32	514803	SOONER 345	512694	CLEVELAND 345	1	345		36		1195/1195
20105	948	11262	OMPA	transmission service	$30,000	OMPA	Replace Line Switches	6/1/2012	M		514907	ARCADIA 138	529272	OMPA-EDMOND GARBER(LAKE)	1	138				
	759	11002	OPPD	zonal - sponsored	$675,523	OPPD	Replace terminal equipment so that the overall facility rating is 352 MVA.	11/10/2012	M		646221	Sub 1221	646255	Sub 1255	1	161				352/352
	216	10275	RCEC	ITP - non OATT	$4,218,750	SPP	Rayburn Project -- Build new 10 mile Ben Wheeler - Barton Chapel 138 kV.	4/30/2012	M	18	508362	Ben Wheeler	509246	BARTON'S CHAPEL (RAYBURN)	1	138		10		215/215
20083	30234	50246	SEPC	ITP	$740,000	SEPC	Install 12 Mvar capacitor bank at Johnson Corner 115 kV substation.	5/1/2012	M	18	531424	JOHNSON CORNER 115				115				12 Mvar
20083	30235	50247	SEPC	ITP	$370,000	SEPC	Install a second 115 kV 12 Mvar capacitor bank at Johnson Corner substation 115 kV bus.	5/1/2012	M	12	531424	JOHNSON CORNER 115				115				12 Mvar
20007	166	10215	SEPC	ITP	$3,986,076	SEPC	Rebuild 12 mile Holcomb - Plymell 115 kV.	6/1/2012	M	18	531448	HOLCOMB	531393	PLYMELL	1	115	11.96			230/276
20014	367	10480	SEPC	ITP	$5,534,364	SEPC	Rebuild 15 mile Holcomb - Pioneer Tap 115kV.	6/1/2012	M	24	531393	PLYMELL	531392	PIONEER TAP	1	115	14.87			230/276
20031	590	10757	SPS	ITP	$3,175,596	SPS	Convert 8 miles of 69 kV to 115 kV from Carlsbad Interchange - Ocotillo. Convert Ocotillo substation to 115 kV.	2/28/2012	M	24	528160	Carlsbad Interchange 115 kV	528131	Ocotillo Sub 69 kV	1	115			8	54/54
	1041	11380	SPS	zonal - sponsored	$10,498,360	SPP	Reconductor Randall - Kress 115 kV with 795 ACSR	2/28/2012	M		524530	Palo Duro Sub 115 kV	525154	Happy Interchange 115 kV	1	115	23.73			246/271
	1041	11381	SPS	zonal - sponsored	$3,277,970	SPP	Reconductor Randall - Kress 115 kV with 795 ACSR	3/31/2012	M		525154	Happy Interchange 115 kV	525179	Tulia Tap 115 kV	1	115	7.475			246/271
20031	633	10828	SPS	ITP	$1,350,000	SPS	Build new 3 mile 69 kV line from Artesia Town - Artesia South Rural 69 kV.	4/30/2012	M	36	527747	Artesia Town Sub 69 kV	527775	Artesia South Rural Sub 69 kV	1	69		3		179/197
20084	779	11029	SPS	ITP	$2,006,285	SPS	Reconductor 6.15 mile Maddox - Sanger Switching Station 115kV line for 226/239 MVA rating.	5/31/2012	M	18	528355	Maddox Station 115 kV	528463	Sanger Switching Station 115 kV	1	115	6.15			146/161
20084	786	11036	SPS	ITP	$1,198,248	SPS	Reconductor 3.36 mile Maddox Station - Monument 115 kV Ckt 1 with 795 ACSR.	5/31/2012	M	18	528355	Maddox Station 115 kV	528491	Monument Sub 115 kV	1	115	3.36			246/270
	151	10195	SPS	ITP	$1,984,500	SPP	Add third Tuco 115/69 kV autotransformer with 84/84 MVA rating		6/1/2012	24	525826	TUCO Interchange 69 kV	525828	TUCO Interchange 115 kV	1	115/69				84/84
20031	156	10326	SPS	ITP	$27,961,644	SPS	Build new 50 mile Moore County - Hitchland 230 kV rated at 541 MVA.	6/1/2012	M	48	523309	Moore County Interchange 230 kV	523095	Hitchland Interchange 230 kV	1	230		62		492/541
20111	156	10330	SPS	ITP	$16,308,064	SPS	Add 230 kV line from Hitchland to Ochilltree - 541 MVA.	12/31/2012	M	48	523095	Hitchland Interchange 230 kV	523155	Ochilltree Interchange 230 kV	1	230		35		492/541
20111	156	10331	SPS	ITP	$7,850,506	SPS	Add 2-Winding 230/115 kV transformer at Ochilltree 172.5 MVA	12/31/2012	M	24	523154	Ochilltree Interchange 115 kV	523155	Ochilltree Interchange 230 kV	1	230/115				150/173
20130	156	11389	SPS	ITP	$1,394,052	SPS	Install 0.19 miles 115 kV line and install terminal equipment at Ochiltree and Perryton substations	12/31/2012	M		523154	Ochilltree Interchange 115 kV	523158	Perryton Interchange 115 kV	1	115		0.19		157/173
	461	10597	SPS	ITP	$9,132,270	SPS	40 miles 115 kV between Bailey and Curry.		6/1/2012	30	524822	Curry County Interchange 115 kV	525028	Bailey County Interchange 115 kV	1	115		40		273/300

20031	554	10705	SPS	ITP	$9,704,988	SPS	Convert 15 mile Channing - Tascosa line from 69 kV to 115 kV with 795 ACSR.	6/1/2012	M	30	523868	Channing Sub 115 kV	523875	Tascosa Sub 115 kV	1	115			15	246/271
20118	554	11321	SPS	ITP	$14,557,484	SPS	Convert 30 mile Tascosa - Potter from 69 kV to 115 kV with 795 ACSR.	6/1/2012	M		523875	Tascosa Sub 115 kV	523951	Potter County 115 kV	1	115			30	246/271
20118	554	11322	SPS	ITP	$4,066,690	SPS	Install 230/115 kV 112/128 MVA XF in Potter substation and terminal equipment	6/1/2012	M		523959	Potter County Interchange 230 kV	523951	Potter County 115 kV	1	230/115				112/128
	823	11128	SPS	ITP - non OATT	$4,500,000	SPP	New Line 115 kV tap to Johnson Draw between Gaines and Taylor Switch	6/1/2012	M	12	527362	Johnson Draw 115 kV			1	115				159/160
	836	11104	SPS	ITP	$1,634,119	SPS	Move load from Muleshoe 69 kV to Muleshoe 115 kV.		6/1/2012	20	524030	Muleshoe E 115 kV				115				120/120
20130	1002	11316	SPS	ITP	$295,313	SPP	Reconductor Sanger Switch - OXY Permian 115 kV line with 397.5 ACSR	6/1/2012	M	18	528575	OXY Permian Sub 115	528463	Sanger Switching Station 115 kV	1	115	0.55			157/173
20130	1005	11319	SPS	ITP	$945,000	SPP	Replace wavetraps, CTs and jumpers at both Wolfford and Yuma substations such that terminal equipment constrains the 192 MVA rating of the 115 kV line T72	6/1/2012		6	526524	Wolfforth Interchange 115 kV	526475	Yuma Interchange 115 kV	1	115				192/192
	30087	50093	SPS	ITP	$1,071,475	SPS	Install two 50 Mvar capacitors at Bushland Interchange 230 kV.		6/1/2012	24	524267	Bushland Interchange 230 kV (POI: Wildorado Wind, 160MW)				230				100 Mvar
	30310	50354	SPS	zonal - sponsored	$1,275,750	SPP	Install 2 stages of 5 MVAR and 2 stages of 10 MVAR reactor at Norton Switching Station	6/1/2012		12	524502	Norton Switching Station, 115 kV (POI: Caprock Wind, 80MW)				115				-30 Mvar
	30351	50401	SPS	ITP	$1,336,466	SPS	Install 14.4 Mvar capacitor at Crosby 115 kV		6/1/2012	12	525926	Crosby County Interchange 115 kV				115				14.4 Mvar
	30356	50406	SPS	ITP	$3,914,970	SPS	Install new 84 MVA 115/69 kV transformer at new Cedar Lake Interchange.		6/1/2012	24	527212	Cedar Lake 115 kV	527211	Adair Tap 69 kV	1	115/69				84/84
	30356	50407	SPS	ITP	$6,112,772	SPS	Build 12 miles of new 115 kV line from Sulphur Interchange to new Cedar Lake Interchange.		6/1/2012	24	527262	Sulphur Interchange 115 kV	527212	Cedar Lake 115 kV	1	115		12		157/173
20031	696	10829	SPS	ITP	$4,244,940	SPS	Convert 11.8 miles of 69 kV line to 115 kV from Chaves County - Price - Central Valley REC-Pine Lodge - Capitan - Roswell.	12/31/2012	M		527482	Chaves County Interchange 115 kV	527564	Roswell Interchange 115 kV	1	115			11.18	120/154
20084	789	11038	SPS	ITP	$160,000	SPS	Reconductor .27 mile Roswell interchange - Brasher Tap 115 kV with 397 kcmil conductor.	12/1/2012	M	12	527564	Roswell Interchange 115 kV	527534	Brasher Sub Tap 115 kV	1	115	0.27			160/160
	631	10819	SWPA	ITP - non OATT	$10,095,750	SPP	Reconductor to 229/335 MVA.	6/1/2012	M	24	300056	Asherville	505434	Idalia	1	161	21.98			335/335
20030	135	10799	WFEC	ITP	$1,248,750	SPP	Reconductor 3.7 miles of 1/0 ACSR to 556.5 ACSR from Lindsay to Lindsay Southwest 69 kV.	6/30/2012	M	24	520977	LINDSAY	520979	LINDSAY SW	1	69	3.7			72/89
20030	239	10305	WFEC	ITP	$3,373,000	SPP	Build new 4 mile AEP Snyder - WFEC Snyder 138 kV.	3/1/2012	M	16	511435	SNYDER	521052	SNYDER	1	138		4		118/154
19951	357	10467	WFEC	transmission service	$2,000,000	WFEC	'Install 2nd 112 MVA auto in parallel with existing Unit	4/1/2012	M	16	520814	ANADARKO	520810	ANADARKO	2	138/69				224/224
20003	400	10520	WFEC	ITP	$225,000	SPP	WFEC will upgrade 800 A CTs, new CT limit will be 1200 A at Pharaoh.	6/1/2012	M	6	505592	Weleetka	521026	PHAROAH	1	138				223/228
20003	401	10521	WFEC	ITP	$50,000	WFEC	Replace CT at WFEC Russell	6/1/2012	M	6	521043	RUSSELL	511448	ALTUS JCT TAP	1	138				143/143
20030	616	10794	WFEC	ITP	$5,765,600	SPP	Convert 11 mile Dover Southwest - Dover from 69 kV to 138 kV and install terminal equipment at Dover Southwest.	6/30/2012	6/1/2012	24	520882	DOVER SW	520879	DOVER	1	138			11	144/179
20132	659	10865	WFEC	ITP	$1,971,000	WFEC	Convert 7-mile Reeding - Twin Lakes Switchyard 69 kV line to 138 kV.	6/1/2012	6/1/2012	12	521037	REEDING	520847	CASHION	1	138			7	144/179
20085	672	10878	WFEC	ITP	$1,950,000	WFEC	Reconductor 6.5 mile El Reno - El Reno SW 69 kV line from 1/0 to 336.4 ACSR.	6/1/2012	M	18	520892	EL RENO SW	520899	EL RENO	1	69	6.5			53/65
20132	846	11116	WFEC	ITP	$1,125,000	SPP	Rebuild 2-mile Blanchard - OU Switchyard 69 kV line as 138 kV.	6/1/2012	M	12	520828	BLANCHARD	521104	OU SWITCH 4	1	138			2	212/264
19985	30041	50047	WFEC	ITP	$350,000	WFEC	Install 12 Mvar capacitor at Comanche 138 kV bus.	6/1/2012	M	12	520864	COMANCHE				138				12 Mvar
20003	30079	50085	WFEC	ITP	$324,000	SPP	Install 12 Mvar capacitor at Carter Jct which makes at total of 24 Mvar.	6/1/2012	M	12	520846	CARTER JCT				69				12 Mvar
20003	30093	50099	WFEC	ITP	$324,000	SPP	Install 12 Mvar capacitor at Latta Junction 138 kV.	6/1/2012	M	12	520970	LATTA				138				12 Mvar
20003	136	10174	WFEC	ITP	$6,674,000	SPP	Build new 10 mile Meeker - Hammett 138 kV and install terminal equipment.	12/1/2012	M	10	520994	MEEKER	520951	HAMMETT269.0	1	138		10		219/235
20086	267	10351	WR	ITP	$685,279	WR	Rebuild 1.0 mile Mud Creek Junction - Mid-American Junction 69 kV line. Replace 336.4 kcmil ACSR conductor with 954 kcmil ACSR conductor and replace terminal equipment at substations.	6/1/2012	M	12	533744	MUD CREEK JUNCTION 69 KV	533741	MID AMERICA JUNCTION 69 KV	1	69	1			116/128
20086	267	10352	WR	ITP	$3,011,613	WR	Rebuild 3.9 mile Mid-American Junction - Newton 69 kV line. Replace 336.4 kcmil ACSR conductor with 954 kcmil ACSR conductor and replace terminal equipment at substations.	6/1/2012	M	12	533741	MID AMERICA JUNCTION 69 KV	533745	NEWTON 69 KV	1	69	3.9			116/128
20006	321	10417	WR	ITP	$2,686,996	WR	Tear down/rebuild 1.91-miles of Oaklawn - Oliver 69 kV line replacing 477 kcmil ACSR conductor with 954 kcmil ACSR conductor. Limit would be 0.2-mile 750 kcmil CU underground cable.	6/1/2012	M	12	533824	OAKLAWN 69 KV	533826	OLIVER 69 KV	1	69	2.11			116/128
20059	529	10674	WR	ITP	$94,379,298	WR	New 345 kV line from Oklahoma/Kansas Stateline or the interface with the OG&E line segment to Rose Hill to achieve 3000 amp or greater emergency rating.	6/15/2012	M	36	514803	SOONER 345	532794	ROSE HILL 345 KV	1	345		53		956/1052
20033	618	10806	WR	ITP	$27,144,000	WR	Tap KSU - Wildcat 115 kV into new Northwest Manhattan substation.	6/1/2012	M	24	533347	NORTHWEST MANHATTAN				115				223/223
20033	618	10808	WR	ITP			Tap the Concordia - East Manhattan 230 kV line and build new Northwest Manhattan 230/115 kV substation. Install new 230/115 kV transformer in substation.	6/1/2012	M	18	532865	NORTHWEST MANHATTAN	533347	NORTHWEST MANHATTAN	1	230/115				280/308
	30387	50470	WR	zonal - sponsored	$6,581,250	SPP	Rebuild 15.6 mile Creswell - Oxford 138 kV line.	6/1/2012	M	24	532981	CRESWELL 138 KV	532982	OXFORD 138 KV	1	138	15.6			267/293
	30387	50471	WR	zonal - sponsored	$885,938	SPP	Rebuild 2.1 mile Oxford - Sumner 138 kV line.	6/1/2012	M	12	532982	OXFORD 138 KV	532984	SUMNER COUNTY	1	138	2.1			267/293
	30387	50472	WR	zonal - sponsored	$3,075,469	SPP	Rebuild 7.3 mile Sumner - BellePlaine 138 kV line.	6/1/2012	M	24	532984	SUMNER COUNTY	533063	SUMNER COUNTY NO. 10 BELLE PLAIN 138 KV	1	138	7.29			267/293
	30348	50397	WR	ITP	$3,676,071	WR	Rebuild 3.4 mile Cowskin to Centennial 138 kV line.		6/1/2012	12	533038	COWSKIN 138 KV	533034	CENTENNIAL 138 KV	1	138	3.4			287/287
	30350	50399	WR	Zonal Reliability	$1,007,160	WR	Install 2nd 6 Mvar capacitor at Elk River 69 kV		6/1/2012	12	533691	ELK RIVER 69 KV				69				6 Mvar
	30335	50382	WR	Zonal Reliability	$957,660	WR	Install 1 stage 10.8 Mvar capacitor at Wheatland 115 kV substation		6/1/2012	12	533439	WHEATLAND 115 KV				115				10.8 Mvar
	30339	50386	WR	ITP	$278,300	WR	Replace terminal equipment on Pentagon Substation to increase Mund - Pentagon 115 kV ckt 1 to 1200A.		12/1/2012	12	533282	MUND 115KV	533261	PENTAGON 115 KV	1	115				179/194

20068	908	11204	WR	transmission service	$50,200	WR	Replace the 69 kV bus and jumpers on the Oatville-Mac Arthur 69 kV line	6/1/2012	M		533813	MACARTHUR 69 KV	533825	OATVILLE 69 KV	1	69				80/80
200176	30383	50465	WR	Generation Interconnection	$5,095,881	GEN-2010-057 Interconnection Agreement	Install necessary equipment and perform line work at Circle substation to accommodate new bus position.	9/20/2012	9/20/2012	12	532871	CIRCLE 230 KV				230				
20140	30323	50369	WR	Zonal Reliability	$2,849,367	WR	Rebuild Clay Center Jct bus to a flat bus design with 4 IPS Bus and 2000 Amp equipment with 2 new 115 kV deadend structures, new metering equipment, and a new control building.	10/1/2012			533323	CLAY CENTER JUNCTION 115 KV				115				
20140	30325	50371	WR	Zonal Reliability	$6,879,751	WR	Build 10 mile 115 kV line with Single 1192.5 kcmil ACSR (Bunting)	10/1/2012			533323	CLAY CENTER JUNCTION 115 KV			1	115		10		
20140	30327	50373	WR	Zonal Reliability	$4,877,550	WR	Build new four terminal ring bus with 2000 amp equipment	10/1/2012								115				
20140	30322	50368	WR	Zonal Reliability	$4,877,550	WR	Build new four terminal ring bus with 2000 amp equipment	10/1/2012			533362	CHAPMAN 115 KV				115				
20063	664	10870	WR	ITP	$3,893,323	WR	Tear down and rebuild 1.8 mile Gill Energy Center West - Waco 138 kV with bundled 1192.5 ACSR conductor.	12/1/2012	M	12	533045	GILL ENERGY CENTER WEST 138 KV	533072	WACO 138 KV	1	138	1.8			534/586
20059	182	10231	WR	ITP	$6,066,000	WR	Rebuild approximately 7.5 miles Chase - White Junction 69 kV line. Replace existing 2/0 copper conductor to achieve a minimum 600 amp emergency rating.	12/31/2012	M	12	533588	CHASE 69 KV	533605	WHITE JUNCTION 69 KV	1	69	7.3			72/72
20131	1022	11344	WR	ITP	$1,000,000	WR	Tap the Stranger - Craig 345 KV line into a new substation at 87th Street	12/31/2012	M	24	532772	STRANGER CREEK 345 KV	542977	CRAIG 345 KV	1	345				1099/1195
20131	1022	11345	WR	ITP	$15,119,789	WR	Tap the 95th & Waverly - Monticello 115 KV line into new 87th Street substation. Tear down and rebuild existing line as new double circuit.	12/31/2012	M	24	533278	95TH & WAVERLY 115 KV	533281	MONTICELLO 115KV	1 & 2	115				223/245
20131	1022	11346	WR	ITP	$21,123,419	WR	Build new substation with 560MVA 345/115/14.4 kV three-winding transformer at 87th Street	12/31/2012	M	30	532775	87TH STREET	533283	87TH STREET	1	345/115				560/616
20091	30224	50228	WR	transmission service	$3,603,715	WR	Rebuild approximately 6 miles of line with 954-KCM ACSR to achieve a minimum 600 amp emergency rating	12/1/2012	M	12	533621	ALLEN 69 KV	533638	LEHIGH TAP 69 KV	1	69	5.69			134/147
20091	30224	50240	WR	transmission service	$1,482,830	WR	Rebuild approximately 1 mile of line with 954-KCM ACSR to achieve a minimum 600 amp emergency rating.	6/1/2012	M	12	533638	LEHIGH TAP 69 KV	533651	UNITED NO. 9 CONGER 69 KV	1	69	0.91			134/147
20059	30225	50229	WR	transmission service	$607,500	WR	Add 15 Mvar Cap bank at Allen	6/1/2012	M	12	533621	ALLEN 69 KV				69				15 Mvar
2013																				
	283	10367	AECI	interregional	$86,017,699	AECI	The proposed line connects to the Morgan - Neosho 345kV line near the Kansas border -- This is the proposed Blackberry sub. From Blackberry the 108 mile 345kV line connects to Chouteau 345 kV bus which connects via a 5 mile 345kV circuit to GRDA 1 bus (GRDA 2 gen). At the Chouteau 345kV bus a 345/161 transformer connects to Chouteau 161kV sub.	12/31/2013	M		300739	Blackberry	300740	Sportsmans Acres	1	345		108		1369/1369
20027	443	10575	AEP	ITP	$2,000,000	AEP	Tap the South Springdale-East Fayetteville 161 kV line and build 1.5 miles of 161 kV to new Osbourne station.	6/1/2013	M	24	506979	Shipe Road 345	506980	Shipe Road 161	1	161		1.5		428/636
	503	10648	AEP	ITP	$926,970	AEP	Replace two breakers and jumpers and wave traps at Perdue. Replace wave traps at Diana.	6/1/2013	6/1/2013	15	508351	PERDUE 138KV	508831	DIANA 138KV	1	138				261/303
20073	767	11011	AEP	ITP	$24,965,000	AEP	Convert 17 mile Canadian River - McAlester City line from 69 kV to 138 kV.	6/1/2013	M	36	510946	Canadian River 138	510908	McALESTER City SOUTH	1	138			17	321/443
20073	767	11012	AEP	ITP	$9,513,000	AEP	Tap Pittsburg - Muskogee 345 kV about 33 miles north of the Pittsburg station and step down to 138 kV with a 450 MVA autotransformer.	6/1/2013	M	36	515422	Canadian river 345kv	510946	Canadian River 138	1	345/138				450/495
20073	767	11183	AEP	ITP	$4,096,000	AEP	Rebuild McAlester City Tap and eliminate the 'T' at McAlester City North Tap.	6/1/2013	M	36	510908	McALESTER City SOUTH	510921	DUSTIN	1	138		5.73		88/107
20073	767	11184	AEP	ITP	$4,096,000	AEP	Rebuild McAlester City Tap, double circuiting existing line, eliminate the 'T' at McAlester City North Tap.	6/1/2013	M	36	510908	McALESTER City SOUTH	510909	MCALESTER CITY NORTH TAP	1	138	5.73			96/105
20064	770	11015	AEP	ITP	$2,500,000	AEP	Rebuild 2.45 miles of 795 ACSR with 1590 ACSR and reset relays.	6/1/2013	M	12	504124	ASHDOWN WEST	510890	CRAIG JUNCTION	1	138	2.45			265/287
	882	11171	AEP	ITP	$10,920,454	AEP	Rebuild or reconductor 11.4-mile Rock Hill - Carthage line from 336 ACSR to 1272 ACSR and remove switches in middle of line. Upgrade breaker, switches, CT ratios, and relay settings at Carthage. Upgrade jumpers, switches, CT ratios, and relay settings at Rock Hill.		6/1/2013	24	509082	ROCK HILL 69	509056	CARTHAGE	1	69	11.4			123/143
20112	1023	11347	AEP	transmission service	$7,200,000	AEP	Rebuild 7.11 miles of 397.5 ACSR with 1272 ACSR	6/1/2013	M		507759	SOUTHWEST SHREVEPORT 138KV	507757	SPRINGRIDGE PAN-HARR REC	1	138	7.11			287/287
20112	1024	11348	AEP	transmission service	$2,800,000	AEP	Rebuild 2.49 miles with 1590 ACSR. Replace wavetrap and jumpers at Whitney. Replace metering CT at Eastex.	6/1/2013	M		508575	WHITNEY 138KV	508582	TEXAS EASTMAN	1	138	2.49			320/380
20122	1081	11421	AEP	ITP	$2,100,000	AEP	Rebuild 1.68-mile Hooks - Lone Star Ordinance Tap 69 kV line. Replace switch 6006 at Lone Star Ordinance.	6/1/2013	M	18	508057	HOOKS	508063	LONESTAR ORDINANCE TAP	1	69	1.68			143/143
20122	30148	50156	AEP	ITP	$6,600,000	AEP	Rebuild Bann - Lone Star Ordinance 69 kV with 1272 ACSR (5.4 miles). Replace jumpers, upgrade CT ratios and adjust relay settings at Bann. Replace 69 kV switch at Lone Star Ordinance Tap with a minimum 800 amp emergency rating.	6/1/2013	M	21	508053	BANN 69KV	508063	LONESTAR ORDINANCE TAP	1	69	5.4			90/121
20135	30316	50375	AEP	transmission service	$5,500,000	AEP	Replace auto with new 450 MVA.	6/1/2013	M	20	508832	DIANA 345KV	508831	DIANA 138KV	3	345/138				450/495
20135	30319	50365	AEP	ITP	$900,000	AEP	Reset CT, Replace Breaker and Switch	6/1/2013	M		508562	PIRKEY 138KV	508575	WHITNEY 138KV	1	138				
20034	646	10847	GMO	ITP	$2,000,000	GMO	Replace Clinton 161/69 kV transformer #1 with new 100/125 MVA to match transformer #2.	6/1/2013	M	12	541303	Clinton 69 KV	541242	Clinton 161 KV	1	161/69				100/125
20087	715	10952	GMO	ITP	$800,000	KCPL	Reconductor GMO portion of Glenare - Liberty 69 kV for 70/79 MVA rating.	6/1/2013	M	24	543081	GLENARE 69 KV	541262	Liberty 69 KV	1	69	0.19			70/79
	331	10428	GMO	zonal - sponsored	$2,418,750	SPP	Extend Clinton MIPU (541242) 161 kV bus and tap into Clinton AECI (300071) to Windsor (541217) 161 kV line	12/31/2013	M	6	541352	Clinton				161				200/200
20028	30071	50077	GRDA	ITP	$374,000	GRDA	Add 7.2 Mvar capacitor at Sallisaw 69 kV.	6/1/2013		12	512652	SALLISAW 69				69				7.2 Mvar

20046	707	10943	ITCGP	Balanced Portfolio	$93,302,649	ITCGP	Build new 345 kV line from Wolf to interception point of Axtell to Wolf line (Kansas Border). Includes line reactor.	6/1/2013	M		640065	Axtell	530583	POST ROCK 345 KV	1	345		80		1792/1792
	1039	11376	KCPL	zonal - sponsored	$2,963,000	KCPL	Rebuild 4.2 mile Olathe - Switzer 161kV line.	6/1/2013	M	18	543036	OLATHE 161 KV	543045	SWITZER 161 KV	1	161	4.2			558/558
	30342	50388	LES	zonal - sponsored	$17,318,000	LES	Add 3.25-mile 115 kV line from 17th & Holdrege to 30th & A.	5/31/2013			650219	17th & Holdrege	650252	30th & A	1	115		3.25		
	30343	50389	LES	zonal - sponsored	$9,980,000	LES	Add 2 mile 115 kV line from 30th & A to 56th & Everett.	5/31/2013			650252	30th & A	650256	56th & Everett	1	115		2		
	30352	50403	LES	ITP	$6,480,000	LES	Rebuild 12 miles of 115 kV between Sheldon and Folsom/Pleasant Hill	5/15/2013	1/1/2012	24	650242	SW7th & Pleasant Hill	640278	Sheldon	2	115	12			240/240
	30384	50466	MIDW	Generation Interconnection	$6,646,800	GEN-2010-057 FACILITIES STUDY	Rebuild and extend 115 kV transmission line from existing Rice Co. substation to new Rice Co. substation, including engineering, surveying, and modification of existing easements as required.	4/1/2013			530623	RICE COUNTY 115 KV	530620	LYONS 115 KV	1	115	11.08	1		
20067	906	11203	MKEC	transmission service	$9,875,072	MKEC	Rebuild 26 mile line	6/1/2013	M		539673	Medicine Lodge 115 KV	539687	Pratt 115 KV	1	115	26			165/198
20067	30211	10994	MKEC	transmission service	$5,864,617	MKEC	Upgrade transformer	6/1/2013	M		539674	Medicine Lodge 138 KV	539673	Medicine Lodge 115 KV	1	138/115				200/250
20067	904	11201	MKEC	transmission service	$5,250,000	MKEC	Rebuild 8.05 mile line	12/31/2013	M		539638	Flat Ridge Tap	539674	Medicine Lodge 138 KV	1	138	8.05			261/314
20067	905	11202	MKEC	transmission service	$10,853,305	MKEC	Rebuild 24.15 mile line	12/31/2013	M	24	539638	Flat Ridge Tap	539668	Harper 138 KV	1	138	24.15			261/314
20047	708	10942	NPPD	Balanced Portfolio	$76,000,000	NPPD	Build new 345 kV line from Axtell to interception point of Axtell to Wolf line (Kansas Border). Includes substation expansion at Axtell and line reactor.	6/1/2013	M	48	640065	Axtell	530583	POST ROCK 345 KV	1	345		45		1792/1792
20080	817	11079	NPPD	ITP	$1,977,010	NPPD	Uprate conductor and substation equipment to 100 Degree rating.	6/1/2013	M	24	640054	Albion	640347	Spalding	1	115				174/174
20117	1094	11438	NPPD	ITP	$3,500,000	NPPD	Increase clearances to 100 Deg C and upgrade terminal equipment (PCB, DISC, WVTRP, CT, BUS) to effect higher rating.	6/1/2013	M	24	640103	Canaday	640256	Lexington	1	115				137/137
20081	892	11182	OGE	ITP	$5,500,000	OGE	Install Canadian River 345 kV terminal equipment at new Canadian River substation tapping the Pittsburg - Muskogee line.	2/15/2013	M	30	515422	Canadian river 345kv				345				1095/1095
	30381	50461	OGE	Generation Interconnection	$3,980,000	AFFECTED SYSTEMS FACILITIES CONSTRUCTION AGREEMENT	ADD 3 138KV CIRCUIT BREAKERS TO SHIDLER SUBSTATION AND CONVERT TO 4 BREAKER RING. PROVIDE A NEW TERMINAL FOR LINE TO FAIRFAX. THIS NEW LINE WILL BE PART OF A RECONFIGURATION OF THE EXISTING FAIRFAX TAP. THE FAIRFAX TAP WILL BE DISSOLVED AND THE LINE WILL BE EXTENDED AND TERMINATED INTO THE RECONFIGURED SHIDLER SUBSTATION. ALSO INCLUDED IN COST IS THE REPLACEMENT OF A RELAY PANEL ON LINE TO OKGE OSAGE AND 138KV METER TRANSFORMERS AT METER AT SHIDLER.REQUIRED IN MITIGATION OF SPP AFFECTED FACILITIES FROM NEW AECI GI PROJECT LOCATED NEAR BURBANK, OK. SPP STUDY ID - ASGI-2010-006	3/14/2013			510403	SHIDLER				138				
20081	235	10300	OGE	ITP	$2,500,000	OGE	Reconductor 2.2 miles of Fort Smith - Colony 161 kV line to 1590 kcmil ACSR and change terminal equipment at Ft. Smith and Colony substations to 2000A.	6/1/2013	M	24	515300	FT SMITH 161	515345	COLONY 161	1	161	2.2			472/542
20029	642	10843	OGE	ITP	$10,000	OGE	Remove wavetrap at VBI.	6/1/2013	M	9	515335	KILGORE 69	515336	VBI 69	1	69				72/72
	928	11228	OGE	zonal - sponsored	$6,068,000	SPP	Trans Canadian Pipeline pump 32	12/1/2013			515033	CUSHING 138	515401	Pump Station 32	1	138		7.4		268/308
20041	700	10930	OGE	Balanced Portfolio	$175,000,000	OGE	Build new 345 kV line from Seminole to Muskogee	12/31/2013	M	40	515045	SEMINOLE 345	515224	MUSKOGEE 345	1	345		100		1200/1200
20138	899	11195	SEPC	ITP	$5,289,502	SEPC	Rebuild 11.1 miles of the 18.3 mile Fletcher - Holcomb 115 kV line with 954 ACSR Cardinal	12/31/2013	M	24	531448	HOLCOMB	531420	FLETCHER	1	115	11.1			214/246
20084	704	11085	SPS	Balanced Portfolio	$14,900,907	SPS	Add second 345/230 kV Tuco Interchange 515/560 MVA transformer. Expand 345 kV bus at Tuco.	3/31/2013	M	24	525832	TUCO Interchange 345 kV	525830	TUCO Interchange 230 kV	2	345/230				515/560
20084	30244	50257	SPS	ITP	$225,000	SPP	Replace 800 A wave trap with 1200 A at Harrington Station Mid Bus 230 kV	3/31/2013	M	12	523978	Harrington Station Mid Bus 230 kV	524365	Randall County Interchange 230 kV	1	230				798/798
20084	829	11096	SPS	ITP	$4,428,144	SPS	Install a second 115/69 kV transformer rated 75/86 MVA at Kingsmill.	3/31/2013	M	24	523711	Kingsmill Interchange 69 kV	523712	Kingsmill Interchange 115 kV	2	115/69				75/86
20084	783	11033	SPS	ITP	$8,502,375	SPP	Install second 230/115 kV transformer in Randall substation.	4/30/2013	M	20	524365	Randall County Interchange 230 kV	524364	Randall County Interchange 115 kV	2	230/115				250/287
20084	851	11121	SPS	ITP	$27,144	SPP	Replace existing 800A Harrington 230 kV wave trap with 1200A unit.	4/30/2013	M	12	523978	Harrington Station Mid Bus 230 kV	524365	Randall County Interchange 230 kV	1	230				478/502
20084	888	11177	SPS	ITP	$16,725,836	SPS	Build new 20 mile Randall Co - Amarillo South 230 kV line.	4/30/2013	6/1/2012	36	524365	Randall County Interchange 230 kV	524415	Amarillo South Interchange 230 kV	1	230		20		492/541
20084	795	11052	SPS	ITP	$19,349,122	SPS	Add transformer 230/115 kV 250/250 MVA CKT 1	5/31/2013	M	24	524770	Pleasant Hill 230 kV	524768	Pleasant Hill 115 kV	1	230/115				250/250
20084	795	11053	SPS	ITP	$14,805,472	SPS	Build new 16 mile Pleasant Hill - Oasis 230 kV line.	5/31/2013	M	24	524770	Pleasant Hill 230 kV	524875	Oasis Interchange 230 kV	1	230		16		492/541
20084	795	11054	SPS	ITP	$20,612,670	SPS	Build new 26 mile Frio - Draw - Roosevelt County 230 kV line.	5/31/2013	M	30	524770	Pleasant Hill 230 kV	524909	Roosevelt County Interchange NORTH 230 kV	1	230		26		492/541
20084	774	11019	SPS	ITP	$679,000	SPS	Tap Potter - Harrington West 230 kV line at Cherry and bring 230 kV into Cherry substation.	6/30/2013	M	20	524010	Cherry Sub 230 kV	523959	Potter County Interchange 230 kV	1	230		0.1		478/502
20084	774	11020	SPS	ITP	$8,515,623	SPS	New 230/115 kV Autotransformer at Cherry Substation.	6/30/2013	M	20	524010	Cherry Sub 230 kV	524009	Cherry Sub 115 kV	1	230/115				218/239
20084	774	11021	SPS	ITP	$5,062,500	SPP	Convert Hastings Sub from 69 kV to 115 kV	6/30/2013	M	30	524136	Hastings Sub 115 kV				115				
20084	774	11023	SPS	ITP	$1,700,000	SPP	Build new 3.7 mile Hastings - East Plant 115kV line.	6/30/2013	M	4	524136	Hastings Sub 115 kV	524162	East Plant Interchange 115 kV	1	115		3.7		157/173
20130	774	11378	SPS	ITP	$1,771,875	SPP	Construct approximately 3.5 miles of 115 kV line from Cherry Street substation to Hastings substation	6/30/2013	M	12	524009	Cherry Sub 115 kV	524136	Hastings Sub 115 kV	1	115		3.5		174/192
20130	792	11046	SPS	ITP	$3,607,000	SPP	Reconductor 8.5-mile Cunningham Station - Buckeye Tap 115 kV line with 795 ACSR	6/1/2013		18	527864	Cunningham Station 115 kV	528348	Buckeye Tap 115 kV	1	115	8.55			226/249
20084	834	11101	SPS	ITP	$4,255,714	SPS	Convert existing 3 mile Portales Interchange - Zodiac 69 kV line to operate at 115 kV.	6/1/2013	M	18	524924	Portales Interchange 115 kV	524935	Zodiac Sub 115 kV	1	115			3	157/173
20113	1025	11349	SPS	transmission service	$500,000	SPP	Replace wavetrap at Harrington East	6/30/2013	M		524010	Cherry Sub 230 kV	523977	Harrington Station West Bus 230 kV	2	230				502/502
20130	1029	11353	SPS	ITP	$100,000	SPP	Convert Lynn County Substation to 115 kV service	6/1/2013		12	526656	Lynn County Interchange 115 kV				115				
	1049	11390	SPS	zonal - sponsored	$4,632,000	SPP	Uprate Deaf Smith Auto for DS-24 mitigation	6/1/2013	M		524623	Deaf Smith County Interchange 230 kV	524622	Deaf Smith County Interchange 115 kV	1	230/115				168/193
	1141	11505	SPS	ITP	$2,394,495	SPS	Upgrade the Spearman transformer to 84/100 MVA		6/1/2013	24	523186	Spearman Interchange 115 kV	523185	Spearman Interchange 69 kV	1	115/69				84/105
	694	10836	SWPA	ITP - non OATT	$4,500,000	SWPA	Reconductor to 229/335 MVA.	6/1/2013	M	24	300056	Asherville	505438	Poplar Bluff	1	161	11.84			206/206
	500	10645	SWPA	ITP - non OATT	$2,250,000	SPP	Replace Springfield transformer #3 with 125 MVA transfomer.	12/1/2013	M	24	505492	Springfield	505494	Springfield	3	161/69				70/70

20003	402	10522	WFEC	ITP	$1,125,000	SPP	Convert 3 miles of 69 kV to 138 kV from Indiahoma to Grandfield.	6/1/2013	6/1/2012	12	521106	Grandfield	520954	INDIAHOMA	1	138			3	183/228
20003	402	10523	WFEC	ITP	$7,306,000	SPP	Tap Cache to Paradise 138 kV and install 13.7 miles of 138 kV from Cache to Indiahoma.	6/1/2013	6/1/2012	24	520954	INDIAHOMA	521105	CACHE 4	1	138				183/228
20003	402	10524	WFEC	ITP	$5,000,000	SPP	Install new 138/69 kV transformer at Grandfield	6/1/2013	6/1/2012	24	521106	Grandfield	520926	GRANDFIELD	1	138/69		13.7		70/70
20114	1026	11350	WFEC	transmission service	$150,000	WFEC	Upgrade Terminal Equipment at Altus SW	6/1/2013	M		521009	NAVAJO	520805	ALTUS SW	1	69				53/65
20132	1084	11424	WFEC	ITP	$6,243,750	SPP	Rebuild 18.5-mile Alva - Freedom 69 kV line from 3/0 to 556.5	6/1/2013	M	24	520806	ALVA	520915	FREEDOM	1	69	18.5			72/89
20132	1085	11429	WFEC	ITP	$50,000	WFEC	Upgrade relaying at OU Switchyard and Lindsay Switchyard; close the normally open Criner - Lindsay 69 kV line	6/1/2013	M	6	520868	CRINER	520977	LINDSAY	1	69				72/89
20136	30320	50366	WFEC	transmission service	$4,800,000	WFEC	UPGRADE CANTON TO TALOGA TO 336.4	6/1/2013			521064	TALOGA	520843	CANTON	1	69	9.7			106/132
20136	30321	50367	WFEC	transmission service	$1,000,000	WFEC	Auto XFMR 56 to 112MVA	6/1/2013			521065	TALOGA	521064	TALOGA	1	138/69				112/112
20003	138	10176	WFEC	ITP	$1,050,000	SPP	Upgrade WFEC Woodward sub to 1200 A and reconductor from 336.4 ACSR to 795 ACSR; new rating 91/110 MVA.	12/1/2013	M	12	514782	WOODWARD 69	521096	WOODWARD	1	69	3.5			91/114
19985	140	10179	WFEC	ITP	$912,000	WFEC	Reconductor 3.8 miles from 3/0 ACSR to 795 ACSR. Rate A=81MVA, Rate B=106MVA	12/1/2013	M	8	520802	ACME	521095	WEST NORMAN	1	69	3.8			81/106
20003	311	10402	WFEC	ITP	$1,601,000	SPP	Convert 4 mile West Norman - Acme from 69 kV to 138 kV.	12/31/2013	M	12	520802.1	ACME	521095	WEST NORMAN	1	138			3.8	183/228
20030	616	10795	WFEC	ITP	$5,315,700	SPP	Convert 12.6 mile Dover - Twin Lakes from 69 kV to 138 kV.	12/31/2013	6/1/2012	24	520879	DOVER	521073	TWIN LAKES	1	138			12.6	144/179
20030	616	10796	WFEC	ITP	$3,164,000	SPP	Convert 7.5 mile Twin Lakes - Cashion from 69 kV to 138 kV.	12/31/2013	6/1/2012	24	521073	TWIN LAKES	520847	CASHION	1	138			7.5	144/179
20030	616	10797	WFEC	ITP	$3,937,500	SPP	Build new 7 mile WFEC Twin Lakes - OG&E Crescent 138 kV.	12/31/2013	6/1/2012	24	521073	TWIN LAKES	515377	Crescent 138kv	1	138		7		183/228
20006	172	10221	WR	ITP	$5,035,730	WR	Convert TEC-Midland from 161 kV to 115 kV	6/1/2013	M	6	533180	TECUMSEH ENERGY CENTER 115 KV	533252	MIDLAND JUNCTION 115 KV	1	115			19.33	117/117
20140	374	10487	WR	transmission service	$1,500,000	WR	Replace jumpers and bus, and reset CTs and relaying on Creswell to Oak 69 kV line. Rebuild substations.	6/1/2013		6	533543	CRESWELL 69 KV	533547	OAK 69 KV	1	69				107/107
19964	375	10488	WR	transmission service	$9,500,000	WR	Install 3rd Rose Hill 345/138 kV TRANSFORMER.	6/1/2013	M	24	532794	ROSE HILL 345 KV	533062	ROSE HILL 138 KV	3	345/138				400/440
20086	467	10603	WR	ITP	$104,530	WR	Replace wavetraps on Gill - Interstate 138 kV line for a new rating of 232/256 MVA.	6/1/2013	M	18	533044	GILL ENERGY CENTER EAST 138 KV	533051	INTERSTATE 138 KV	1	138				232/232
20063	563	10713	WR	ITP	$108,000	WR	Replace 69 kV disconnect switches at Aquarius with a minimum 600 amp emergency rating	6/1/2013	M	12	533765	LITCHFIELD 69 KV	533756	AQUARIUS 69 KV	1	69				80/80
	563	10714	WR	ITP	$150,000	SPP	Replace 69 kV disconnect switches at Aquarius.	6/1/2013	M		533764	HUDSON JUNCTION 69 KV	533756	AQUARIUS 69 KV	1	69				80/80
20131	1073	11411	WR	ITP	$4,981,988	WR	Build 6 miles of double circuit 69 kV line from new Franklin substation to Mulberry - Sheffield 69 kV line, tapping line and connecting to Mulberry.	6/1/2013	M		532938	FRANKLIN	533767	MULBERRY 69 KV	1	69		6		72/72
20131	1073	11412	WR	ITP	$4,981,988	WR	Build 6 miles of double circuit 69 kV line from new Franklin substation to Mulberry - Sheffield 69 kV line, tapping line and connecting to Sheffield.	6/1/2013	M		532938	FRANKLIN	533774	SHEFFIELD 69 KV	1	69		6		72/72
20091	30224	50233	WR	transmission service	$2,163,272	WR	Rebuild approximately 7 miles of line with 954 kcmil ACSR to achieve a minimum 1200 amp emergency rating.	7/1/2013	M	24	533626	BURLINGTON JUNCTION 69 KV	533630	COFFEY COUNTY NO. 3 WESTPHALIA 69 KV	1	69	7.2			134/147
20091	30224	50234	WR	transmission service	$3,161,738	WR	Rebuild approximately 4 miles of line with 954 kcmil ACSR to achieve a minimum 1200 amp emergency rating.	6/1/2013	M	24	533626	BURLINGTON JUNCTION 69 KV	533653	WOLF CREEK 69 KV	1	69	4.1			134/147
20091	30224	50236	WR	transmission service	$6,024,876	WR	Rebuild approximately 9 miles of line with 954 kcmil ACSR to achieve a minimum 1200 amp emergency rating.	12/1/2013	M	24	533636	GREEN 69 KV	533630	COFFEY COUNTY NO. 3 WESTPHALIA 69 KV	1	69	9.22			134/147
20059	30227	50231	WR	transmission service	$607,500	WR	Add 15 Mvar Cap bank at Athens	6/1/2013	M	12	533623	ATHENS SWITCHING STATION 69 KV				69				15 Mvar
	30252	50290	WR	zonal - sponsored	$3,072,000	SPP	Add second 76.8 Mvar bank at Benton.	6/1/2013	M	24	532986	BENTON 138 KV				138				76.8 Mvar
20068	30271	50284	WR	transmission service	$1,215,000	WR	Dearing 138 kV 20 MVAR Capacitor Addition	6/1/2013	M	18	533002	DEARING 138 KV				138				20 Mvar
20140	30324	50370	WR	Zonal Reliability	$850,000	WR	Install 14.4 MVAR capacitor at Chapman Junction 115 kV	10/1/2013			533362	CHAPMAN 115 KV				115				14.4 Mvar
20086	819	11082	WR	ITP	$3,471,989	WR	Rebuild 5.56 mile Gill Energy Center East - MacArthur 60 kV line. Replace substation bus and jumpers at MacArthur 69 kV.	12/1/2013	M	18	533795	GILL ENERGY CENTER EAST 69 KV	533813	MACARTHUR 69 KV	1	69	5.56			134/147
20140	30326	50372	WR	Zonal Reliability	$4,632,508	WR	Build 6.7 mile 115 kV line with Single 1192.5 kcmil ACSR (Bunting)	12/31/2013							1	115		6.7		
20140	30328	50374	WR	Zonal Reliability	$850,000	WR	Install a 2000 Amp bus system, GOAB switches, metering and communication systems.	12/31/2013			533319	Riley				115				
2014																				
20000	450	10582	AEP	ITP	$11,962,000	AEP	Install 9 miles of 161 kV from new Shipe Road Substation to East Centerton Substation.	6/1/2014	M	60	506980	Shipe Road 161	506929	EAST CENTERTON 161KV	1	161		9		520/729
20000	450	10584	AEP	ITP	$13,104,000	AEP	Install 345/161 kV transformer at Shipe Road.	6/1/2014	M	48	506979	Shipe Road 345	506980	Shipe Road 161	1	345/161				675/743
20000	450	10585	AEP	ITP	$34,085,000	AEP	Install 18 miles of new 345 kV, 2-954 ACSR line.	6/1/2014	M	60	506935	FLINT CREEK 345KV	506979	Shipe Road 345	1	345		18		1011/1176
	502	10647	AEP	ITP	$7,214,837	AEP	Reconductor 3.25 miles Northwest Henderson-Poynter 69 kV line with 1272 ACSR.		6/1/2014	24	509075	NORTHWEST HENDERSON 69KV	509081	POYNTER	1	69	3.25			140/143
20027	649	10853	AEP	ITP	$2,150,000	AEP	Reconductor 2.15 mile section of 115 kV line with 795 ACSR.	6/1/2014	M	24	510399	LONE STAR	510423	LOCUST GROVE	1	115	2.15			120/120
	1012	11331	AEP	ITP	$17,359,447	AEP	Rebuild 21.85 mile Diana-Perdue 138 kV line. Replace switches, jumpers, and upgrade CT ratios at Diana and Perdue. Upgrade relay settings at Diana.		6/1/2014	30	508351	PERDUE 138KV	508831	DIANA 138KV	1	138	21.85			455/478
	30354	50405	AEP	ITP	$1,318,601	AEP	Install 6 Mvar capacitor at Cowetta 69 kV.		6/1/2014	12	509719	COWETA				69				6 Mvar
20096	936	11236	AEP	high priority	$127,995,000	AEP	Build a new 76 mile 345 kV line from Valliant to NW Texarkana with at least 3000 A capacity. Upgrade the Valliant and NW Texarkana substations with the necessary breakers and terminal equipment.	10/1/2014	M	51	510911	VALLIANT 345KV	508072	NORTHWEST TEXARKANA 345KV	1	345		76.25		1330/1940
	648	10849	DETEC	zonal - sponsored	$11,454,960	SPP	Convert from 69 kV to 138 kV	6/1/2014							1	138			9.58	215/225
	648	10850	DETEC	zonal - sponsored			Convert from 69 kV to 138 kV	6/1/2014							1	138			8.82	215/225
	648	10851	DETEC	zonal - sponsored			Convert from 69 kV to 138 kV	6/1/2014							1	138			10.52	215/225
	648	10852	DETEC	zonal - sponsored			Convert from 69 kV to 138 kV	6/1/2014							1	138			3.7	215/225
20123	472	10608	EDE	ITP	$1,550,000	EDE	Reconductor 2.85 miles of 1/0 CU with 556 ACSR	6/1/2014	M	12	547438	SUB EXPLORER SPRING CITY TAP	547592	SUB 389 - JOPLIN SOUTHWEST	1	69	2.85			54/65
20021	299	10385	GRDA	ITP	$4,212,500	GRDA	Reconductor 8.8 mile line to 1590 ACSR.	6/1/2014	M	24	512714	KANSAS TAP 161	512642	WEST SILOAM SPRINGS 161	1	161	8.8			347/403
20021	299	10386	GRDA	ITP	$1,700,000	GRDA	Reconductor 4.2 mile line to 1590 ACSR.	6/1/2014	M	24	512642	WEST SILOAM SPRINGS 161	512643	SILOAM CITY 161	1	161	4.2			347/403

200162	945	11252	ITCGP	high priority	$295,815,437	ITCGP	Build a new 36 mile double circuit 345 kV line with at least 3000 A capacity from the Spearville substation to the new Clark County substation. Build the Comanche County 345 kV substation with a ring bus and necessary terminal equipment.	12/31/2014	M		531469	SPEARVILLE	539800	Comanche Co 345 kV	1	345		27.5		1792/1792
200162	945	11253	ITCGP	high priority			Build a new 36 mile double circuit 345 kV line with at least 3000 A capacity from the Spearville substation to the new Clark County substation. Build the Clark County 345 kV substation with a ring bus and necessary terminal equipment.	12/31/2014	M		531469	SPEARVILLE	539800	Comanche Co 345 kV	2	345		27.5		1792/1792
200162	945	11254	ITCGP	high priority			Build a new 86 mile double circuit 345 kV line with at least 3000 A capacity from the Thistle 345 kV substation to the new Clark County substation. Build a new 345 kV substation at Thistle near Flat Ridge with the necessary breakers and terminal equipment for connecting the Spearville-Thistle-Wichita double circuit transmission lines and for connecting to the Woodward District EHV 345 kV double circuit transmission lines.	12/31/2014	M		539800	Comanche Co 345 kV	539801	Flat Ridge 345 kV	1	345		86		1792/1792
200162	945	11255	ITCGP	high priority			Build a new 86 mile double circuit 345 kV line with at least 3000 A capacity from the Thistle 345 kV substation to the new Clark County substation. Build a new 345 kV substation at Thistle near Flat Ridge with the necessary breakers and terminal equipment for connecting the Spearville-Thistle-Wichita double circuit transmission lines and for connecting to the Woodward District EHV 345 kV double circuit transmission lines.	12/31/2014	M		539800	Comanche Co 345 kV	539801	Flat Ridge 345 kV	2	345		86		1792/1792
200162	945	11260	ITCGP	high priority			Install a 400 MVA 345/138 kV transformer at the new 345 kV Thistle substation.	12/31/2014	M		539801	Flat Ridge 345 kV	539674	Medicine Lodge 138 KV	1	345/138				400/400
200162	945	50384	ITCGP	high priority			Build 1 mile 138 kV line from new Thistle substation to Flat Ridge substation.	12/31/2014								138		1		
	30385	50468	KCPL	zonal - sponsored	$1,518,750	SPP	Rebuild 3 mile Overland Park - Merriam 161 kV line.	12/31/2014	M		543032	MERRIAM 161 KV	543047	OVERLAND PARK 161 KV	1	161	3			229/334
	816	11078	NPPD	ITP	$1,240,000	NPPD	Uprate conductor and substation equipment to 100 Degree rating.	6/1/2014	M	24	640054	Albion	640181	Genoa	1	115				137/137
	30237	50249	NPPD	ITP	$1,193,000	NPPD	Install a 18 Mvar capacitor bank at Holdrege substation 115 kV bus.	6/1/2014	M	24	640224	Holdrege				115				18 Mvar
20117	30285	50319	NPPD	ITP	$5,645,881	NPPD	Replace 187MVA Ogallala transformer with 336MVA Ogallala transformer	6/1/2014	M	36	659132	OGALLALLA	640302	Ogallala	1	230/115				336/336
20041	701	10932	OGE	Balanced Portfolio	$146,360,000	OGE	Build new 345 kV line from Woodward EHV to Border	5/19/2014	M	40	515458	Border	515375	Woodward EHV 345kv	1	345		125		1475/1623
20041	701	10933	OGE	Balanced Portfolio			Install 2nd 345/138 kV transformer at Woodward EHV	5/19/2014	M	24	515376	Woodward EHV 138kv	515375	Woodward EHV 345kv	2	345/138				448/493
20043	701	10937	OGE	Balanced Portfolio	$14,880,000	OGE	Build midpoint reactor station at interception point of Woodward to Tuco line.	5/19/2014	M		515458	Border				345				560/560
20029	615	10792	OGE	ITP	$5,404,250	OGE	Convert 13.64 miles of 69 kV to 138 kV from Crescent to Cottonwood Creek and install terminal equipment at Cottonwood Creek, completing loop from Crescent to Twin Lakes (WFEC).	6/1/2014	M	18	515377	Crescent 138kv	514827	COTTONWOOD CREEK 138	1	138			13.64	84/104
	897	11191	OGE	zonal - sponsored			New Distribution Sub - WR Airport	6/1/2014	M		514888	36 & MERIDIAN 138	514889	CHEMTRON 138	1	138				233/267
	897	11192	OGE	zonal - sponsored			New Distribution Sub - WR Airport	6/1/2014	M		514889	CHEMTRON 138	514925	PENNSYLVANIA 138	1	138				233/267
20100	941	11244	OGE	high priority	$188,000,000	OGE	Build a new 92 mile double circuit 345 kV line with at least 3000 A capacity from the Woodward District EHV substation to the SPS interception from the Hitchland substation. Upgrade the Woodward District EHV substation with the necessary breakers and terminal equipment.	6/30/2014	M		523097	Hitchland Interchange 345 kV	515375	Woodward EHV 345kv	1	345		92		1792/1792
20100	941	11245	OGE	high priority			Build a new 92 mile double circuit 345 kV line with at least 3000 A capacity from the Woodward District EHV substation to the SPS interception from the Hitchland substation. Upgrade the Woodward District EHV substation with the necessary breakers and terminal equipment.	6/30/2014	M		523097	Hitchland Interchange 345 kV	515375	Woodward EHV 345kv	2	345		92		1792/1792
20121	942	11246	OGE	high priority	$151,500,000	OGE	Build a new 79 mile double circuit 345 kV line with at least 3000 A capacity from the Woodward District EHV substation to the Kansas/Oklahoma state border towards the Medicine Lodge substation. Upgrade the Woodward District EHV substation with the necessary breakers and terminal equipment.	12/31/2014	M		539801	Flat Ridge 345 kV	515375	Woodward EHV 345kv	1	345		79		1792/1792
20121	942	11247	OGE	high priority			Build a new 79 mile double circuit 345 kV line with at least 3000 A capacity from the Woodward District EHV substation to the Kansas/Oklahoma state border towards the Medicine Lodge substation. Upgrade the Woodward District EHV substation with the necessary breakers and terminal equipment.	12/31/2014	M		539801	Flat Ridge 345 kV	515375	Woodward EHV 345kv	2	345		79		1792/1792
200163	943	11248	PW	high priority	$60,590,000	PW	Build a new 30.4 mile double circuit 345 kV line with at least 3000 A capacity from the Thistle substation to the Kansas/Oklahoma state border towards the Woodward District EHV substation.	12/31/2014	M		539801	Flat Ridge 345 kV	515375	Woodward EHV 345kv	1	345		30.4		1792/1792
200163	943	11249	PW	high priority			Build a new 30.4 mile double circuit 345 kV line with at least 3000 A capacity from the Thistle substation to the Kansas/Oklahoma state border towards the Woodward District EHV substation.	12/31/2014	M		539801	Flat Ridge 345 kV	515375	Woodward EHV 345kv	2	345		30.4		1792/1792

200163	946	11258	PW	high priority	$163,498,000	PW	Build a new 78 mile double circuit 345 kV line with at least 3000 A capacity from the Wichita substation to ITC Great Plains' Thistle 345 kV substation.	12/31/2014	M		539801	Flat Ridge 345 kV	532796	WICHITA 345 KV	1	345		77.5		1792/1792
200163	946	11259	PW	high priority			Build a new 78 mile double circuit 345 kV line with at least 3000 A capacity from the Wichita substation to ITC Great Plains' Thistle 345 kV substation.	12/31/2014	M		539801	Flat Ridge 345 kV	532796	WICHITA 345 KV	2	345		77.5		1792/1792
20130	1042	11383	SPS	ITP	$177,000	SPS	Tap the Kress - Plainview City 115 kV line with North Plainview substation. Convert North Plainview substation to 115 kV.	2/28/2014	M		525257	North Plainview Sub 115 kV				115				
20130	1043	11384	SPS	ITP	$150,000	SPP	Tap the Kress - Plainview City 115 kV line with Kress Rural. Convert Kress Rural substation to 115 kV.	2/28/2014	M		525225	Kress Rural Sub 115 kV				115				157/173
20084	839	11107	SPS	ITP	$15,538,805	SPS	Build new 22 mile Kress Interchange - Kiser 115 kV.	2/28/2014		36	525192	Kress Interchange 115 kV	525271	Kiser Sub 115 kV	1	115		22		157/173
	839	50450	SPS	ITP	$4,500,000	SPP	Build new Kiser substation. Install a 115/69 kV transformer and 69 kV terminal equipment to connect to the local 69 kV system.		6/1/2014	36	525271	Kiser Sub 115 kV	525272	Kiser Sub 69 kV	1	115/69				84/97
20084	840	11109	SPS	ITP	$6,590,414	SPS	Build new 10 mile Cox - Kiser 115 kV line unit.	12/31/2014	M	36	525326	Cox Interchange 115 kv	525271	Kiser Sub 115 kV	1	115		10		157/173
20043	704	10936	SPS	Balanced Portfolio	$140,588,182	SPS	Build new 345 kV line from Tuco to OGE's Border station near TX/OK Stateline. Install line reactor outside Border station and line reactors at Tuco.	5/19/2014	M		525832	TUCO Interchange 345 kV	515458	Border	1	345		125		1792/1972
20130	764	11007	SPS	ITP	$2,230,200	SPS	Upgrade Happy County 115/69 kV Transformer #1 to 84/96 MVA	6/1/2014		28	525154	Happy Interchange 115 kV	525153	Happy Interchange 69 kV	1	115/69				84/96
20130	764	11009	SPS	ITP	$2,230,200	SPS	Upgrade Happy County 115/69 kV Transformer #2 to 84/96 MVA	6/1/2014		28	525154	Happy Interchange 115 kV	525153	Happy Interchange 69 kV	2	115/69				84/96
20130	833	11100	SPS	ITP	$1,890,000	SPP	Construct 115 kV bus at NE-Hereford Interchange to accept two transformer terminals, two 115 kV line terminals, and one future 115 kV line terminal. Add 2nd 115/69 kV 84/96 MVA transformer.	6/1/2014		30	524567	Northeast Hereford Interchange 115 kV	524573	Northeast Hereford Interchange 69 kV	2	115/69				84/96
20088	835	11102	SPS	ITP	$2,500,000	SPS	Move load at East Clovis from 69 kV bus to 115 kV bus.	6/1/2014	M	36	524772	East Clovis Sub 69 kV	524773	East Clovis Sub 115 kV	1	115				146/161
	884	11173	SPS	ITP	$6,761,086	SPS	Add 2nd transformer Eddy Co 230-115 kV CKT 2		6/1/2014	30	527800	Eddy County Interchange 230 kV	527798	Eddy County Interchange 115 kV	2	230/115				168/168
20099	940	11241	SPS	high priority	$8,883,760	SPS	Install a second 345/230 kV transformer at Hitchland substation.	6/30/2014	M		523097	Hitchland Interchange 345 kV	523095	Hitchland Interchange 230 kV	2	345/230				560/560
20099	940	11242	SPS	high priority	$38,790,727		Build 30 mile double circuit 345 kV line with at least 3000 A capacity from the Hitchland substation to the OGE interception point from the Woodward District EHV substation. Upgrade the Hitchland substation with the necessary breakers and terminal equipment.	6/30/2014	M		523097	Hitchland Interchange 345 kV	515375	Woodward EHV 345kv	1	345		30		1792/1792
20099	940	11243	SPS	high priority			Build 30 mile double circuit 345 kV line with at least 3000 A capacity from the Hitchland substation to the OGE interception point from the Woodward District EHV substation. Upgrade the Hitchland substation with the necessary breakers and terminal equipment.	6/30/2014	M		523097	Hitchland Interchange 345 kV	515375	Woodward EHV 345kv	2	345		30		1792/1792
20130	1034	11359	SPS	ITP	$2,362,500	SPP	Convert Hereford Interchange - NE-Hereford Interchange 69 kV line Z72 to 115 kV service	6/1/2014		18	524606	Hereford Interchange 115 kV	524567	Northeast Hereford Interchange 115 kV	1	115			4.8	87/95
	30353	50402	SPS	ITP	$8,270,297	SPS	Modify 230 kV bus to provide termination points for moving 230 kV lines from Lea County Sub to Hobbs. Retire Lea County 150 MVA 230/115 kV transformer. Install new 240 MVA 230/115 kV transformer at Hobbs.		1/1/2014	24	527894	Hobbs Interchange 230 kV	527891	Hobbs Interchange 115 kV	2	230/115				240/240
20003	361	10471	WFEC	ITP	$2,000,000	WFEC	Upgrade 7 miles to 795 ACSR from Fletcher SW to Marlow Junction 69 kV.	6/1/2014	M	16	520911	FLETCHER	520990	MARLOW JCT	1	69	7			72/72
20132	847	11117	WFEC	ITP	$6,705,000	SPP	Upgrade 15-mile Wakita -Nash 69 kV line from 1/0 to 336.4 ACSR	6/1/2014	M	18	521008	NSAH	521085	WAKITA	1	69	14.9			53/65
20030	30039	50045	WFEC	ITP	$243,000	SPP	Install 6 Mvar capacitor at Esquandale 69 kV.	6/1/2014	M	12	520904	ESQUANDALE				69				6 Mvar
20003	137	10175	WFEC	ITP	$8,000,000	WFEC	Reconductor 18.9 mile Wakita - Hazelton Junction 69 kV from 1/0 ACSR to 336.4 ACSR for new rating of 53/65 MVA.	12/1/2014	M	10	521085	WAKITA	520938	HAZELTON JCT	1	69	18.9			53/65
20003	241	10307	WFEC	ITP	$2,000,000	WFEC	Rebuild 2 mile Anadarko - Georgia 138 kV line from 556 to 1113 ACSR.	12/1/2014	M	12	520814	ANADARKO	520923	GEORGIA	1	138	2			212/264
20003	242	10308	WFEC	ITP	$3,240,000	SPP	Elmore - Paoli Rebuild 3/0 to 336 ACSR - 10.8 miles.	12/2/2014	M	12	520898	ELMORE	521022	PAOLI	1	69	10.8			47/61
20003	311	10401	WFEC	ITP	$2,065,000	SPP	Convert 5 mile Acme - Franklin from 69 kV to 138 kV.	12/31/2014	M	12	520917	FRANKLIN SW	520802.1	ACME	1	138			4.9	132/163
	30369	10425	WR	ITP	$12,197,900	WR	Install second 138/115 kV transformer at Moundridge. Operate both 138/115 kV transformers normally closed.		1/1/2014	24	533013	MOUNDRIDGE 138 KV	533429	MOUNDRIDGE 115 KV	2	138/115				110/125
20086	534	10679	WR	ITP	$1,875,000	WR	Replace Halstead 138/69 kV transformer with 100/110 MVA unit.	6/1/2014	M	24	533012	HALSTEAD SOUTH BUS 138 KV	533736	HALSTEAD 69 KV	1	138/69				100/110
20131	1073	11413	WR	ITP	$11,354,999	WR	Tap Litchfield - Marmaton 161 kV line at new Franklin substation	6/1/2014	M		533876	FRANKLIN				161				211/211
20131	1073	11444	WR	ITP	$2,539,659	WR	New 161/69 kV transformer at Franklin	6/1/2014	M		533876	FRANKLIN	532938	FRANKLIN	1	161/69				100/110
20059	30226	50230	WR	transmission service	$607,500	WR	Add 6 Mvar Cap bank at Altoona East	6/1/2014	M	18	533673	ALTOONA EAST 69 KV				69				6 Mvar
	30336	50383	WR	Zonal Reliability	$957,660	WR	Install 1 stage 15 Mvar capacitor at Northwest Manhattan 115 kV substation		6/1/2014	12	533347	NORTHWEST MANHATTAN				115				15 Mvar
	30349	50398	WR	ITP	$25,845,600	WR	Replace Auburn 230/115 kV transformer with 400/440MVA unit.		6/1/2014	24	533151	AUBURN ROAD 115 KV	532851	AUBURN ROAD 230 KV	1	230/115				400/440
20103	946	11497	WR	high priority	$5,262,000	WR	Upgrade the Wichita substation with the necessary breakers and terminal equipment to accommodate two new 345 kV circuits form the new Thistle 345 kV substation	12/31/2014	M		532796	WICHITA 345 KV				345				1792/1792
2015																				
20104	947	11261	AEP	transmission service	$4,400,000	AEPW	Rebuild 4.33 of 795 ACSR with 1590 ACSR.	6/1/2015	M	20	509806	ONETA 138KV	509786	BROKEN ARROW NORTH - SOUTH TAP	1	138	4.33			284/316
	30130	50136	CUS	zonal - sponsored	$750,000	CUS	Install 30 MVAR capacitor at Twin Oaks Substation	6/1/2015	M	24	549933	Twin Oaks 69				69				30 Mvar
	636	10834	DETEC	zonal - sponsored	$8,894,000	SPP	Install new 138 kV line from Chireno to Martinsville	6/1/2015							1	138		9.5		215/225
20123	422	10548	EDE	ITP	$2,973,000	EDE	Reconductor 9.85 miles of 69 kV 1/0 Cu between Sub #170 and Sub #345 with 556 ACSR	6/1/2015	M	24	547542	SUB 170 - NICHOLS ST.	547576	SUB 345 - REPUBLIC NORTHEAST	1	69	9.85			72/72
20123	422	50352	EDE	ITP	$476,500	EDE	Reconductor 1.55 miles of 69 kV 1/0 Cu between Sub #451 and Sub #359 with 556 ACSR	6/1/2015	M	24	547443	SUB 451 - REPUBLIC HINES STREET	547580	SUB 359 - REPUBLIC EAST	1	69	1.55			72/72

20123	422	50348	EDE	ITP	$1,100,500	EDE	Reconductor 3.58 miles of 69 kV 1/0 Cu between Sub #345 and Sub #451 with 556 ACSR	6/1/2015	M	24	547576	SUB 345 - REPUBLIC NORTHEAST	547443	SUB 451 - REPUBLIC HINES STREET	1	69	3.58			72/72
	334	10431	GMO	zonal - sponsored	$7,096,402	GMO	Radial Line From Greenwood to a new distribution sub at Lone Jack	6/1/2015	M	24	541316	Lone Jack	541218	Greenwood Energy Center 161 KV	1	161		4		223/245
	414	10540	KCPL	zonal - sponsored	$3,756,500	KCPL	New Cedar Niles-Clare 161 kV Line & Clare substation	6/1/2015	M	24	543054	CEDAR NILES 161 KV	543131	CLARE 161 KV	1	161		4.84		293/335
20042	703	10935	KCPL	Balanced Portfolio	$49,824,000	KCPL	Tap Nashua 345kV bus in Hawthorn - St. Joseph 345 kV line. Build new 345 kV line from Iatan to Nashua.	6/1/2015	M		542982	IATAN 345 KV	542980	PAOLA 345KV	1	345		30		2546/2546
20042	703	10945	KCPL	Balanced Portfolio	$4,620,000	KCPL	Install new 345/161 kV transformer at Nashua	6/1/2015	M		542980	PAOLA 345KV	543028	NASHUA 161 KV	1	345/161				400/440
	30345	50391	LES	zonal - sponsored	$7,675,000	LES	Build 5.5 mile 115 kV line from SW 7th & Bennet to 40th & Rokeby	5/31/2015			650244		650250	40th & Rokeby	1	115		5.5		
20127	30286	50320	NPPD	ITP	$8,000,000	NPPD	Add second parallel 3-winding transformer at Stegall	6/1/2015	M	48	659206	STEGALL TRANSFORMER	659135	STEGALL	2	345/230				400/400
	30286	50400	NPPD	ITP	$5,239,000	NPPD	Build 3.3 mile tie line between Stegall 230 kV and 345 kV substations	6/1/2015	6/1/2015	48	652573	STEGALL 230 kV	659317	Stegall Tie 230 kV	2	230		3.3		
20084	791	11040	SPS	ITP	$10,480,445	SPS	Tap the Potter Interchange - Plant X Station 230 kV line for new Newhart Substation and install 230/115 kV, 150/173 MVA transformer.	4/30/2015	M	24	525461	Newhart Interchange 230 kV	525460	Newhart Interchange 115 kV	1	230/115				250/250
20084	791	11041	SPS	ITP	$7,707,929	SPS	New 19 mile Swisher County Interchange - Newhart 230 kV line.	4/30/2015	M	36	525461	Newhart Interchange 230 kV	525213	Swisher County Interchange 230 kV	1	230		19		492/541
20084	791	11042	SPS	ITP	$10,798,110	SPS	New 18 mile Kress - Newhart 115 kV line.	4/30/2015	M	36	525192	Kress Interchange 115 kV	525460	Newhart Interchange 115 kV	1	115		18		157/173
20084	791	11043	SPS	ITP	$13,500,000	SPP	New 24 mile Castro County Interchange - Newhart 115 kV line.	4/30/2015	M	36	524746	Castro County Interchange 115 kV	525460	Newhart Interchange 115 kV	1	115		24		157/173
20084	791	11044	SPS	ITP	$5,204,131	SPP	Build new 4 mile Hart Industrial Substation - Newhart Substation 115 kV line.	4/30/2015	M	15	525124	Hart Industrial 115 kV	525460	Newhart Interchange 115 kV	1	115		4		157/173
20084	791	11045	SPS	ITP	$11,599,769	SPS	New 15 mile Lampton Interchange - Hart Industrial Substation 115 kV line.	4/30/2015	M	36	525414	Lamton Interchange 115 kV	525124	Hart Industrial 115 kV	1	115		15		157/173
20130	1001	11315	SPS	ITP	$1,680,000	SPP	Construct approximately 2 miles of new 115 kV line from Randall Co. with 795 ACSR. Tie new line into V70 around (not to) Osage Substation. Add new 115 kV terminal at Randall Co. Interchange. (Re-build Randall 115 kV bus to breaker and one-half design.) Re-Conductor V70 with 795 ACSR. Remove line termination at Osage Substation. Upgrade terminal equipment and reset relays at South Georgia Interchange. Remove V04 termination from Osage and remove circuit back to Manhattan Tap (remove 3-terminal condition). Remove circuits V67 & V05 terminations from Osage and tie together around Osage Substation. Leave only V43 & T75 terminated at the Osage Substation.	6/1/2015	M	24	524364	Randall County Interchange 115 kV	524322	South Georgia Interchange 115 kV	1	115		2		160/160
	1003	11317	SPS	ITP	$3,961,322	SPS	Upgrade Grassland 230/115 kV transformer Ckt 1 to 150/165 MVA.		6/1/2015	24	526677	Grassland Interchange 230 kV	526676	Grassland Interchange 115 kV	1	230/115				150/165
20130	1036	11372	SPS	ITP	$500,000	SPP	Convert 1.04 miles of Z33 to 115 kV service by tapping the 115 kV line from Sunset Substation to Coulter Interchange at I-40 & Soncy Street. At Soncy Sub split the converted Z33 line off the 69 kV bus and terminate to a new 115/13.2 kV transformer to serve the Soncy distribution load. Install new 115/13.2 kV distribution transformer. Leave 69 kV underground cable to Lawrence Park to be fed by Y72 out of Coulter Interchange.	6/1/2015	M	18	524252	Soncy Tap 115 kV	524254	New Soncy 115 kV	1	115			1.04	157/173
	30332	50379	SPS	ITP	$1,349,807	SPS	Install 14.4 Mvar capacitor at Drinkard 115 kV		6/1/2015	12	528589	Drinkard Sub 115 kV				115				14.4 Mvar
20003	399	10519	WFEC	ITP	$1,347,000	SPP	Upgrade line from 1/0 to 336.4, 4.85 miles	6/1/2015	M	12	520979	LINDSAY SW	521087	WALLVILLE	1	69	4.85			53/65
20132	673	10879	WFEC	ITP	$3,712,500	SPP	Reconductor 11 miles of 1/0 with 336.4 ACSR	6/1/2015	M	24	520829	BRADLEY	520979	LINDSAY SW	1	69	11			53/65
20132	846	11115	WFEC	ITP	$14,737,500	SPP	Rebuild 25.2-mile Anadarko - Blanchard 69 kV line as 138 kV.	6/1/2015	M	36	520814	ANADARKO	520828	BLANCHARD	1	138			25.2	212/264
20114	1027	11351	WFEC	transmission service	$150,000	WFEC	Replace CTs	6/1/2015	M		521129	BLUE CANYON WIND 5	521024	PARADISE	1	138				163/163
20003	311	10403	WFEC	ITP	$1,577,000	SPP	Convert 8 mile OU - West Norman from 69 kV to 138 kV.	12/31/2015	M	12	521095	WEST NORMAN	521104	OU SWITCH 4	1	138			8.3	183/228
	624	10812	WR	ITP	$6,969,136	WR	Rebuild 1.83 mile Fort Junction - West Junction City 115 kV line that follows the path of the JEC - Summit 345 kV line. Remove old double circuit and West Junction City Junction (East) - West Junction City 115 kV line.		6/1/2015	24	533328	FORT JUNCTION SWITCHING STATION 115	533342	WEST JUNCTION CITY 115 KV	1	115	1.83			240/240
2016																				
20122	479	10616	AEP	ITP	$14,500,000	AEP	Rebuild 12.63 miles of the Georgia Pacific - Keatchie 138 kV line from 795 ACSR to 1272 ACSR	6/1/2016	M	24	509064	GEORGIA-PACIFIC	509050	KEATCHIE REC	1	138	12.63			287/287
20000	511	10656	AEP	ITP	$11,000,000	AEP	Install new 345/161 kV transformer at Osage Creek	6/1/2016	M	60	338683	Osage Creek 345 kV	338682	Osage Creek (AECC)	1	345/161				400/440
20000	511	10659	AEP	ITP	$24,500,000	AEP	Install 9 miles of 345 kV line from Shipe Road to East Rogers	6/1/2016	M	60	506979	Shipe Road 345	506982	East Rogers 345	1	345		9		1366/1915
20000	511	10660	AEP	ITP	$65,500,000	AEP	Install 32 miles of 345 kV line from East Rogers to Osage Creek	6/1/2016	M	60	506982	East Rogers 345	338683	Osage Creek 345 kV	1	345		32		1366/1915
20122	30296	50334	AEP	ITP	$1,166,400	AEP	Install a new 28.8 MVAR capacitor bank at Winnsboro 138 kV substation.	6/1/2016	M	18	508317	Winnsboro 138 kV				138				28.8 Mvar
20122	30298	50336	AEP	ITP	$1,166,400	AEP	Install 28.8 MVAR capacitor bank at Logansport 138 kV substation.	6/1/2016	M	18	509071	LOGANSPORT 138KV				138				28.8 Mvar
	418	10544	KCPL	zonal - sponsored	$1,632,300	KCPL	New Waldron sub cut-in	6/1/2016	M	18	543030	WALDRON5 161 KV			1	161				293/293
20002	518	10663	OGE	ITP	$250,000	OGE	Increase rating of HSL East kV to HSL West 69 kV line to 143 MVA. Planned by OGE in 2008.	6/1/2016	M	12	514927	HSLEAST 69	514937	HORSESHOE LAKE 69	1	69				134/143
	805	11067	SPS	ITP	$4,120,585	SPS	Add 2nd 115/69 kV transformer at Bowers.		6/1/2016	24	523748	Bowers Interchange 115 kV	523747	Bowers Interchange 69 kV	2	115/69				84/96

	805	50453	SPS	ITP	$13,286,935	SPS	Build new 38-mile 115 kV line from Bowers Interchange - Howard. At Bowers, install 115 kV breaker positions to serve the new transmission line, converting to a 3-Breaker Ring.		6/1/2016	36	523748	Bowers Interchange 115 kV	523797	Howard 115 kV	1	115		38		180/199
20108	30290	50328	WR	transmission service	$700,000	WR	Replace disconnect switches, wavetrap and CT	6/1/2016	M		533012	HALSTEAD SOUTH BUS 138 KV	533065	SEDGWICK COUNTY NO. 12 COLWICH 138 KV	1	138				160/160
2017																			
20123	537	10685	EDE	ITP	$7,369,319	EDE	Build new 6-mile Sub 383 - Monett 5 161 kV line as part of multi line upgrade	6/1/2017	M	48	547480	SUB 383 - MONETT	547510	SUB 470 - South Monett 161 kV	1	161		6		218/268
20123	537	50350	EDE	ITP	$324,000	SPP	Build new 0.72-mile 69 kV line (one of double circuit) from new Monett S. substation to existing 69 kV on SW corner of city of Monett	6/1/2017	M	48	547402	SUB 416 - MONETT CITY EAST	547511	SUB 470 - South Monett 69kV	1	69		0.72		75/92
20123	537	50353	EDE	ITP	$4,149,000	SPP	Build new 1.06-mile 69 kV line (second of double circuit for approx 0.72 mi, then single circuit for 0.34 mi) from new Monett S. substation to existing 69 kV on south side of city of Monett which will tie/feed radially to substation PUR390.	6/1/2017	M	48	547404	SUB 390 - PURDY SOUTH	547511	SUB 470 - South Monett 69kV	1	69		1.06		27/32
20123	537	50326	EDE	ITP	$2,250,000	SPP	Install 3-winding transformer connecting Monett 376 161 kV bus to Monett 470 69 kV bus as part of multi line upgrade	6/1/2017	M	48	547510	SUB 470 - South Monett 161 kV	547511	SUB 470 - South Monett 69kV	1	161/69				100/100
20123	537	50316	EDE	ITP	$468,000	SPP	Build new 1.04-mile 69 kV line from new Monett S. substation to existing 69 kV trunk line	6/1/2017	M	48	547511	SUB 470 - South Monett 69kV	547514	Monett SW PT2 2 69kV	1	69		1.04		75/92
20097	938	11238	GMO	high priority	$231,600,000	GMO	Build a new 105 mile 345 kV line with at least 3000 A capacity from Sibley to a new Maryville substation. Upgrade the Sibley substation with the necessary breakers and terminal equipment.	6/1/2017	M	72	541201	Sibley 345 KV	541197	Maryville 345 kV	1	345		105		2496/2496
20097	938	11239	GMO	high priority	$152,640,000	GMO	Build a new 345 kV substation at Maryville with a ring bus and necessary terminal equipment. Build a new 65 mile 345 kV line with at least 3000 A capacity from the new Maryville substation to the Missouri/Nebraska state border towards OPPD's Nebraska City substation.	6/1/2017	M	72	645458	Sub 3458 (Neb Cty)	541197	Maryville 345 kV	1	345		65		2496/2496
	30375	50442	NPPD	ITP	$92,660,000	NPPD	Build new 345 kV Transmission Line from GGS 345 kV Substation to a new Cherry County 345 kV Substation (76 miles).		1/1/2017	72	640500	Cherry County 345 kV	640183	Gerald Gentleman Station	1	345		76		1792/1792
	30375	50443	NPPD	ITP	$1,380,000	NPPD	With this project, stability limit for GGS is never reached, and there no voltage issues. Also, the GGS interface limit will be impossible to manage without this project. Mitigates wind curtailment in Future 1. Additionally in Future 2, this project has a high B/C and mitigates significant wind curtailment in Cherry County.		1/1/2017	72	640183	Gerald Gentleman Station				345				
	30375	50444	NPPD	ITP	$6,000,000	NPPD	Build new Cherry County 345 kV Substation.		1/1/2017	72	640500	Cherry County 345 kV				345				
	30375	50445	NPPD	ITP	$172,360,000	NPPD	Build new 345 kV Transmission Line from new Cherry County 345 kV Substation to new 345 kV Holt County Substation. (Estimated 146 miles).		1/1/2017	72	640500	Cherry County 345 kV	640503	Holt County 345 kV	1	345		146		1792/1792
	30375	50446	NPPD	ITP	$16,880,000	NPPD	Construct new Holt Co 345 kV substation.		1/1/2017	72	640503	Holt County 345 kV				345				
20137	1134	11496	OGE	transmission service	$15,000,000	OGE	Install third 345/138 kV transformer in Northwest Sub	6/1/2017		40	514880	NORTHWEST 345	514879	NORTHWEST 138	3	345/138				493/493
20017	30160	50168	OGE	transmission service	$14,000,000	OGE	Convert Ft. Smith 161KV to 1-1/2 breaker design and install 3rd 500-161KV transformer bank.	6/1/2017	M	32	515305	FT SMITH 500	515300	FT SMITH 161	5	500/161				493/493
20017	30164	50172	OGE	transmission service	$100,000	OGE	Upgrade CT	6/1/2017	M	9	515336	VBI 69	504032	VBI NORTH	1	161				72/72
20098	939	11240	OPPD	high priority	$19,796,666	OPPD	Build a new 11.2 mile 345 kV line with at least 3000 A capacity from the Nebraska City substation to the Missouri/Nebraska state border towards KCPL's Maryville substation. Upgrade the Nebraska City substation with the necessary breakers and terminal equipment.	6/1/2017	M		645458	Sub 3458 (Neb Cty)			1	345		11.2		2496/2496
20130	1004	11318	SPS	ITP	$4,762,800	SPS	Upgrade existing Swisher 230/115 kV transformer to 252 MVA	6/30/2017	M	24	525213	Swisher County Interchange 230 kV	525212	Swisher County Interchange 115 kV	1	230/115				252/252
	1033	11358	SPS	ITP	$6,921,313	SPS	Reconductor 4.1 miles of 6.1 miles from Randall County to South Georgia 115 kV.		6/1/2017	18	524364	Randall County Interchange 115 kV	524322	South Georgia Interchange 115 kV	1	115	4.1			246/270
	30330	50377	SPS	ITP	$466,889	SPS	Install second stage 14.4 Mvar capacitor at Etter Rural 115 kV substation.		6/1/2017	12	523256	Etter Rural Sub 115 kV				115				14.4 Mvar
	1159	11523	SWPA	ITP - non OATT	$225,000	SPP	Upgrade switches - 1200 A rated		6/1/2017		505472	Table Rock	300491	Redwood 161 kV	1	161				
2018																			
	879	11158	AEP	ITP	$8,764,621	AEP	Rebuild 9.0 mile Prattville-Bluebell 138 kV line from 795 ACSR to 1590 ACSR. New summer ratings 287/287 limited by breaker, switches, CTs, wave trap.		6/1/2018	24	515242	BLUEBELL 138	509758	PRATTVILLE	1	138	9			287/287
	30361	50413	AEP	ITP	$81,514,845	AEP	Build new 46.5 mile 345 kV line from Elk City to Gracemont (AEP portion).		3/1/2018	60	700345	Elk City 345 kV	515800	Gracemont 345kv	1	345		46.5		1792/1792
	30361	50414	AEP	ITP	$18,060,547	AEP	Expand Elk City substation (or build new station). Install a 345/230 kV 675 MVA transformer at Elk City.		3/1/2018	60	700345	Elk City 345 kV	511490	ELK CITY 230KV	1	345/230				675/675
	814	11076	CUS	zonal - sponsored	$1,750,000	CUS	Rebuild James River to South Highway 65 69 kV	6/1/2018	M	24	549904	James River 69	549908	South Highway 65 69	1	69	3.8			153/159
	815	11077	CUS	zonal - sponsored	$956,000	CUS	Rebuild South Highway 65 to Sunset 69 kV	6/1/2018	M	24	549907	Sunset 69	549908	South Highway 65 69	1	69	1.9			153/159
20123	677	10891	EDE	ITP	$3,591,000	SPP	Tear down the Riverton - Joplin 59 69 kV line, rebuild as 161 kV from Stateline to outside Joplin 59 substation	6/1/2018	M	48	547498	SUB 439 - STATELINE	547900	Joplin 59 161 kV	1	161			5.32	218/268
20123	677	10894	EDE	ITP	$2,011,500	SPP	Tear down and rebuild Pillsbury - Reinmiller 69 kV as 161 kV	6/1/2018	M	48	547685	SUB 447 - 32ND & STEPHENS	547500	SUB 393 - REINMILLER	1	161			2.98	218/268
20123	677	50322	EDE	ITP	$1,647,000	SPP	Rebuild Joplin 422 - Joplin 59 69 kV as 161 kV	6/1/2018	M	48	547607	SUB 422 - JOPLIN 24TH & CONNECTICUT	547900	Joplin 59 161 kV	1	161			2.44	218/268
20123	677	50323	EDE	ITP	$1,201,500	SPP	Rebuild Joplin 422 - Pillsbury 69 kV as 161 kV	6/1/2018	M	48	547607	SUB 422 - JOPLIN 24TH & CONNECTICUT	547685	SUB 447 - 32ND & STEPHENS	1	161			1.78	218/268
20123	677	50324	EDE	ITP	$749,250	SPP	Rebuild Joplin 391 - Gateway 69kV as 161 kV	6/1/2018	M	48	547593	SUB 391 - JOPLIN SOUTHEAST	547551	SUB 258 - GATEWAY SOUTH	1	161			1.11	218/268
20123	677	50325	EDE	ITP	$4,968,000	SPP	Rebuild Gateway - Joplin 389 69 kV as 161 kV	6/1/2018	M	48	547551	SUB 258 - GATEWAY SOUTH	547483	SUB 389 - JOPLIN SOUTHWEST	1	161			7.36	218/268

	30365	50422	GMO	ITP	$2,983,952	KCPL	Reconductor 3.21 miles from Blue Springs to Prairie Lee 161 kV to 795 ACSS. Upgrade substation equipment to 2000 Amps.		6/1/2018	24	541211	Blue Spring South 161 KV	541206	Prairie Lee 161 KV	1	161	3.21			558/558
	30365	50423	GMO	ITP	$2,399,248	KCPL	Reconductor 2.5 mile from Blue Springs South - Blue Springs East 161 kV to 795 ACSS. Upgrade substation equipment to 2000 Amps.		6/1/2018	24	541205	Blue Springs East 161 KV	541211	Blue Spring South 161 KV	1	161	2.5			558/558
	30367	50425	ITCGP	ITP	$28,580,803	ITCGP	Build new 345 kV line from Elm Creek to Summit (ITCGP portion)		3/1/2018	60	750011	Elm Creek 345 kV	532773	SUMMIT 345 KV	1	345		28		1792/1792
	30367	50426	ITCGP	ITP	$5,403,707	ITCGP	Install new 345/230 kV transformer at Elm Creek.		3/1/2018	60	750011	Elm Creek 345 kV	539639	Elm Creek Substation	1	345/230				448/448
	30367	50427	ITCGP	ITP	$8,015,964	ITCGP	Bus work on 345 kV side at Elm Creek substation.		3/1/2018	60	750011	Elm Creek 345 kV			1	345				
	30367	50428	ITCGP	ITP	$697,163	ITCGP	Bus work on 230 kV side at Elm Creek substation.		3/1/2018	60	539639	Elm Creek Substation				230				
20107	30299	50337	MKEC	transmission service	$150,000	MKEC	Replace CTs and relays at Jewell substation and Smith Center substation	6/1/2018	M		539669	Jewell 3 115	539693	Smith Center 115 KV	1	115				80/88
	30361	50419	OGE	ITP	$75,486,000	OGE	Build new 46.5 mile 345 kV line from Elk City to Gracemont (OGE portion).		3/1/2018	60	700345	Elk City 345 kV	515800	Gracemont 345kv	1	345		46.5		1792/1792
	30355	50404	SPS	ITP	$50,068,309	SPS	Build 44 mile new 230 kV line from Wolfforth to Grassland and install terminal equipment at Grassland and Wolfforth substations		3/1/2018	54	526525	Wolfforth Interchange 230 kV	526677	Grassland Interchange 230 kV	1	230		44		478/478
	1000	11314	SPS	ITP	$100,240	SPS	Upgrade line trap at both Jones Bus #2 and Lubbock South Interchange.		6/1/2018	12	526338	Jones Station Bus#2 230 kV	526269	Lubbock South Interchange 230 kV	2	230				478/502
	1140	11502	SPS	ITP	$37,490,796	SPS	New 345/115 kV transformer between Tuco and Stanton.		6/1/2018	36	525836	New-Sub-EH1 345kV	525837	New-Sub-EH1 115kV	1	345/115				458/474
	1140	11503	SPS	ITP			Build new 345kV line between Tuco and high side of new transformer between Tuco and Stanton.		6/1/2018	36	525832	TUCO Interchange 345 kV	525836	New-Sub-EH1 345kV	1	345		15		1792/1792
	1140	11504	SPS	ITP			Build new 115kV line between Stanton and low side of new transformer between Tuco and Stanton.		6/1/2018	36	525837	New-Sub-EH1 115kV	526076	Stanton Sub 115 kV	1	115		17		174/192
	1146	11509	SPS	ITP	$3,644,914	SPS	Upgrade the Carlisle 230/115/13.2 transformer - 250 MVA.		6/1/2018	24	526161	Carlisle Interchange 230 kV	526160	Carlisle Interchange 115 kV	1	230/115				250/250
	30377	50454	SPS	ITP	$1,581,080	SPS	Reconductor 1.5 miles line from Indiana to Stanton.		6/1/2018	24	526146	Indiana Sub 115 kV	526076	Stanton Sub 115 kV	1	115	1.5			240/240
	30377	50455	SPS	ITP	$1,604,810	SPS	Reconductor 4 miles from Indiana to SP-Erskine.		6/1/2018	24	526146	Indiana Sub 115 kV	526109	South Plains REC-Erskine 115 kV	1	115	4			240/240
	30367	50429	WR	ITP	$62,110,152	WR	Build new 345 kV line from Elm Creek to Summit (Westar portion).		3/1/2018	60	750011	Elm Creek 345 kV	532773	SUMMIT 345 KV	1	345		30		1792/1792
2019																				
	30374	50440	NPPD	ITP	$61,205,000	NPPD	Build a new 50 mile 345 kV line from Hoskins to Neligh		3/1/2019	60	640226	Hoskins	750013	Neligh 345 kV	1	345		40		1792/1792
	30374	50441	NPPD	ITP	$35,497,400	NPPD	Construct new substation at Neligh. Install a new 345/115 kV transformer at Neligh.		3/1/2019	60	750013	Neligh 345 kV	640293	Neligh	1	345/115				458/474
20110	910	11207	OGE	transmission service	$225,000	OGE	Replace wavetrap	6/1/2019	M	12	514839	BRYANT 138	514835	MEMORIAL 138	1	138				478/478
20110	1021	11343	OGE	transmission service	$18,000,000	OGE	Add 3rd 345kV line from Arcadia to Redbud	6/1/2019	M		514908	ARCADIA 345	514909	REDBUD 345	3	345		5		1248/1426
	1139	11501	SPS	ITP	$3,528,552	SPS	Rebuild 6 miles of 115 kV line from Lubbock South Interchange to Allen		6/1/2019	24	526268	Lubbock South Interchange 115 kV	526213	Allen Sub 115 kV	1	115	6			273/300
	1143	11507	SPS	ITP	$3,942,881	SPS	Install a second 230/115/13.2 kV transformer at Lubbock South.		6/1/2019	24	526269	Lubbock South Interchange 230 kV	526268	Lubbock South Interchange 115 kV	2	230/115				252/290
20108	30289	50327	WR	transmission service	$700,000	WR	Replace terminal equipment on East Manhattan - Northwest Manhattan 230 kV line.	6/1/2019	M	12	532861	EAST MANHATTAN 230 KV	532865	NORTHWEST MANHATTAN	1	230				359/359
2020																				
	30210	50439	MKEC	ITP	$9,613,332	MKEC	Reconductor 22.1 mile Harper to Milan Tap 138 kV line.		3/1/2020	36	539668	Harper 138 KV	539675	Milan Tap 138 KV	1	138	22.1			261/314
	1017	11339	OGE	ITP	$341,500	OGE	Replace 800 amp CT and wave trap at Classen substation.		6/1/2020	12	514922	CLASSEN 138	514921	SW 5TAP 138	1	138				268/287
	486	10629	SPS	ITP	$3,644,914	SPS	Upgrade Chaves 230/115 kV ckt 2 to 225/258 MVA.		6/1/2020	24	527483	Chaves County 230 kV	527482	Chaves County 115 kV	2	230/115				250/250
	30376	50447	SPS	ITP	$181,415,883	SPS	Build new 345 kV line from Tuco to Amoco (67 miles).		1/1/2020	72	525832	TUCO Interchange 345 kV	750014	Amoco 345 kV	1	345		67		1792/1792
	30376	50457	SPS	ITP			Build new 100 mile Amoco - Hobbs 345 kV line. Expand the Hobbs substation.		1/1/2020	72	750014	Amoco 345 kV	750015	Hobbs 345 kV	1	345		100		1792/1792
	30376	50451	SPS	ITP			Install new 345/230 kV transformer at Amoco.		1/1/2020	72	750014	Amoco 345 kV	526460	Amoco Switching Station 230 kV (Amoco Slaughter)	1	345/230				448/448
	30376	50452	SPS	ITP			Install new 345/230 kV transformer at Hobbs.		1/1/2020	72	750015	Hobbs 345 kV	527894	Hobbs Interchange 230 kV	1	345/230				448/448
2021																				
	30364	50420	OGE	ITP	$71,876,622	OGE	Build new 49 mile Woodward EHV - Tatonga 345 kV circuit 2 line.		3/1/2021	72	515375	Woodward EHV 345kv	515407	Tatonga 345kv		345		49		1792/1792
	30364	50421	OGE	ITP	$82,139,900	OGE	Build new 61 mile Tatonga - Mathewson 345 kV line.		3/1/2021	72	515407	Tatonga 345kv	4	Mathewson 345 kV	1	345		61		1792/1792
	30364	50456	OGE	ITP	$32,780,617	OGE	Build new 16 mile 345 kV line from Mathweson to Cimarron.		3/1/2021	72	4	Mathewson 345 kV	514901	CIMARRON 345	1	345		16		1792/1792
	30364	50458	OGE	ITP	$20,169,602	OGE	Build new Mathewson 345 kV substation at the intersection of the Woodring-Cimarron and the existing Northwest - Tatonga 345 kV lines.		3/1/2021	72	4	Mathewson 345 kV				345				
	1144	11508	SPS	ITP	$4,220,694	SPS	Build a second 230/115/13.2 kV transformer at Hitchland.		6/1/2021	24	523095	Hitchland Interchange 230 kV	523093	Hitchland Interchange 115 kV	2	230/115				250/250
	1145	11524	SPS	ITP	$4,714,312	SPS	Reconductor 3.98 miles of Carlisle - Murphy 115 kV.		6/1/2021	24	526160	Carlisle Interchange 115 kV	526192	Murphy Sub 115 kV	1	115	3.98			273/300
	756	10998	WR	ITP	$18,343,600	WR	Tap Lawrence Hill-Swissvale 230 kV line near Baldwin Creek substation and install Baldwin Creek 230/115 kV transformer		6/1/2021	24	532858	BALDWIN CREEK	533232	BALDWIN CREEK 115 KV	1	230/115				280/308
2022																				
	451	50415	AECC	ITP	$24,880	AECC	Replace bus at Farmington REC and rebuild 400 feet of the 161 kV line going to Chamber Springs.		6/1/2022	36	504020	FARMINGTON AECC			1	161	0.075			520/729
	451	10583	AEP	ITP	$15,870,489	AEP	Rebuild and reconductor 11.1 mile Chamber Springs-Farmington REC 161 kV line with 2156 ACSR.		6/1/2022	36	506944	CHAMBER SPRINGS 161KV	504020	FARMINGTON AECC	1	161	11.1			520/729
	30362	50416	AEP	ITP	$100,504,688	AEP	Build 55 mile new 345 kV line from Welsh to Lake Hawkins (or Perdue).		3/1/2022	60	700346	Lake Hawkins 345 kV	508359	WELSH	1	345		55		1792/1792
	30362	50417	AEP	ITP	$16,666,456	AEP	Expand Lake Hawkins (or Perdue) substation (or build new station). Install a 345/138 kV transformer at Lake Hawkins (or Perdue).		3/1/2022	60	700346	Lake Hawkins 345 kV	508358	LAKE HAWKINS	1	345/138				675/675

	30366	50424	GMO	ITP	$12,809,443	KCPL	Install new 345/161 kV transformer at new Eastowne sub, tapping the Iatan - St. Joe 345 kV and connecting to the existing 161 kV in the area, switching out Lake Rd. - Alabama 161 kV.		1/1/2022	24	541400	Eastowne 345 kV	541401	Eastowne 161 kV	1	345/161				400/440
	30208	10991	MKEC	ITP	$3,150,000	SPP	Rebuild MKEC portion of the 5.6 mile Clearwater-Milan Tap 115 kV with bundled 1192.5 kcmil ACSR conductor (Bunting)		3/1/2022	24	533036	CLEARWATER 138KV	539675	Milan Tap 138 KV	1	138	5.6			261/314
	757	11000	OGE	ITP	$7,760,000	SPP	Reconductor 12.08 mile FPL Switch - Woodward District 138 kV line to 1590 ASCR.		3/1/2022	24	514785	WOODWARD 138	515785	FPL SWITCH 138	1	138	12.08			404/485
	30363	50418	OGE	ITP	$15,990,000	SPP	Reconductor 26 mile Glass Mountain - Mooreland line to 795 AS33		3/1/2022	36	520999	MOORELAND	514788	GLASS MOUNTAIN 138	1	138	26			268/287
	1147	11512	SPS	ITP	$6,707,552	SPS	Convert 26 miles Channing - Potter 115 kV to 230 kV, upgrade terminal equipment at Potter.		6/1/2022	48	523869	Channing 230 kV	523959	Potter County Interchange 230 kV	1	230			40	492/541
	1147	11514	SPS	ITP	$828,700	SPS	Convert 35 miles Channing - Dallam 115 kV to 230 kV. Build a double circuit 230/115 kV line tapping Channing - Dallam 230/115 kV into new XIT sub.		6/1/2022	48	523869	Channing 230 kV	523229	Dallam 230 kV	1	230			35	492/541
	1147	11515	SPS	ITP	$3,583,825	SPS	Install 230/115/13.2 kV Transformer at Dallam County Jr. (XIT) Sub.		6/1/2022	48	523229	Dallam 230 kV	523228	Dallam County Interchange 115 kV	1	230/115				168/168
	30329	50376	SPS	ITP	$944,754	SPS	Install 28.8 Mvar capacitor at Lamb County 69 kV.		6/1/2022	12	526036	Lamb County REC-Opdyke Sub 115 kV				69				28.8 Mvar
	30331	50378	SPS	ITP	$697,688	SPS	Install 14.4 MVAR capacitor at Eagle Creek 115 kV.		6/1/2022	12	527711	Eagle Creek 115 kV				115				14.4 Mvar
	30372	50437	WFEC	ITP	$16,666,500	SPP	Reconductor Okeene - Dover Switching Station 138 kV to 795 ACSS.		3/1/2022	36	520882	DOVER SW	521016	OKEENE	1	138	27.1			286/286
	30209	10992	WR	ITP	$7,951,703	WR	Rebuild Westar portion of the Clearwater-Milan tap 115 kV with bundled 1192.5 kcmil ACSR conductor (Bunting)		3/1/2022	24	533036	CLEARWATER 138KV	539675	Milan Tap 138 KV	1	138	6.1			261/314
	30368	50430	WR	ITP	$11,501,055	WR	Tear down/rebuild 12.3 mile Abilene East - Chapman 115 kV line as single circuit with bundled 1192 ACSR conductor.		6/1/2022	36	533365	EAST ABILENE 115 KV	533362	CHAPMAN 115 KV	1	115	12.3			240/240
	30368	50431	WR	ITP	$3,806,178	WR	Tear down/rebuild Abilene East - Abilene Energy Center 115 kV as single circuit with bundled 1192 ACSR conductor.		6/1/2022	24	533365	EAST ABILENE 115 KV	533361	ABILENE ENERGY CENTER 115 KV	1	115	3.33			240/240
	30368	50432	WR	ITP	$19,949,242	WR	Tear down/rebuild Abilene Energy Center - Northview 115 kV as single circuit with bundled 1192 ACSR conductor.		6/1/2022	36	533361	ABILENE ENERGY CENTER 115 KV	533371	NORTHVIEW 115 KV	1	115	21.75			240/240
	30368	50433	WR	ITP	$5,131,249	WR	Tear down/rebuild North Street - Northview 115 kV as single circuit with bundled 1192 ACSR conductor.		6/1/2022	24	533370	NORTH STREET 115 KV	533371	NORTHVIEW 115 KV	1	115	3.2			240/240
	30370	50435	WR	Zonal Reliability	$957,660	WR	Install additional 1 stage of 15 MVAR capacitor bank at Northwest Manhattan for a total of 30 Mvar.		6/1/2022	12	533347	NORTHWEST MANHATTAN				115				15 Mvar
	30371	50436	WR	Zonal Reliability	$957,660	WR	Install second bank of 10.9 Mvar at South Seneca 115kV substation.		6/1/2022	12	533337	SOUTH SENECA 115 KV				115				10.9 Mvar
	2030																		
	30391	50473	ITCGP	ITP	6,000,000	SPP	Install new 345/230 kV 448 MVA Post Rock Transformer		1/1/2030			Post Rock 345 KV		Post Rock 230 KV	2	345/230				448/448
	30391	50474	ITCGP/SEPC	ITP	121,500,000	SPP	Build new new 108 mies Mingo - Post Rock and associated terminal equipment		1/1/2030			Mingo 345 kV		POST ROCK 345 KV	1	345		108		1792/1792
	30392	50475	KCPL/WR	ITP	79,875,000	SPP	Build new 71 miles of 345 kV line Iatan - Jeffrey Energy Center and associated terminal equipment		1/1/2030			Iatan 345 KV		Jeffrey Energy Center 345 kV	1	345		71		1792/1792
	30393	50476	MIDW/SEPC	ITP	$85,840,000	SPP	Build new 164 miles 345 kV Spearville - Mullergren - Circle - Reno and associated terminal equipment		1/1/2030		531469	Spearville 345 lV		Mullergren 345 kV	1	345		79		1792/1792
	30393	50477	MIDW/WR	ITP	$85,840,000	SPP			1/1/2030			Mullergren 345 kV		Circle 345 kV	1	345		79		1792/1792
	30393	50478	WR	ITP	$6,519,500	SPP			1/1/2030			Circle 345 kV		Reno 345 kV	1	345		6		1792/1792
	30393	50481	MIDW	ITP	6,000,000	SPP	Install new 345/230 kV 448 MVA Mullergren Transformer		1/1/2030			Mullergren 345 kV		Mullergren 230 kV	1	345/230				448/448
	30394	50479	NPPD	ITP	5,625,000	SPP	Build new 5 miles 345 kV Keystone – Ogallala and associated terminal equipment		1/1/2030			Keystone 345 lV		Ogallala 345 kV	1	345		5		1792/1792
	30394	50480	NPPD	ITP	6,000,000	SPP	Install new 345/230 kV 448 MVA Ogallala Transformer		1/1/2030			Ogallala 345 kV		Ogallala 230 kV	1	345/230				448/448
	30395	50483	NPPD/WAPA	ITP	64,125,000	SPP	Grand Island - Holt Co. rebuild 76 miles of 345 kV		1/1/2030			Grand Island 345 kV		Holt Co. 345 kV	1	345	76			1792/1792
	30397	50486	NPPD	ITP	$30,656,000	NPPD	Build new 16 miles 345 kV Holt - Neligh and associated terminal equipment		1/1/2030			Holt 345 kV		Neligh 345 kV	1	345		16		1792/1792
	30396	50484	NPPD	ITP	69,750,000	SPP	Build new 345 kV Holt Co. - Shell Creek and associated terminal equipment		1/1/2030			Holt Co. 345 kV		Shell Creek 345 kV	1	345		69		1792/1792
	30396	50485	NPPD	ITP	6,000,000	SPP	Install new 345/230 kV MVA Shell Creek Transformer		1/1/2030			Shell Creek 345 kV		Shell Creek 230 kV	2	345/230				336/420
	30398	50487	NPPD	ITP	6,000,000	SPP	Install new 345/115 kV 420 MVA Columbus East Transformer		1/1/2030			Columbus East 345 kV		Columbus East 115 kV	2	345/115				336/420
	30399	50488	NPPD	ITP	6,000,000	SPP	Install 2nd 45/230 kV 420 MVA Hoskins Transformer		1/1/2030			Hoskins 345 kV		Hoskins 230 kV	2	345/230				336/420
	30399	50489	NPPD	ITP	6,000,000	SPP	Install 2nd 345/115 420 MVA kV Hoskins Transformer		1/1/2030			Hoskins 345 kV		Hoskins 115 kV	2	345/115				336/420
	30399	50490	NPPD/OPPD	ITP	$193,380,000	OPPD/ NPPD	Build 120 miles 345 kV new Hoskins - Ft. Calhoun and associated terminal equipment		1/1/2030			Hoskins 345 kV		Ft. Calhoun 345 kV	1	345		120		1792/1792
	30400	50491	OPPD	ITP	46,875,000	SPP	Build new 23 miles 345 kV Ft Calhoun - S3454 and associated terminal equipment		1/1/2030			Ft Calhoun 345 kV		S3454 345 kV	1	345		23		1792/1792
	30401	50492	OPPD	ITP	36,750,000	SPP	Build new 23 miles 345 kV Cass Co. - S.W. Omaha (aka S3454) and associated terminal equipment		1/1/2030			Cass Co 345 kV		S.W. Omaha (Sub 3454) 345 kV	1	345		23		1792/1792
	30402	50493	OPPD	ITP	6,000,000	SPP	Install 2nd 345/161 kV 560 MVA S3459-S1209 Transformer		1/1/2030			S3459 345 kV		S1209 161 kV	2	345/161				560/560
	30403	50494	SPS	ITP	133,875,000	SPP	Build 119 new miles 345 kV Hitchland - Potter Co. and associated terminal equipment		1/1/2030			Hitchland 345 kV		Potter Co 345 kV	2	345		119		1792/1792
	30404	50495	SPS	ITP	121,500,000	SPP	Build new 90 miles 345 kV Tolk - Potter Co. and associated terminal equipment		1/1/2030			Tolk 345 kV		Potter Co. 345 kV	1	345		90		1792/1792
	30393	50482	WR	ITP	6,000,000	SPP	Install new 345/230 kV 448 MVA Circle Transformer		1/1/2030			Circle 345 kV		Circle 230 kV	1	345/230				448/448
	30405	50496	WR	ITP	$54,000,000	SPP	Build new 80 miles 345 kV Wichita - Viola - Rose Hill and associated terminal equipment		1/1/2030			Wichita 345 kV		Viola 345 kV	1	345		40		1792/1792
	30405	50497	WR	ITP	$54,000,000	SPP			1/1/2030			Viola 345 kV		Rose Hill 345 kV	1	345		40		1792/1792