Monday, October 27, 2014  
1:00 - 5:00 p.m.  
SPP Corporate Offices  
Little Rock, AR

1. CALL TO ORDER

2. PRELIMINARY MATTERS
   a. Declaration of a Quorum

3. UPDATES
   a. RSC Third Quarter Financial Report
   b. SPP
   c. FERC

4. BUSINESS MEETING
   a. Election of RSC Officers [Voting Item]
   b. Approval of 2015 RSC Budget [Voting Item]

5. REPORTS/PRESENTATIONS
   a. CAWG Report…………………………………………………………………………………………………………………Meena Thomas
      This report provides an update on CAWG activity.
   b. Non-Order 1000 Seams Projects Update
      Update on Seams Project Policy Paper …………………………………………………………………………………….Paul Malone
      This report will provide an update on the Seams Projects Policy Paper.
      Cost Allocation for Non-Order 1000 Seams Projects [Voting Item] …………………….Meena Thomas
      This report will be the CAWG’s recommendation to the RSC on cost allocation for non-Order 1000 Seams Projects.
   c. Strategic Planning Committee Task Force on New Members [Potential Voting Item]…………………………………………………………………………………………………………………………….Ricky Bittle / Dana Murphy
      This report will provide an update on the Process Recommendations of the Task Force.
   d. EPA’s Clean Power Plan – SPP Update………………………………………………………………………………….Lanny Nickell
      This report will update the RSC on SPP’s efforts and activity related to EPA Rule 111 (d).
      Discussion of possibility of RSC Comments.
   e. Integrated Transmission Planning Update………………………………………………………………………………….Lanny Nickell
      This report will provide an update on the ITP Process and the waiver SPP anticipates seeking from FERC.
f. Capacity Margin Task Force………………………………………………………………………..Tom Hesterman
   This report will provide an update on the activities of the Task Force

g. Update on Seams Related Dockets at FERC………………………………………………..David Kelley
   This report will provide an update on the pending matters at FERC related to the MISO Seam.

h. Integrated Marketplace Update………………………………………………………………..Bruce Rew
   This report will update the RSC on the Integrated Marketplace.

6. OTHER RSC MATTERS

7. ACTION ITEMS

8. SCHEDULING OF NEXT REGULAR MEETINGS, SPECIAL MEETINGS OR EVENTS
   RSC Meetings:
   November 27, 2014 – Conference Call (Tentative)
   December 29, 2014 – Conference Call (Tentative)
   January 26, 2015 – Dallas, TX
   April 27, 2015 – Tulsa, OK
   July 27, 2015 – Kansas City, MO
   October 26, 2015 – Little Rock, AR

9. ADJOURN

* NOTE: ADDITIONAL INFORMATIONAL MATERIAL ATTACHED

Attached to the RSC’s meeting agenda and background material is additional material that is either for informational or reporting purposes.
Southwest Power Pool
REGIONAL STATE COMMITTEE
Embassy Suites - Downtown Old Market
July 28, 2014
• M I N U T E S •

Administrative Items:
The following members were in attendance:

- Patrick Lyons, New Mexico Public Regulation Commission (NMPRC)
- Dana Murphy, Oklahoma Corporation Commission (OCC)
- Donna Nelson, Public Utility Commission of Texas (PUCT)
- Olan Reeves, Arkansas Public Service Commission (APSC)
- Stephen Lichter, Nebraska Power Review Board (NPRB)
- Steve Stoll, Missouri Public Service Commission (MOPSC)
- Shari Feist Albrecht, Kansas Corporation Commission (KCC)

President Donna Nelson called the Regional State Committee (RSC) meeting to order at 1:05 p.m. with roll call and a quorum was declared. She then requested introductions of those in attendance. There were 118 in attendance, either in person or via phone (Attendance & Proxies – Attachment 1). President Nelson introduced guest Commissioner Kristie Fiegen from the South Dakota Public Utilities Commission.

President Nelson requested approval of the April 28, 2014 meeting minutes (RSC Minutes 4/28/14 - Attachment 2). Commissioner Steve Stoll moved to approve the April 28, 2014 minutes; Commissioner Patrick Lyons seconded. The motion passed unanimously.

UPDATES
RSC Financial Report
Staff Secretary Paul Suskie provided the RSC Financial Report (Financial Report – Attachment 3). Mr. Suskie reported that the RSC is halfway through the 2014 calendar year and stated that, as is normal this time of year, the RSC is over budget on travel due to the frequency of meetings. This is something that levels off toward the end of the year. The RSC remains under budget in other areas, such as a much lower cost on the RSC consultant than was budgeted.

SPP Report
Mr. Nick Brown, Southwest Power Pool, Inc. (SPP) CEO, turned the meeting over to Mr. Jim Eckelberger, Chairman of the SPP Board of Directors, to provide the SPP Update. Chairman Eckelberger reported on the Integrated System (IS) members joining SPP. The associated tariff language was approved to incorporate the IS into SPP at the June Board meeting. Chairman Eckelberger acknowledged receiving a letter from RSC members from Texas, Kansas and Oklahoma, pointing out an issue with the process used during the integration process for the IS. Chairman Eckelberger reported that the Strategic Planning Committee is taking action on this matter and will set up a task force to address the issue of the integration of new members and what can be done in the future to avoid the concerns raised in the letter. Chairman Eckelberger will be visiting with the President of the RSC to discuss this issue further. He anticipates that there will be a lot of input on this issue.
FERC
Mr. Patrick Clarey, FERC staff, provided an update on recent FERC activities. In May, the DC Circuit Court of Appeals vacated FERC’s final rule on demand response compensation in organized wholesale energy markets. Last month, FERC announced that it will ask the full Court to rehear the May 23 order, but will only seek review of the ruling that FERC lacked jurisdiction over demand response and not its decision to vacate FERC policies on compensation for demand response.

In June FERC conditionally accepted the CAISO proposal to implement an Energy Imbalance Market that will allow neighboring balancing authorities to participate in its real-time market for imbalance energy.

Finally, in June FERC initiated a proceeding, which includes a series of workshops to evaluate issues regarding price formation in the energy and ancillary services markets operated by RTOs/ISOs. The first workshop will be held on September 8 at the Commission.

On July 15, the Senate voted to confirm Cheryl LaFleur and Norman Bay as Commissioners. Both are expected to be sworn in within the next few weeks.

Mr. Clarey reported that FERC Commissioners and Mr. Norman Bay will testify before the House Energy and Commerce Subcommittee regarding FERC’s perspectives on EPA Rule 111(d).

BUSINESS MEETING
During the business meeting, Mr. Suskie stated that the RSC Bylaws require an annual audit (RSC Auditor Report - Attachment 4, Audit Findings Letter – Attachment 5, Representation Letter – Attachment 6, Form 990 – Attachment 7). There is an independent auditor’s report on the statements of accuracies and disbursements of SPP RSC for the years ended December 2013 and 2012. Mr. Suskie reported that it was a clean audit with no significant findings or problems. Commissioner Patrick Lyons moved to Accept the Thomas and Thomas LLP financial audit of the SPP Regional State Committee (RSC) for 2013 and to approve the filing of IRS Form 990 for 2013 with the IRS; Commissioner Stoll seconded the motion. The motion passed unanimously.

REPORTS/PRESENTATIONS
Cost Allocation Working Group (CAWG) Report
Meena Thomas, PUCT staff and Chair of the CAWG, provided the CAWG report (CAWG Report – Attachment 8). Ms. Thomas presented an overview of the group’s activities in the following areas:

- Proposed Changes to Wind and Solar Accreditation
- Benefit Metrics Review
- CAWG Comments on SPP Evaluation of Capacity Margin
- Integration of New Members into SPP
- Potential Issues for Future RSC Consideration

Proposed Changes to Regional Allocation Review Task Force (RARTF) Charter
President Nelson and Mr. Rob Janssen, Chair of the Markets and Operations Policy Committee (MOPC) worked together on filling vacancies on this joint RSC/MOPC task force. (RARTF Charter and Appointments – Attachment 9, Draft RAR Task Force Charter – Attachment 10). President Nelson stated that she and Mr. Janssen wanted to make sure that, pursuant to the charter of the task force, all of the different areas of SPP are represented on the RARTF. Board Member Stephen Lichter made the motion to amend the RARTF charter to add an additional RSC member and an additional SPP member, to extend the scope to include work needed for subsequent RCAR analyses and to include the work formerly completed by the Rate Impact Task Force, Commissioner Murphy seconded the motion. The motion passed unanimously.
Process for Integrating New Members into SPP
President Nelson said that she appreciated Chairman Eckelberger’s earlier comments and understands that a special task force under the Strategic Planning Committee (SPC) has been set up and Commissioner Murphy has volunteered to represent the RSC on the new task force.

Proposed Changes to SPP Wind Accreditation
Mr. Mitch Williams, Chair of the Generation Working Group (GWG) reported on the proposed changes to the SPP wind accreditation (Wind Capacity Criteria – Attachment 11, CAWG Report – Proposed Changes to SPP Wind Accreditation – Attachment 12).

Ms. Thomas followed up with her CAWG report on this issue. At the April 17 CAWG meeting three recommendations were reached on the impact of the proposed changes on resource adequacy and transmission planning.
1) SPP should evaluate the current SPP capacity margin to ensure that it is adequate to meet the needs for a reliable system.
2) SPP should inform the RSC and the CAWG, on an ongoing basis, if the increase in accredited wind capacity, as a result of the criteria change, is partly or wholly responsible for causing any changes in the need for transmission upgrades in the SPP footprint.
3) RSC and CAWG should be presented with the GWG annual report regarding the performance of wind and solar facilities. The report should include a yearly comparison of wind and solar output during peak periods. This would allow the criteria to be reevaluated, if necessary, based on information on actual wind and solar output at peak periods.

Commissioner Patrick Lyons made the motion to support the CAWG recommendation in the event the Board approves Recommendation CRR-012 to give the Board some direction, Commissioner Dana Murphy seconded the motion. The motion passed with Chairwoman Shari Albrecht abstaining.

Capacity Margin Presentation
Mr. Lanny Nickell, SPP Staff, provided the Capacity Margin presentation. (Capacity Margin Requirement Update – Attachment 13, Capacity Margin Task Force Charter – Attachment 14). Mr. Nickell stated why there is a need for an update of SPP’s capacity margin requirements and recent SPP staff activity related to this issue. He also reviewed the charter for the new Capacity Margin Task Force (CMTF).

Update on IS
Mr. Carl Monroe, SPP Staff, provided an update on the pending membership of the IS (Update on Integrated System – Attachment 15). Mr. Monroe reported that on June 9th the SPP Board approved the changes needed to the tariffs and governing documents for the IS owners to become SPP members. He also reported that in July all of the IS owners had received approval from their Boards and, in the case of WAPA, the administrator to proceed with each entity to join SPP.

Update on Seams Related Dockets at FERC
Mr. Carl Monroe reviewed the update on Seams related docket at FERC (Seams Related Dockets at FERC – Attachment 16). This review included the current status of the current SPP complaint, and filing of an unexecuted service agreement, and settlement discussions.

Update on Seams Project Task Force
Mr. Paul Malone, Chair of the Seams Steering Committee, provided the Seams Project Task Force Update (SPTF – Attachment 17). The SPTF is completing a white paper to address the criteria and a cost allocation proposal for seams projects that are not part of the Order 1000 interregional planning process. He stated that the proposal to the RSC and CAWG on cost allocation from the SPTF is for costs of seams projects greater than 300 kV to be recovered through the highway portion of the highway/byway cost allocation methodology. The SPTF is also proposing that the costs of projects less than 300 kV recovered regionally through “highway” funding.
Order 1000 Update  
Mr. Paul Suskie provided the Order 1000 Update (Order 1000 – Attachment 18).

Integrated Market Update  
Mr. Bruce Rew, SPP Staff, provided an update on the Integrated Marketplace (Integrated Marketplace Update - Attachment 19). He noted that the Integrated Marketplace continues to perform well with high market participant engagement. President Nelson requested that an update be provided to the RSC on a quarterly basis.

Value of Transmission Presentation  
Mr. Lanny Nickell reported on the Value of SPP Transmission Assessment project (Value of Transmission Presentation - Attachment 20). He stated that an objective of the project is to determine the benefits attributable to transmission development in the SPP region.

Benefit Metrics  
Mr. Antoine Lucas, SPP Staff, presented the current status of the benefit metrics (Benefit Metrics – Attachment 21). Mr. Lucas noted that this was a task directed by MOPC to the ESWG and that once approved by the SPP Board, these will be the metrics used in planning.

SPP Strategic Plan  
Mr. Michael Desselle, SPP Staff, reported on the Strategic Plan update (2014 Strategic Plan – Attachment 22).

Sub-synchronous Resonance  
Mr. Lanny Nickell reported on Sub-synchronous Resonance (Sub-synchronous Resonance – Attachment 23). Sub-synchronous Resonance (SSR) is of concern when series compensation is introduced into the transmission network. Currently SPP has no series compensation on its system which means there are no SSR concerns.

EPA Rule 111(d)  
Mr. Lanny Nickell provided the update on the EPA Rule 111(d) (EPA Rule 111(d) – Attachment 24). He stated that the SPC has requested that SPP Staff complete an impact analysis of the proposed rule on the SPP region using existing Integrated Transmission Plan 2024 models.

Frequency of RSC Meetings  
President Nelson reported that the RSC will begin to meet monthly with teleconference meetings during the months when there is not a face-to-face meeting. The meetings will take place on the last Monday of every month at 1:00 PM. The first meeting will take place on August 25, 2014.

Scheduling of Next Regular Meeting, Special Meetings or Events:  
President Nelson noted the next face-to-face RSC meeting will be in Little Rock, AR on October 27, 2014.

With no further business, the meeting adjourned at 3:55 p.m.

Respectfully Submitted,  
Paul Suskie
Southwest Power Pool
REGIONAL STATE COMMITTEE
Teleconference
August 25, 2014
• M I N U T E S •

Administrative Items:
The following members were in attendance:

  Dana Murphy, Oklahoma Corporation Commission (OCC)
  Donna Nelson, Public Utility Commission of Texas (PUCT)
  Olan Reeves, Arkansas Public Service Commission (APSC)
  Stephen Lichter, Nebraska Power Review Board (NPRB)
  Steve Stoll, Missouri Public Service Commission (MOPSC)
  Shari Feist Albrecht, Kansas Corporation Commission (KCC)

President Donna Nelson called the Regional State Committee (RSC) meeting to order at 1:05 p.m. with roll call and a quorum was declared. She then requested introductions of those in attendance. There were 69 in attendance, (Attendance & Proxies – Attachment 1).

BUSINESS MEETING
Nothing to report at this time.

REPORTS/PRESENTATIONS
Nothing to report at this time.

UPDATES
Meena Thomas reported that the Cost Allocation Working Group (CAWG) had its monthly meeting on August 12th in Dallas and the group discussed implementation of Order 1000, the benefits metrics and the Seams Projects Policy Paper.

Lanny Nickell reported on the EPA Rule 111(d). We started on the reliability impact analysis several weeks ago. We have not finished the analysis yet, but preliminary results indicate that there are some pretty serious concerns from a reliability perspective about the impact of generator retirements based on EPA assumptions. We continue to evaluate and are trying to qualify and quantify the concerns. We are having a difficult time getting the models to solve.

Southwest Power Pool (SPP) has prepared a write-up of a high-level scope of how SPP would complete the scope if the RSC wants us to do it. We can take a state-by-state or do a regional approach. We will be prepared to provide a report at the next conference call. Commission Reeves communicated with Great Plains Institute and Bi-Partisan Policy Center. They are completing this study with 16 MISO states coming up with the least cost alternative to comply with the rule. They are willing to do the same with SPP states they just need guidance as to what we want before they proceed. They will complete Texas, Arkansas, Louisiana, and Missouri in the MISO study. Commissioner Nelson asked that Lanny have a report ready for the next meeting in late September. Lanny will provide a copy of the scope document he and his staff has prepared for the study they would propose and take comments on that. He will also work with Commissioner Reeves to try and get something in writing what the Great Plains Institute and the BPC would do.

Antoine Lucas discusses the RCAR Benefit Metrics (Benefit Metrics Status – Attachment 3). Antoine reviewed the RARTF and the first RCAR Assessment, the Benefits to be calculated, the recommendations of the lessons learned, the Market and Operations Policy Committee (MOPC) directive.

Meena Thomas provided the CAWG report (CAWG Report to the RSC – Attachment 4). The following areas were discussed regarding the Seams Projects Policy Paper.

- Background
- CAWG Consideration of the Policy Paper
- Upcoming Relevant Activity
- Seams Policy Task Force (SPTF) Recommendation on Cost Allocation
- Upcoming CAWG Action

Jake Langthorn reported on the update of the SPTF (Seams Project Task Force Update – Attachment 5). Jake reported that the SPTF was chartered to develop criteria for seams projects that are not part of the Interregional Order 1000 Process. Sources of Seams Projects:

- Tariff Processes
- Non-Order 1000 Seams Planning Process
- Joint Special Studies

Seams Project Criteria:

- 100 kV and above
- Minimum total project cost of $5 million
- Need date within 10-years
- SPP Regional B/C ration of 1.0
- Cost sharing agreement between SPP and the Seams Partner
  - Cost shared between SPP and the Seams Partner(s) based on benefits
  - Agreed-to metrics
  - Principles used in arriving at equitable cost sharing

Other RSC Matters:

A list of action items was discussed for the next meeting:

- SPP will complete a cost analysis on completing an EPA study
- SPP will provided a report on the Reliability Study that was completed
- RARTF will provide an update and vote on the new metrics
- SPTF on New Member Additions will provide and update

Scheduling of Next Regular Meeting, Special Meetings or Events:

- September 29, 2014  Net Conference
- October 27, 2014  Little Rock, AR
- January 26, 2015  Dallas, TX
- April 27, 2015  Tulsa, OK
- July 27, 2015  Kansas City, MO

With no further business, the meeting adjourned at 2:45 p.m.

Respectfully Submitted,

Paul Suskie
Southwest Power Pool

REGIONAL STATE COMMITTEE
Teleconference
September 29, 2014
• MINUTES •

ADMINISTRATIVE ITEMS:
The following members were in attendance:

Dana Murphy, Oklahoma Corporation Commission (OCC)
Donna Nelson, Public Utility Commission of Texas (PUCT)
Olan Reeves, Arkansas Public Service Commission (APSC)
Stephen Lichter, Nebraska Power Review Board (NPRB)
Steve Stoll, Missouri Public Service Commission (MOPSC)
Shari Feist Albrecht, Kansas Corporation Commission (KCC)

President Donna Nelson called the Regional State Committee (RSC) meeting to order at 1:08 p.m. with roll call and a quorum was declared. She then requested introductions of those in attendance. There were 69 in attendance, (Attendance & Proxies – Attachment 1).

REPORTS/PRESENTATIONS

Cost Allocation for Non-Order 1000 Seams Projects
Meena Thomas, Chair of the Cost Allocation Working Group (CAWG), provided the CAWG Report to the RSC (Cost Allocation for Non-Order 1000 Seams Projects – Attachment 2), (Kansas’ Comments on “No” Vote – Attachment 3) and (Nebraska’s Comments on “Yes” Vote – Attachment 4). Ms. Thomas reported on the cost allocation for non-order 1000 Seams projects. She provided background on the issue including the Seams Steering Committee (SSC) approval of a policy paper.

The CAWG considered two options regarding the allocation of costs of these projects:
- Assign costs of all Seams Projects to the regional rate (i.e. Highway)
- Allocate seams cost pursuant to currently approved allocation method

CAWG took the following action:
The motion was made and passed by the majority of CAWG Members with TX, KS, and NM voting no:
- CAWG recommends to the RSC adoptions of Option 1 (assign costs of all Seams Projects to the regional rate (i.e. Highway)) for cost allocation for Non-Order 1000 Seams Projects 100 kV and above.

EPA Rule 111(d)
Lanny Nickell, SPP Staff, reported on the results of the Reliability Impact Assessment. Mr. Nickell noted that the assessment is not intended to be a transmission planning study but an initial look at what you would expect to see if the retirements of existing coal generators and some gas generators occur as assumed by EPA in the proposed Clean Power Plan (CCP). He also presented the scope that SPP had put together for evaluating the cost of compliance with the proposed CCP (EPA Compliance Cost – Attachment 5).
Regional State Committee
August 25, 2014

RARTF Update
Ben Bright, SPP Staff, provided an update on the recent work of the RARTF (RARTF Update – Attachment 6). He reviewed the actions from the September 10 meeting. This included the following: (1) Staff will provide additional work on the allocation of the benefits for the reliability metric; (2) continued review by the RARTF of tariff changes to include the list of remedies from the RARTF Report; and (3) Staff’s work with members in the deficient zones from the first RCAR.

SPCTF on New Members
Kristine Schmidt, ITC Great Plains, and Commissioner Dana Murphy reported on the SPCTF on New Members (SPCTF on New Members – Attachment 7). Ms. Schmidt discussed the stages/processes for adding new members into SPP. The recommendations for process improvement include use of the “bright line” date, confidential treatment of information, and clearer communication about executive sessions of the Strategic Planning Committee to discuss possible additions of new members. It is anticipated that the RSC will act on the issues referred to them by the SPCTF on New Members at their upcoming October meeting.

Capacity Margin Task Force
Lanny Nickell, SPP Staff, gave a brief update on the work of the Capacity Margin Task Force (CMTF). The CMTF has discussed how SPP currently calculates capacity margins and the different studies involved in the process. Mr. Nickell also noted that the charter for the CMTF has been revised for MOPC approval in October. In addition, Staff will also present a proposed work plan to MOPC in October.

Other RSC Matters:
The RSC discussed possible educational topics for October.

Action Items:
See attached.

Scheduling of Next Regular Meeting, Special Meetings or Events:

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 27, 2014</td>
<td>Little Rock, AR</td>
</tr>
<tr>
<td>November 24, 2014</td>
<td>Net Conference (if needed)</td>
</tr>
<tr>
<td>December 29, 2014</td>
<td>Net Conference (if needed)</td>
</tr>
<tr>
<td>January 26, 2015</td>
<td>Dallas, TX</td>
</tr>
<tr>
<td>April 27, 2015</td>
<td>Tulsa, OK</td>
</tr>
<tr>
<td>July 27, 2015</td>
<td>Kansas City, MO</td>
</tr>
</tbody>
</table>

With no further business, the meeting adjourned at 3:32 p.m.

Respectfully Submitted,

Sam Loudenslager, SPP Staff
## Regional State Committee
### For the Nine Months Ending September 30, 2014
#### Budget vs. Actual

<table>
<thead>
<tr>
<th></th>
<th>YTD Actuals</th>
<th>YTD Budget</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Income</td>
<td>182,681</td>
<td>258,775</td>
<td>(76,094)</td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td>182,681</td>
<td>258,775</td>
<td>(76,094)</td>
</tr>
<tr>
<td><strong>Expense</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel/Meeting</td>
<td>170,005</td>
<td>130,725</td>
<td>39,280</td>
</tr>
<tr>
<td>Audit</td>
<td>2,225</td>
<td>2,300</td>
<td>(75)</td>
</tr>
<tr>
<td>Administrative Costs</td>
<td>-</td>
<td>750</td>
<td>(750)</td>
</tr>
<tr>
<td>RSC Consultant</td>
<td>10,451</td>
<td>75,000</td>
<td>(64,549)</td>
</tr>
<tr>
<td>Technical Conference</td>
<td>-</td>
<td>50,000</td>
<td>(50,000)</td>
</tr>
<tr>
<td><strong>Total Expense</strong></td>
<td>182,681</td>
<td>258,775</td>
<td>(76,094)</td>
</tr>
<tr>
<td><strong>Net Income (Loss)</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Southwest Power Pool, Inc.
REGIONAL STATE COMMITTEE 2014
Budget and Proposed 2015 Budget
October 27, 2014

<table>
<thead>
<tr>
<th>Expense Category</th>
<th>2014 TOTAL BUDGET</th>
<th>2015 PROPOSED BUDGET</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Travel &amp; Meetings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel</td>
<td>$175,000</td>
<td>$185,000</td>
</tr>
<tr>
<td>Meetings</td>
<td>$25,000</td>
<td>$25,000</td>
</tr>
<tr>
<td><strong>Total Travel &amp; Meetings</strong></td>
<td>$191,000</td>
<td>$200,000</td>
</tr>
<tr>
<td><strong>Administrative</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual Audit</td>
<td>$2,300</td>
<td>$2,300</td>
</tr>
<tr>
<td>Other Administrative</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
<tr>
<td><strong>Total Administrative</strong></td>
<td>$3,300</td>
<td>$3,300</td>
</tr>
<tr>
<td><strong>Principal Consultant</strong></td>
<td>$100,000</td>
<td>$100,000</td>
</tr>
<tr>
<td><strong>Technical Conference</strong></td>
<td>$50,000</td>
<td>$50,000</td>
</tr>
<tr>
<td><strong>Seams Cost Allocation</strong></td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td><strong>TOTAL EXPENSES</strong></td>
<td>$353,300</td>
<td>$363,300</td>
</tr>
</tbody>
</table>
Report to the
Regional State Committee
October 27, 2014

COST ALLOCATION WORKING GROUP
(CAWG)

Meena Thomas
CAWG Chairman
CAWG REPORT TO RSC

TOPICS
I. Cost Allocation for Non-Order 1000 Seams Projects (Separate Report)
II. Aggregate Study Waiver Process
III. SPP Regional Order 1000 Process
IV. Potential Issues for Future RSC Consideration
I. Cost Allocation for Non-Order 1000 Seams Projects

- In October 2012, the RSC, through a majority vote, approved regional funding for interregional projects selected pursuant to FERC Order 1000 interregional planning processes.

- The Seams Steering Committee (SSC) has developed a policy paper regarding seams projects that fall outside the scope of the Order 1000 interregional planning process or that do not meet the Order 1000 criteria.

- CAWG’s recommendation on the intra-regional cost allocation for such seams projects will be presented under agenda item 5(b).
II. Aggregate Study Waiver Process

- The Business Practices Working Group has endorsed changes in the waiver request process as part of improvements to the Aggregate Study Process.
- These changes are outlined in Business Practice Revision – 051 (BPR-051). The BPR and the tariff revisions needed to implement BPR-051 have yet to be considered by MOPC and the SPP Board of Directors.
II. Aggregate Study Waiver Process

- BPR -051 addresses the waiver process for two types of waiver requests for base plan funding.

- The two types of waiver requests are:
  - Service requests that do not meet the requirements for base plan funding in Attachment J – therefore, a waiver of the requirements is requested; and
  - Service requests that do meet the requirements for Base Plan funding but the costs allocated to the transmission service request exceed the safe harbor cost limit applicable to the request - therefore, a waiver of the allocated costs is requested.
II. Aggregate Study Waiver Process

- The revisions in the waiver request process address:
  - timelines for requesting a waiver
  - application of any waiver, if granted, to a transmission service request if the customer commits to the aggregate study.

- CAWG did not identify any impact on the cost allocation mechanism that is currently in place for eligible base plan upgrades resulting from the Aggregate Study Process. Neither were concerns raised about revisions to the waiver request process.
III. SPP Regional Order 1000 Process

- Competitive bidding on certain transmission projects in the regional Order 1000 process is expected to take place in 2015.
- An RFP will be issued for each Competitive Upgrade approved by the SPP Board of Directors in January 2015.
- Certain issues related to the execution of Order 1000 in states and the RFP/bid approval process are expected to be presented for CAWG consideration in future meetings.
III. SPP Regional Order 1000 Process

Examples of issues include:

- Should there be an expedited state process for granting utility status to a winning bidder that is not a utility?
- Should the CCN process for Order 1000 projects be expedited?
III. SPP Regional Order 1000 Process

- SPP staff, in conjunction with state regulators, is researching the statutes on the current processes for granting utility status and CCN in various states.

- It remains to be seen whether these issues should be addressed by CAWG or whether they merit state-specific solutions. The impact of the Order 1000 competitive bidding process could vary across states.
  - Nebraska has state mandated ROFR
  - Oklahoma has state mandated ROFR below 300kV
IV. Potential Issues for Future RSC Consideration

- CAWG members continue to monitor pertinent Working Group/Task Force activity in anticipation of future RSC actions.

- Of relevance are four major issues that will likely come up for RSC consideration within the next year:
IV. Potential Issues for Future RSC Consideration

1. RCAR II Analysis and Results
2. Capacity Margin Requirements
3. Impact of EPA Rule 111(d)
4. State Issues related to Implementation of SPP Regional Order 1000 Process
CAWG Report to RSC

Questions?

Submitted by: Meena Thomas
CAWG Chairman
October 27, 2014
Seams Project Policy Paper

Paul Malone, NPPD

Helping our members work together to keep the lights on... today and in the future
Background

• SSC initially developed white paper on seams projects in 2011

• Order 1000 issued
  – SPP filed response to Order 1000 addressing evaluation and cost sharing of interregional projects between SPP-MISO and SPP-SERTP
  – Still waiting on FERC response

• After Order 1000 gaps remain
  – Projects not meeting Order 1000 criteria (voltage, project type)
  – Projects with neighboring TOs instead of regions
Seams Project Task Force Update

• Seams Projects Task Force (SPTF) chartered by SSC in March 2014

• SSC, ESWG, TWG, and RTWG members

• Chartered to develop criteria for seams projects
  – Project requirements
  – Planning and approval process
  – Stakeholder process
  – Regional cost allocation

• Multiple open stakeholder meetings
Seams Projects Policy Paper Approvals

- SPTF completed draft development in August
- CAWG and SSC approval in September
  - CAWG vote included three no votes: Texas, New Mexico, and Kansas
  - SSC vote included one no vote: Xcel/SPS
- Multiple review at the Regional State Committee
  - Approval decision at October meeting
Definitions

• New Definitions

  – Seams Project: project which has agreement on cost sharing, 100 kV and above, SPP B/C ratio of at least 1.0, provides benefit to SPP

  – Seams Partner: non-SPP transmission owner which whom SPP is considering a Seams Project

  – Regional Review Process: Process used by SPP region to regionally evaluate a Seams Project. This is separate from any interregional or joint seams evaluation
Sources of Seams Projects

• Tariff Processes
  – ITPNT, ITP10, or other SPP Tariff planning process

• Non-Order 1000 Seams Planning Process
  – Joint study via SPP-AECI Joint Operating Agreement (JOA)
  – Any other study performed as a part of a defined seams planning process
  – SPP approval through the Regional Review Process

• Joint Special Study
  – Other study between SPP and a Seams Partner

• SPP approval through the Regional Review Process
SPP Regional Review Process

- Same Regional Review Process approved by SPP stakeholders for use in the Interregional Order 1000 planning process
- Used for regional review and decision on approval
  - SPP stakeholder directed: TWG, ESWG input
  - SPP assumptions, models, and metrics
Seams Project Criteria

- 100 kV and above
  - Tie lines or wholly within SPP or a Seams Partner
- Minimum total project cost of $5 million
- Need date within 10-years
- SPP regional B/C ratio of 1.0
  - Benefits based upon ESWG developed metrics
  - Provide 5% of benefits to SPP and each Seams Partner
- Cost sharing agreement between SPP and the Seams Partner
  - Could be with more than one Seams Partner
Cost Sharing

• Cost shared between SPP and the Seams Partner(s) based on benefits
• Agreed-to metrics
• Principles used in arriving at equitable cost sharing:
  – Costs roughly commensurate with benefits
  – No cost sharing without receiving benefits
  – Transparent methodologies and identification of benefits
  – Share of benefits to SPP and its Seams Partners should be sufficient to support seams projects’ approval
Regional Cost Allocation Proposal

• Cost for Seams Projects greater than 300 kV will be recovered according to SPP’s highway/byway cost allocation methodology

• Projects less than 300 kV recovered regionally through “highway” funding

• Approved seams projects will be considered in the SPP Regional Cost Allocation Review (RCAR)
Stakeholder Input & Next Steps

• Seams Steering Committee approved September 9
  – 1 no vote (SPS)

• Markets and Operations Policy Committee approved October 14
  – 3 no votes (Golden Spread, Tri-County, SPS)

• Submit to the BOD for approval in October

• Complete tariff language
  – SPP staff has begun working on draft language
CAWG RECOMMENDATION TO RSC

Intra-Regional Cost Allocation for Non-Order 1000 Seams Projects

Background

- In October 2012, the RSC, through a majority vote (5-2), approved a 100% regional allocation of costs related to interregional projects selected pursuant to FERC Order 1000 interregional planning processes. New Mexico and Texas dissented.

- SPP filed the Order 1000 interregional compliance filing in July 2013. FERC has not issued its decision on the compliance filing.
CAWG RECOMMENDATION TO RSC

Intra-Regional Cost Allocation for Non-Order 1000 Seams Projects

Background (Continued)

- The Seams Steering Committee (SSC) identified gaps in the types of projects that can be approved and cost shared through the Interregional Order 1000 process. These projects include projects developed with a neighboring Transmission Owner or projects that did not meet the Order 1000 criteria (voltage, project type).
- The SSC developed a policy paper delineating the project criteria, the study/approval process and cost sharing for such Seams Projects.
CAWG RECOMMENDATION TO RSC

Intra-Regional Cost Allocation for Non-Order 1000 Seams Projects

Background (Continued)

- With respect to intra-regional cost allocation for such Seams Projects, the policy paper states:

  SPP Seams Project costs for Seams Projects greater than 300kV will be recovered according to the approved highway/byway cost allocation methodology. Subject to approval of the RSC, the costs of all Seams Projects less than 300kV will be recovered regionally through “highway” funding.

- The SSC and MOPC approved the policy paper by a majority vote.
CAWG RECOMMENDATION TO RSC

Intra-Regional Cost Allocation for Non-Order 1000 Seams Projects

Background (continued)

- CAWG considered and voted on the intra-regional cost allocation issue at its September 3, 2014 meeting.
- CAWG’s action and arguments in support of the majority and minority positions were presented in its report at the September 2014 RSC teleconference meeting.
- Detailed arguments in support of and against Option 1 (regional funding for Seams Projects) are listed in the Appendix to this report.
CAWG RECOMMENDATION TO RSC

Intra-Regional Cost Allocation for Non-Order 1000 Seams Projects

CAWG Consideration

Cost Assignment Options Considered by CAWG:

1. Assign costs of all Seams Projects to the regional rate (i.e. Highway).

2. Allocate seams costs pursuant to currently approved allocation method (i.e. Highway/Byway – dependent upon voltage of Seams Project) with the option to request waiver.
CAWG RECOMMENDATION TO RSC

Intra-Regional Cost Allocation for Non-Order 1000 Seams Projects

Major arguments made in support of Option 1 (assign costs of all Seams Projects to the regional rate (i.e. Highway)):

- Consistent with the approved cost allocation methodology approved by the RSC for Order 1000 interregional projects.
- Non-Order 1000 Seams Projects are not materially different from projects that originate from the Order 1000 planning processes.
- Benefits accrue regionally – An increase in transfer capability between SPP and a seams partner should provide benefits to the entire integrated marketplace.
CAWG RECOMMENDATION TO RSC

Intra-Regional Cost Allocation for Non-Order 1000 Seams Projects

Major arguments made in support of Option 1:

- Use of byway funding for lower voltage seams projects would not ensure that benefits and costs are at least roughly commensurate for zones in seams states.

- Use of highway funding for 100-300 kV Seams Projects will eliminate the incentive of the SPP seams zone to lobby for a regionally funded higher voltage (and more expensive) project and for low-voltage facilities to be moved to a nearby, electrically similar zone.

- Regional cost allocation for Seams Projects would encourage the development of beneficial, efficient Seams Projects and is consistent with one of the foundational strategies in the 2014 SPP strategic plan.
CAWG RECOMMENDATION TO RSC

Intra-Regional Cost Allocation for Non-Order 1000 Seams Projects

Major arguments made against Option 1 (assign costs of all Seams Projects to the regional rate (i.e. Highway)):

- Applying the highway/byway cost allocation for Seams Projects ensures that the cost allocation is consistent for byway projects within the SPP footprint and along the seams, is uncomplicated, easy to administer, and will not result in discriminatory rate treatment of byway projects based on geographical location of such projects.

- Regional funding for 100-300 kV seams projects as RCAR remedies in deficient zones is appropriate (Proposed Tariff Revision Request 131). Unlimited availability of regional funding for 100-300 kV projects virtually eliminates any potential benefit-cost ratio shifts between TOs.

- With the periphery of the SPP region expected to double in the near future, the number of potential Seams Projects is unknown and the regional benefits of lower voltage Seams Projects are unclear.
CAWG RECOMMENDATION TO RSC

Intra-Regional Cost Allocation for Non-Order 1000 Seams Projects

Major arguments made against Option 1:

- Regional cost allocation for Seams Projects is not supported by a recent court decision rejecting the postage stamp rate cost sharing method for high-voltage transmission facilities in PJM.

- Arguments made in favor of regional cost allocation for seams byway projects could apply to non-seams byway projects (e.g. regional benefits, avoidance of higher voltage projects); however, non-seams byway projects do not receive 100% regional funding currently or under the proposal.

- Seams Projects are currently under evaluation by SPP and its seams partners. Until the completion of the studies, it would not be possible to determine whether byway Seam Projects would provide regional benefits and are unique to warrant regional cost allocation.
CAWG RECOMMENDATION TO RSC

Intra-Regional Cost Allocation for Non-Order 1000 Seams Projects

CAWG Action:
The following motion was made and passed by the majority of CAWG members:

CAWG recommends to the Regional State Committee adoption of Option 1 (assign costs of all Seams Projects to the regional rate (i.e. Highway)) for cost allocation for Non-Order 1000 Seams Projects 100 kV and above.

The roll call was as follows:
Nebraska: Yes  Oklahoma: Yes  Missouri: Yes  Texas: No
Arkansas: Yes  Kansas: No  New Mexico: No
CAWG RECOMMENDATION TO RSC

Intra-Regional Cost Allocation for Non-Order 1000 Seams Projects

In dissenting with the CAWG majority:

- The Kansas CAWG member supported the current highway/byway cost allocation methodology for Seams Projects except for byway Seams Projects that serve as RCAR remedies, but was willing to consider the option of a waiver (Option 2).

- The Texas and New Mexico CAWG members supported regional funding for Seams Projects on a case-by-case basis (Option 2) on an interim basis until SPP has gained experience with these Seams Projects. If benefits from Seams Projects are shown to be predominantly regional in nature, then automatic regional funding could be applied to all Seams Projects on a going forward basis. Seams Projects serving as RCAR remedies would be excluded from the case-by-case evaluation.
CAWG RECOMMENDATION TO RSC

Intra-Regional Cost Allocation for Non-Order 1000 Seams Projects

PROPOSED RSC MOTION (BASED ON CAWG MAJORITY VOTE):

The Regional State Committee adopts a 100% regional allocation of costs for all Non-Order 1000 Seams Projects with a voltage of 100 kV and above.
Questions?

Submitted by: Meena Thomas
CAWG Chairman
October 27, 2014
CAWG RECOMMENDATION TO RSC

APPENDIX
CAWG RECOMMENDATION TO RSC

Intra-Regional Cost Allocation for Non-Order 1000 Seams Projects

Arguments made in support of Option 1 (assign costs of all Seams Projects to the regional rate (i.e. Highway)):

- Consistent with the approved cost allocation methodology approved by the RSC for Order 1000 interregional projects.
- Use of byway funding for lower voltage seams projects would not ensure that benefits and costs are at least roughly commensurate for zones in seams states. Byway funding would allocate majority of the costs to seams zones although a majority of the benefits will accrue to other zones as the projects would address inner-regional congestion relief and regional reliability issues.
CAWG RECOMMENDATION TO RSC

Intra-Regional Cost Allocation for Non-Order 1000 Seams Projects

Arguments made in support of Option 1:

- Non-seams zones would not build the Seams Projects but would benefit from these projects. Costs should, therefore, be allocated regionally.

- Regional funding of Seams Projects would be consistent with the foundational strategy in the SPP’s 2014 Strategic Plan which seeks to optimize interdependent systems. One of the high priority initiatives under this strategy is the focus on seams transmission projects.
CAWG RECOMMENDATION TO RSC

Intra-Regional Cost Allocation for Non-Order 1000 Seams Projects

Arguments made in support of Option 1:

- Non-Order 1000 Seams Projects are not materially different from projects that originate from the Order 1000 planning processes.
  - Provide benefits to SPP and to the seams partner.
  - Agreed upon cost allocation methodology between SPP and the seams partner.
  - Projects originate from a regional planning process, not from a bilateral planning process.
CAWG RECOMMENDATION TO RSC

Intra-Regional Cost Allocation for Non-Order 1000 Seams Projects

Arguments made in support of Option 1:

- Benefits accrue regionally – In the integrated marketplace, an increase in transfer capability between SPP and a seams partner should provide benefits to the entire marketplace.

- Any concerns about seams zones unduly benefiting from Seams Projects should be addressed in the RCAR process.

- Use of highway funding for 100-300 kV Seams Projects will eliminate the incentive of the SPP seams zone interconnected to the Seams Project to lobby for a regionally funded higher voltage (and more expensive) project in place of a more efficient, lower voltage project.
CAWG RECOMMENDATION TO RSC

Intra-Regional Cost Allocation for Non-Order 1000 Seams Projects

Arguments made in support of Option 1:

- Use of by-way funding creates a financial incentive for a seams zone to lobby for low-voltage facilities to be moved to a nearby, electrically similar zone.

- Regional cost allocation for a Seams Project through a waiver process puts the onus on the seams zone where the project is located to prove that the project provides regional benefits.

- The Board could vote not to approve Seams Projects deemed to not provide regional benefits. The seams zone may choose to pursue such projects as sponsored projects.

- Regional cost allocation for Seams Projects would encourage the development of beneficial, efficient Seams Projects.
CAWG RECOMMENDATION TO RSC

Intra-Regional Cost Allocation for Non-Order 1000 Seams Projects

Arguments made against Option 1 (assign costs of all Seams Projects to the regional rate (i.e. Highway)):

- The Kansas CAWG member supported the current highway/byway cost allocation methodology for Seams Projects except for byway Seams Projects that serve as RCAR remedies, but was willing to consider the option of a waiver (Option 2).

- Regional funding for 100-300 kV seams projects as RCAR remedies in deficient zones is appropriate (Proposed Tariff Revision Request 131). However, if the RSC adopts regional cost allocation for all Seams Projects 100 kV and above as the norm, the RCAR remedy contemplated in TRR 131 for 100-300 kV projects would be moot.

- Unlimited availability of regional funding for 100-300 kV projects virtually eliminates any potential benefit-cost ratio shifts between TOs.
CAWG RECOMMENDATION TO RSC

Intra-Regional Cost Allocation for Non-Order 1000 Seams Projects

Arguments made against Option 1:

- When highway/byway was established, it was determined that highway project benefits were predominantly regional while zonal (byway) projects benefits were predominantly local in nature. Byway cost allocation provides for a 1/3 regional component in recognition of the assumption that almost any byway project has some regional benefit.

- Applying the highway/byway cost allocation for Seams Projects ensures that the cost allocation is consistent with existing cost allocation for projects within the SPP footprint, is uncomplicated, easy to administer, and will not result in discriminatory rate treatment of byway projects based on geographical location of such projects.
CAWG RECOMMENDATION TO RSC

Intra-Regional Cost Allocation for Non-Order 1000 Seams Projects

Arguments made against Option 1:

- Until recently, lack of accurate external modelling data for planning and not lack of highway funding has been the impediment in the consideration of Seams Projects in SPP planning.
- Regional funding for 100-300 kV byway projects could end the existence of zonally funded byway projects because it would be easy to add on several hundred miles of lower voltage upgrades to a major 345 kV Seams Project. There is no length limit proposed for non-Order 1000 Seams Projects.
- With the periphery of the SPP region expected to double in the near future, the number of potential Seams Projects is unknown and the regional benefits of lower voltage Seams Projects are unclear.
CAWG RECOMMENDATION TO RSC

Intra-Regional Cost Allocation for Non-Order 1000 Seams Projects

Arguments made against Option 1:

- Given that TOs instead of regions could be potential seams partners, there is concern about the number of Seams Projects that could result from this process.

- Regional cost allocation for non-order 1000 Seams Projects is not equitable. The recent decision by the U.S. Court of Appeals for the Seventh Circuit rejected the postage stamp rate method developed by FERC as a cost-spreading mechanism for high-voltage transmission facilities constructed in the PJM footprint.

- Unlike the Order 1000 process, it is unlikely the seams partner (the TO) could spread its share of the costs across a region. This could result in SPP taking on more costs than it otherwise would, to facilitate the construction of the Seams Project, with the attendant impact on ratepayers in the region if the project is regionally funded.
CAWG RECOMMENDATION TO RSC

Intra-Regional Cost Allocation for Non-Order 1000 Seams Projects

Arguments made against Option 1:

- Some of the arguments made to support regional cost allocation for seams byway projects could apply to non-seams byway projects; however, non-seams byway projects do not receive 100% regional funding currently or under the proposal. These reasons include assertions that byway seams facilities are limiting elements that constrain the full use of higher voltage projects and that regional funding for byway projects would avoid the construction of higher voltage projects.

- The reasons given for deviating from the current cost allocation methodology for byway projects (2/3rd zonal and 1/3rd regional) are based on assertions that byway Seams Projects are unique in nature because they are expected to provide regional benefits.
CAWG RECOMMENDATION TO RSC

Intra-Regional Cost Allocation for Non-Order 1000 Seams Projects

Arguments made against Option 1:

- Seams Projects are currently under evaluation by SPP and its seams partners. Until the completion of the studies, it would not be possible to determine whether byway Seam Projects would provide regional benefits and are unique to warrant regional cost allocation.

- The Texas and New Mexico CAWG members supported regional funding for Seams Projects on a case-by-case basis (Option 2) until SPP has gained experience with these Seams Projects. If evidence shows that benefits from Seams Projects are predominantly regional in nature, SPP could apply automatic regional funding for all Seams Projects on a going forward basis. Seams Projects serving as RCAR remedies would be excluded from the case-by-case evaluation.
Strategic Planning Committee Task Force on New Member Additions

**INTERIM REPORT**
SPC TF on New Members
Recent Activities

• Oct. 7 – TF met to finalize documents, recommendations, and SPC presentation
  – Final Scoping Document
  – Final Process Description with Recommended Process Improvements
  – Recommendations for SPP Staff, SPP Legal, RSC, and SPC
  – Recommend Jan. Interim Status Report and Apr. Final Status Report
SPC TF on New Members -- Recent Activities

• 10/16–TF presented Interim Report/Recommendations to SPC
  – The SPC adopted the TF recommendations but with the following adjustments:
    • Meetings that are to be held in executive session or a closed meeting will allow for telephonic participation by SPP members, RSC members and CAWG members who register to attend.
    • The assurances from the RSC and CAWG to participate in confidential discussions include an assurance that the confidential information would not be used in other adjudicatory cases
    • SPP Legal Staff is requested to determine if the confidentiality provisions in the Membership Agreement govern the SPP Members’ requirement to keep information confidential during closed meetings
    • SPP Staff will read a confidential statement at the beginning of all closed meetings
    • The third item under review by the RSC was changed to:

3. The Task Force requests more information from the RSC as to how it views its role regarding the “Bright Line” date
Under Review by the RSC

1. Can/should RSC, CAWG or State Commission staff attend the SPC meetings’ Executive Sessions, and to possibly join the ad hoc Members Forum
   - Need RSC feedback on preference to participate, and assurance that they can protect the confidential information that may be subject to FOIA and state open meeting laws, and assurance that the confidential information would not be used in other adjudicatory cases.

2. When SPP Staff convenes the all-Member special meeting, SPP Staff convene an RSC/CAWG special meeting to follow so that Members and Commissioners/Staff can hear the issues of concern from each other
   - Need RSC feedback on preference to have a second SPP Staff convened special meeting as proposed

3. The Task Force requests more information from the RSC as to how it views its role regarding the “Bright Line” date
Recent Clean Power Plan Activities

- SPP completed its reliability assessment of the EPA’s projected EGU retirements
- October 7\textsuperscript{th} – SPP met with FERC and senior FERC staff to share SPP’s conclusions and recommendations
- October 9\textsuperscript{th} – SPP submitted its comments and recommendations to the EPA
- October 23\textsuperscript{rd} – SPP met with EPA staff
- EPA letter and assessment report posted on SPP website
  - Assessment Report
    http://www.spp.org/publications/CPP%20Reliability%20Analysis%20Results%20Final%20Version.pdf
  - Letter to EPA
SPP’s CPP Impact Assessments

• SPP performed two types of assessments
  – Transmission system impacts
  – Reserve margin impacts
• Both assessments modeled EPA’s projected EGU retirements within the SPP region and surrounding areas
• Transmission system impact assessment performed in two parts
  – Part 1 assumed unused capacity from generators currently available in SPP’s models would be used to replace retired EGUs
  – Part 2 relied upon both currently available generation and new generation added to replace retired EGUs
EPA’s Projected 2016-2020 EGU Retirements

*Excludes committed retirements prior to 2016
**Extracted from EPA IPM data
***THESE RETIREMENTS ARE ASSUMED BY EPA – NOT SPP!
New Generating Capacity Added in Part 2 of SPP’s TSIA
Transmission System Impact Assessment Results

• Part 1 – “what happens if CPP compliance begins and EGU retirements occur before generation and transmission infrastructure is added”
  – Extreme reactive deficiencies of approximately 5,200 MVAR across SPP system
  – Will result in significant loss of load and violations of NERC reliability standards

• Part 2 – “what happens during CPP compliance after replacement generation capacity is added but before requisite transmission infrastructure is added”
  – Loading on 38 facilities in SPP exceeds equipment ratings
  – Some overloads so severe that cascading outages would occur
  – Would result in violations of NERC reliability standards
Reactive Deficiencies Observed in Part 1 of TSIA
Transmission Overloads Observed in Part 2 of TSIA

Overloads in SPP Caused by EPA's Projected EGU Retirements

![Graph showing overloads in SPP caused by EPA's projected EGU retirements. The graph plots the number of facilities overloaded against loading (% of equipment rating). The data points indicate a steep decline in the number of overloads as the loading increases.](image-url)
SPP Reserve Margin Assessment

- Used current load forecasts supplied by SPP members, currently planned generator retirements, currently planned new generator capacity with GIAs, and EPA’s assumed retirements
- SPP’s minimum required reserve margin is 13.6%
- By 2020, SPP’s anticipated reserve margin would be 4.7%, representing a capacity margin deficiency of approximately 4,600 MW
- By 2024, SPP’s anticipated reserve margin would be -4.0%, representing a capacity margin deficiency of approximately 10,100 MW
- Out of 14 load serving members assessed, 9 would be deficient by 2020 and 10 by 2024
Impact of EPA’s Retirements on Reserve Margin

*Includes current load forecasts, current planned generator additions and retirements, and EPA's projected retirements
SPP’s Conclusions

• Significant new generating capacity not currently planned will be needed to replace EPA’s projected retirements
  – EPA projects about 9,000 MW of retirements in the SPP region by 2020 – almost 6,000 MW more than SPP is currently expecting!

• New transmission infrastructure will be needed, both to connect new generation to grid and to deliver energy reliably
  – Currently takes up to 8.5 years to study, plan, and construct transmission in SPP
  – Up to $2.3 million per mile for 345 kV transmission construction

• More comprehensive reliability analysis is needed before final rules are adopted

• Sufficient time is needed to comply in a reliable fashion
SPP’s Recommendations to EPA

• Technical conferences jointly sponsored by FERC and EPA to discuss
  – Reliability impacts
  – Impacts on regional markets
  – How to move forward to accomplish both reliability and environmental objectives

• Comprehensive nationwide analysis of reliability impacts before final rule issued

• Extension of schedule for compliance – at a minimum, interim goals extended at least 5 years

• Adoption of “reliability safety valve”
Next Steps for SPP

- Continue to work with and assist states, as requested
- Work with NERC on its preliminary assessment

Cost of Compliance Study
- Current scope includes comparison of regional approach and individual state approaches
- Could be used to evaluate mass-based versus rate-based approaches
- Could be used to inform states
- Could be used to develop possible futures for inclusion in the next ITP-10
Additional Information

Assessment Report
http://www.spp.org/publications/CPP%20Reliability%20Analysis%20Results%20Final%20Version.pdf

Letter to EPA

Lanny Nickell
Vice President, Engineering
501-614-3232
lnickell@spp.org
2015 ITP10
Overview

October 27, 2014

Lanny Nickell
ASSUMPTIONS AND PROCESS
2015 ITP10 Futures (Recap)

• Future 1: Business as Usual

• Future 2: Decreased Base Load Capacity
  – Up to 20% capacity reduction of conventional generation and hydro
  – Most coal units under 200 MW retired
ITP10 Input Assumptions

2015 ITP10 Fuel Costs ($/MMBtu)

- SPP Central delivered coal: $6.52
- SPP Central natural gas: $3.55
- SPP Central natural gas: $1.54

Year 2013 2015 2017 2019 2021 2023

SPP Annual Energy for 2024

- 61 GW
- July 19, 5 pm

2024 Monthly Demand (TWh)

- July
- August
- September
- October
- November
- December

Retirements and Derates per Future (2015-2024)

- Future 1
- Future 2

SPP Capacity Additions by Unit Type by 2024

- CT: 9.7, 13.0
- CC: 5.6, 8.0
- Wind: 3.3, 3.3

SPP Generation Mix by Unit Type

- Future 1
- Future 2

SPP Energy Output for 2024 by Unit Type

- Future 1
- Future 2
Statistics

- Reliability Needs – 489 unique facilities
- Economic Needs – 25 per future
- Policy Needs – No policy needs
- Projects Evaluated – 1374
PRELIMINARY RESULTS
Draft Consolidated Portfolio

Consolidated Reliability & Economic Grouping
September 2014

This map contains the intellectual property of SPP and may not be used, copied or disseminated by third parties without the express permission of SPP. All rights reserved.
NEXT STEPS
Past Steps
- Futures
- Scope
- Policy Survey
- Resource Plan
- Models
- Benchmarking
- Needs Evaluation
- Project Submittals

Next Steps
- Finalize Portfolio
- Staging
- Metrics
- Sensitivities

TODAY’S RSC

November 2014
Draft Final Section of Report

December 2014
Final Report
2017 ITP10 Scope & Timeline
Introduction

• SPP BOD has directed another ten-year assessment be performed following completion of the 2015 ITP10
  – EPA Clean Power Plan section 111(d) impacts, nationwide 30% reduction of CO$_2$ by 2030
  – Integration of the IS facilities
• Final 111(d) rule expected June, 2015
2017 ITP10 Scope Timeline

<table>
<thead>
<tr>
<th>OCT</th>
<th>NOV</th>
<th>DEC</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>OCT</th>
</tr>
</thead>
</table>

ESWG & TWG propose multiple futures (for MOPC & SPC)

ESWG & TWG narrow futures

Expected CPP Ruling

Remaining Scope Details

Possible Scope Adjustments

Working Group/Task Force Approval

Member Review/Feedback Period

Milestone Period
Next Steps

- **ITP20 Waiver**
  - Forgo the ITP20 for the next ITP Planning Cycle

- **24-month ITP10 Study**
  - Begin scoping ITP10 in January 2015
  - Begin ITP10 model development in July-October 2015
    - Subject to EPA adhering to the CPP schedule
Capacity Margin
Task Force

Tom Hestermann
CMTF Chair

RSC October 27

Southwest Power Pool

Helping our members work together to keep the lights on... today and in the future
# CMTF Membership

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Company/Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thomas Hestermann</td>
<td>Chairman</td>
<td>Mid-Kansas Electric Company</td>
</tr>
<tr>
<td>Jason Atwood</td>
<td>Vice-Chair</td>
<td>Northeast Texas Electric Cooperative, Inc.</td>
</tr>
<tr>
<td>Zac Hager</td>
<td>Member</td>
<td>Oklahoma Gas and Electric Company</td>
</tr>
<tr>
<td>Jon Iverson</td>
<td>Member</td>
<td>Omaha Public Power District</td>
</tr>
<tr>
<td>Patrick Lyons</td>
<td>Member</td>
<td>New Mexico Public Regulation Commission</td>
</tr>
<tr>
<td>Noman Williams</td>
<td>Member</td>
<td>Sunflower Electric Power Corporation</td>
</tr>
<tr>
<td>John Varnell</td>
<td>Member</td>
<td>Tenaska Power Services Co</td>
</tr>
<tr>
<td>Lloyd Linke</td>
<td>Member*</td>
<td>Western Area Power Administration</td>
</tr>
<tr>
<td>Bryan Taggart</td>
<td>Member</td>
<td>Westar Energy</td>
</tr>
<tr>
<td>Ed Johnson</td>
<td>Member</td>
<td>Xcel Energy</td>
</tr>
<tr>
<td>Jon Sunneberg</td>
<td>Member</td>
<td>Nebraska Public Power District</td>
</tr>
<tr>
<td>Jim Jacoby</td>
<td>Member</td>
<td>American Electric Power</td>
</tr>
<tr>
<td>Aaron Ramsdell</td>
<td>Member*</td>
<td>Basin Electric</td>
</tr>
<tr>
<td>Marguerite Wagner</td>
<td>Member</td>
<td>Boston Energy Trading and Marketing, Inc.</td>
</tr>
<tr>
<td>Walt Cecil</td>
<td>Member</td>
<td>Missouri Public Service Commission</td>
</tr>
<tr>
<td>Jason Chaplin</td>
<td>Member</td>
<td>Oklahoma Corporation Commission</td>
</tr>
<tr>
<td>Randy Hughes</td>
<td>Member</td>
<td>IPL</td>
</tr>
<tr>
<td>John Stephens</td>
<td>Member</td>
<td>City Utilities of Springfield</td>
</tr>
<tr>
<td>Rob Janssen</td>
<td>Member</td>
<td>Dogwood Energy, LLC</td>
</tr>
<tr>
<td>Todd Tarter</td>
<td>Member</td>
<td>Empire District Electric Company</td>
</tr>
<tr>
<td>Kristy Ashley</td>
<td>Member</td>
<td>Exelon Power Team</td>
</tr>
<tr>
<td>Randy Root</td>
<td>Member</td>
<td>Grand River Dam Authority</td>
</tr>
<tr>
<td>Michael Wise</td>
<td>Member</td>
<td>Golden Spread Electric Cooperative, Inc.</td>
</tr>
<tr>
<td>Bill Bojorquez</td>
<td>Member</td>
<td>Hunt Transmission Services, LLC</td>
</tr>
<tr>
<td>Pat McCool</td>
<td>Member</td>
<td>Kansas City Power &amp; Light Company</td>
</tr>
<tr>
<td>Clinton Bruhn</td>
<td>Member</td>
<td>Lincoln Electric System</td>
</tr>
<tr>
<td>Bradley Hans</td>
<td>Member*</td>
<td>Municipal Energy Agency of Nebraska</td>
</tr>
<tr>
<td>Bill Dowling</td>
<td>Member</td>
<td>Midwest Energy, Inc.</td>
</tr>
<tr>
<td>John Grotzinger</td>
<td>Member</td>
<td>Missouri Joint Municipal EUC</td>
</tr>
<tr>
<td>Lanny Nickell</td>
<td>Staff Secretary</td>
<td>Southwest Power Pool</td>
</tr>
</tbody>
</table>

*Will have an advisory vote until their SPP Membership is effective. These votes are such that they will be recorded in the meeting minutes, but shall not impact the tabulation of the votes of the task force.
CMTF Policy topics

- Reserve Margin entity application and assumptions
- Assumptions about Reserve Margin calculation and requirements
- Accreditation policies
- Fuel supply and transportation firmness policies
- Deliverability policies
- Environmental policies
- State law policies
- Penalty policies
- Timing of implementation of policy changes
- Working Group ownership of Reserve Margin
Future CMTF meetings

- October 30th 8:30 am - 3:00 pm, Dallas (AEP office)
- November 13th 8:30 am - 3:00 pm, Dallas (Homewood Suites)
- December 10th 8:30 am - 3:00 pm, Dallas (AEP office)
- January 8th 8:30 am - 3:00 pm, Dallas (AEP office)
- February 25th 8:30 am - 3:00 pm, Dallas (AEP office)
- March 25th 8:30 am - 3:00 pm, Dallas (AEP office)
Update on Seams
Related Dockets at FERC

October 2014

David Kelley

Southwest Power Pool

Helping our members work together to keep the lights on... today and in the future
SPP-MISO DISPUTE
Background

- MISO filed request for declaratory order on interpretation of Section 5.2 of SPP-MISO JOA to effectuate integration of Entergy
  - FERC granted MISO’s request
- SPP appealed FERC’s decision to the D.C. Circuit
  - D.C. Circuit vacated and remanded FERC’s decision in January 2014
- SPP began billing MISO for usage beginning 12/19/13
- SPP made filing at FERC for Service Agreement under Section 205 (ER14-1174) and complaint under Section 206 (EL14-21)
- MISO filed Section 206 complaint (EL14-30)
Transmission Charges for MISO Usage

<table>
<thead>
<tr>
<th>Service Agreement Charges</th>
<th>Tariff Charges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec - Jan 1-28</td>
<td>$8,629,000</td>
</tr>
<tr>
<td>Jan 29-February</td>
<td>$7,880,365</td>
</tr>
<tr>
<td>March</td>
<td>$6,497,276</td>
</tr>
<tr>
<td>April</td>
<td>$3,140,536</td>
</tr>
<tr>
<td>May</td>
<td>$1,873,132</td>
</tr>
<tr>
<td>June</td>
<td>$1,592,510</td>
</tr>
<tr>
<td>July</td>
<td>$2,492,170</td>
</tr>
<tr>
<td>August</td>
<td>$3,790,241</td>
</tr>
<tr>
<td>September</td>
<td>$4,374,080</td>
</tr>
<tr>
<td>Total</td>
<td>$40,269,310</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Charges</th>
<th>Penalties</th>
<th>Losses</th>
<th>Accrued Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>$31,640,310</td>
<td>$3,790,241</td>
<td>$7,880,365</td>
<td>$8,629,000</td>
</tr>
<tr>
<td>$31,640,310</td>
<td>$3,140,536</td>
<td>$1,873,132</td>
<td>$1,592,510</td>
</tr>
<tr>
<td>$2,492,170</td>
<td>$3,790,241</td>
<td>$4,374,080</td>
<td></td>
</tr>
</tbody>
</table>

100 of 155
Settlement Proceedings

• In March 2014 FERC accepted SPP’s service agreement effective January 29, 2014 subject to refund and set all issues for hearing pending settlement proceedings
  – Parties to the settlement discussions primarily include SPP and SPP TO’s, MISO and MISO TO’s, and ORCA Joint Parties

• Settlement conferences
  – 1st on April 29, 2014
  – 2nd on June 3, 2014
  – 3rd on August 21, 2014
  – 4th schedule for October 23, 2014
Other Relevant Regulatory Activity

- On April 12 MISO proposed to voluntarily restrict N-S dispatch flow to a target of 1000 MW (ER14-1713)

- On May 22 MISO requested waiver of tariff provisions for processing long-term transmission service requests that may cause MISO to exceed 1000 MW (ER14-2022)

- On June 16 FERC accepted MISO’s proposed cost recovery mechanism for charges under the SPP Service Agreement and set for settlement (ER14-1736)

- On July 16 MISO filed to exceed the 1000 MW contract path limit when it is economical to do so by paying the SPP charges to realize the production cost savings (ER14-2445)
FERC Technical Conference

• Conference held at FERC offices on September 22

• Three agenda topics included:
  – Interface bus pricing
  – Deferral of day-ahead FFE exchange/settlement
  – Addition of M2M flowgates

• Conference materials posted on FERC website: [Link to Materials]
Integrated Marketplace Update

Bruce Rew, PE
Vice President, Operations
SPP Integrated Marketplace Update

• Summary of first seven months
• Marketplace Statistical Information
• Integrated Marketplace Settlement review
• Day Ahead versus Real-Time differences
Marketplace as of October 1, 2014

- 131 Market Participants
  - 87 financial only and 44 asset owning
    - Some entities as multiple Market Participants
    - EIS Market had 50 Market Participants
- SPP BA has successfully maintained NERC control performance standards
- System availability has exceeded expectations
  - Day-Ahead Market has posted on-time every day except once in early June (due to a modeling issue)
  - Real-Time Balancing Market has successfully solved 99.986% of all intervals
Unit Commitment Improvement

Average RT Daily Capacity Overage*

*Overage = Economic Max - Load - NSI - (RegUp+SPIN+SUPP)

EIS Capacity Overage
IM Capacity Overage
Unit Commitment Improvement

RT Daily Capacity Overage*

*Overage = Economic Max - Load - NSI - (RegUp+SPIN+SUPP)

- **EIS Capacity Overage**
- **IM Capacity Overage**

109 of 155
Graph on Dispatch by Fuel Type
Graph on Fuel on the Margin in RT
Graph on Real-Time versus DA pricing
Marketplace Settlement

• Based on difference in quantity and price between DA and Real-Time (RT)
• Price = Locational Marginal Price (LMP)
  – Represents cost to serve the next increment of load at specific pricing location
  – Value includes cost of producing Energy, and cost of its delivery (*congestion and losses*)
DA vs RT: Percent Contribution to LMP Difference

% Contribution to LMP Difference

<table>
<thead>
<tr>
<th>Month</th>
<th>MCC</th>
<th>MLC</th>
<th>MEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Mar</td>
<td>75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-Apr</td>
<td></td>
<td></td>
<td>97</td>
</tr>
<tr>
<td>1-May</td>
<td></td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>1-Jun</td>
<td></td>
<td></td>
<td>95</td>
</tr>
<tr>
<td>1-Jul</td>
<td></td>
<td></td>
<td>98</td>
</tr>
<tr>
<td>1-Aug</td>
<td></td>
<td></td>
<td>81</td>
</tr>
</tbody>
</table>

MCC: Marginal Congestion Cost
MLC: Marginal Loss Cost
MEC: Marginal Energy Cost
Reasons for Lower Pricing in Real Time

• Market Participant Behavior
  – Bidding 100% or more of actual load in DA Market
  – Wind offering in the DA Market is less than actual production in Real-Time
  – Resources self-committing after DA Market

• Virtual Participation
  – Stable virtual activity suggests healthy price differences between the markets
Other DA vs. RT Price Considerations

- **ARR/TCR Process**
  - TCR positions settle against DA Market positions creating more incentive for participation in the DA Market
  - Incents Market Participants to bid in load to ensure congestion is accurate.

- **Price Assurance from DA Market**
  - Bid conservatively (full load) in DA
    - Ensures higher/consistent pricing for Resources in DA
    - Can minimize exposure to Real-Time price spikes
    - Resources are more responsive to prices in Real-Time than Load
Helping our members work together to keep the lights on... today and in the future
<table>
<thead>
<tr>
<th>No.</th>
<th>Action Item</th>
<th>Date Originated</th>
<th>Status</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EPA 111(d) : (1) Lanny Nickell to provide scope document on compliance analysis and an update on when SPP reliability analysis will be completed (2) Commissioner Reeves to provide update on possibility of studies to be performed by BPC and GPI, what services those entities are providing</td>
<td>8/25/2014</td>
<td>Completed</td>
<td>Addressed at 9/29/14 Meeting</td>
</tr>
<tr>
<td>2</td>
<td>RARTF: Update on RARTF and New Metrics</td>
<td>8/25/2014</td>
<td>Completed</td>
<td>Addressed at 9/29/14 Meeting</td>
</tr>
<tr>
<td>3</td>
<td>Seams Project Task Force: CAWG will consider the issue at next meeting and bring back to RSC for discussion</td>
<td>8/25/2014</td>
<td>Completed</td>
<td>Addressed at 9/29/14 Meeting; On 10/27/14 Meeting as a voting item</td>
</tr>
<tr>
<td>4</td>
<td>SPC Task Force on New Members: RSC should email Commissioner Murphy with any concerns or topics. Update to be provided at next RSC meeting</td>
<td>8/25/14</td>
<td>Completed</td>
<td>Addressed at 9/29/14 Meeting</td>
</tr>
<tr>
<td>No.</td>
<td>Action Item</td>
<td>Date Originated</td>
<td>Status</td>
<td>Comments</td>
</tr>
<tr>
<td>-----</td>
<td>-------------------------------------------------------------------------------</td>
<td>-------------------</td>
<td>---------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>5</td>
<td>Consideration of RSC Bylaws changes related to membership eligibility</td>
<td>Ongoing</td>
<td>Action needed before IS Parties join SPP (expected join date is November 1, 2015)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>EPA’s Clean Power Plan – Discuss possibility of RSC filing comments</td>
<td>September 29, 2014</td>
<td>Action needed before EPA filing deadline</td>
<td>On October 27, 2014 Agenda</td>
</tr>
</tbody>
</table>
# Table of Contents

Executive Summary ......................................................................................................................... 2

NTC Project Summary ..................................................................................................................... 4
  NTC Issuance ............................................................................................................................... 8
  NTC Withdraw .............................................................................................................................. 8
  Completed Projects ..................................................................................................................... 9
  Project Status Summary .............................................................................................................. 15

Balanced Portfolio ......................................................................................................................... 16

Priority Projects ............................................................................................................................ 18

Out-of-Bandwidth Projects .......................................................................................................... 21

Responsiveness Report .................................................................................................................. 22

Appendix I ...................................................................................................................................... 24
Executive Summary

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

Each quarter SPP staff solicits feedback from the project owners to determine the progress of each approved transmission project. This quarterly report charts the progress of all SPP Transmission Expansion Plan (STEP) projects approved either directly by the SPP Board of Directors (BOD) or through a FERC filed service agreement under the SPP Open Access Transmission Tariff (OATT).

The reporting period for this report is May 1, 2014 through July 31, 2014. Table 1 provides a summary of all projects in the current Project Tracking Portfolio (PTP), which includes all Network Upgrades that have been completed since January 1, 2013. The PTP includes all active Network Upgrades including transmission lines, transformers, substations, and devices.

Table 1 below summarizes the PTP for this quarter. Figures 1 reflects the percentage cost of each upgrade type in the PTP. Figure 2 shows the percentage cost of each project status in the PTP.

<table>
<thead>
<tr>
<th>Upgrade Type</th>
<th>No. of Upgrades</th>
<th>Estimated Cost</th>
<th>Miles of New</th>
<th>Miles of Rebuild</th>
<th>Miles of Voltage Conversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Reliability</td>
<td>336</td>
<td>$2,337,424,857</td>
<td>1049.4</td>
<td>456.1</td>
<td>309.0</td>
</tr>
<tr>
<td>Transmission Service</td>
<td>38</td>
<td>$193,292,694</td>
<td>31.5</td>
<td>138.9</td>
<td>0.0</td>
</tr>
<tr>
<td>Balanced Portfolio</td>
<td>11</td>
<td>$550,554,329</td>
<td>457.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>High Priority</td>
<td>117</td>
<td>$2,323,378,456</td>
<td>1741.9</td>
<td>20.5</td>
<td>40.0</td>
</tr>
<tr>
<td>ITP10</td>
<td>17</td>
<td>$767,590,318</td>
<td>515.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Zonal Reliability</td>
<td>9</td>
<td>$108,568,750</td>
<td>34.7</td>
<td>28.5</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**NTC Projects Subtotal** 528 $6,280,809,404 3829.5 644.0 349.0

<table>
<thead>
<tr>
<th>Upgrade Type</th>
<th>No. of Upgrades</th>
<th>Estimated Cost</th>
<th>Miles of New</th>
<th>Miles of Rebuild</th>
<th>Miles of Voltage Conversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation Interconnection</td>
<td>42</td>
<td>$202,070,350</td>
<td>40.5</td>
<td>11.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Regional Reliability - Non OATT</td>
<td>10</td>
<td>$31,567,090</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>TO - Sponsored</td>
<td>29</td>
<td>$152,776,000</td>
<td>61.1</td>
<td>7.8</td>
<td>77.1</td>
</tr>
</tbody>
</table>

**Non-NTC Projects Subtotal** 81 $386,413,440 101.6 18.9 77.1

**Total** 609 $6,667,222,845 3931.1 662.9 426.1

*Table 1: Q4 2014 Portfolio Summary*
Southwest Power Pool, Inc.

Figure 1: Percentage of Project Type on Cost Basis

- Regional Reliability: 36%
- Transmission Service: 3%
- Balanced Portfolio: 8%
- High Priority: 36%
- ITP10: 12%
- Zonal Reliability: 2%
- Generation Interconnection: 3%

Figure 2: Percentage of Project Status on Cost Basis

- Complete: 26%
- On Schedule < 4: 3%
- On Schedule > 4: 9%
- Delay - Mitigation: 5%
- NTC Suspension: 35%
- NTC - Commitment Window: 0.3%
- NTC-C Project Estimate Window: 1%
- Re-evaluation: 1%

Q4 2014 Project Tracking Report
In adherence to the OATT and Business Practice 7060, SPP issues Notifications to Construct (NTCs) to Designated Transmission Owners (DTOs) to commence the construction of Network Upgrades that have been approved or endorsed by the SPP Board of Directors (BOD) intended to meet the construction needs of the STEP, OATT, or Regional Transmission Organization (RTO).

Figure 3 reflects project status within each source study, and Table 2 provides the supporting data. Figure 4 shows the amount of estimated cost by in-service year for all Network Upgrades that have been issued an NTC or NTC-C. Figure 5 shows the cost trend of all the SPP BOD-approved studies that have resulted in NTCs. Note: Figures 3, 4 and 5, and Table 2 provide data for all projects for which SPP has issued an NTC or NTC-C, regardless of completion date, and therefore include data from Network Upgrades no longer included in PTP.
**Table 2: Project Status by NTC Source Study**

<table>
<thead>
<tr>
<th>Source Study</th>
<th>Complete</th>
<th>Delayed</th>
<th>Suspended</th>
<th>On Schedule</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006 STEP</td>
<td>$223,202,401</td>
<td>$912,000</td>
<td></td>
<td></td>
<td>$224,114,401</td>
</tr>
<tr>
<td>2007 STEP</td>
<td>$418,407,224</td>
<td>$144,309,000</td>
<td></td>
<td></td>
<td>$562,716,224</td>
</tr>
<tr>
<td>2008 STEP</td>
<td>$409,249,199</td>
<td>$11,417,000</td>
<td></td>
<td></td>
<td>$420,666,199</td>
</tr>
<tr>
<td>Balanced Portfolio</td>
<td>$749,693,002</td>
<td>$65,342,070</td>
<td></td>
<td></td>
<td>$815,035,072</td>
</tr>
<tr>
<td>2009 STEP</td>
<td>$468,142,670</td>
<td>$108,790,344</td>
<td></td>
<td></td>
<td>$576,933,014</td>
</tr>
<tr>
<td>Priority Projects</td>
<td>$365,847,867</td>
<td>$127,995,000</td>
<td>$902,225,090</td>
<td></td>
<td>$1,396,067,957</td>
</tr>
<tr>
<td>2010 STEP</td>
<td>$106,340,480</td>
<td>$24,288,655</td>
<td>$10,316,217</td>
<td>$21,157,136</td>
<td>$162,102,488</td>
</tr>
<tr>
<td>2012 ITPNT</td>
<td>$98,274,985</td>
<td>$99,362,036</td>
<td>$6,300,000</td>
<td>$1,143,670</td>
<td>$205,080,691</td>
</tr>
<tr>
<td>2012 ITP10</td>
<td></td>
<td></td>
<td></td>
<td>$767,590,318</td>
<td>$767,590,318</td>
</tr>
<tr>
<td>2013 ITPNT</td>
<td>$58,044,682</td>
<td>$335,604,297</td>
<td></td>
<td>$155,352,341</td>
<td>$549,001,320</td>
</tr>
<tr>
<td>2014 ITPNT</td>
<td>$3,804,467</td>
<td>$304,001,065</td>
<td></td>
<td>$384,646,531</td>
<td>$692,452,063</td>
</tr>
<tr>
<td>HPILS</td>
<td>$26,952,690</td>
<td>$309,546,961</td>
<td></td>
<td>$592,019,072</td>
<td>$928,518,723</td>
</tr>
<tr>
<td>Ag Studies</td>
<td>$703,213,420</td>
<td>$118,331,700</td>
<td></td>
<td>$77,331,962</td>
<td>$898,877,081</td>
</tr>
<tr>
<td>DPA Studies</td>
<td>$64,353,205</td>
<td>$122,365,276</td>
<td></td>
<td>$370,008</td>
<td>$187,088,489</td>
</tr>
<tr>
<td>GI Studies</td>
<td>$140,666,139</td>
<td>$65,782,555</td>
<td>$3,033,890</td>
<td>$101,268,041</td>
<td>$310,750,625</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$3,836,192,431</td>
<td>$1,772,705,889</td>
<td>$19,650,107</td>
<td>$3,068,446,238</td>
<td>$8,696,994,665</td>
</tr>
</tbody>
</table>
Figure 4: Estimated Cost for NTC Projects per In-Service Year
Figure 5: Cost Trend per BOD-Approved Study
**NTC Issuance**

Nine (9) NTCs were issued since the last quarterly report for new and previously approved projects with a total cost estimate of the included Network Upgrades totaling $264.6 billion.

Four (4) NTCs were issued as a result of the completion of the Aggregate Facility Studies SPP-2010-AGP1-AFS-8 and SPP-2012-AG1-AFS-7. The total estimated cost of the Network Upgrades described in these NTCs is $38.7 million.

Five (5) of the NTCs were issued as a result of Transmission Owners submitting updated cost estimates in response to Notifications to Construct with Conditions (NTC-Cs). The NTC-Cs were issued as a result of the 2014 ITP Near-Term Assessment (ITPNT) approved in January. For these projects, all cost estimates were found to meet the conditional requirements of the NTC-C, and therefore were issued NTCs without the NTC-C conditions.

Table 3 summarizes the NTC activity from June 1, 2014 through September 30, 2014. NTC ID values in **bold** font indicate NTC-Cs.

<table>
<thead>
<tr>
<th>NTC ID</th>
<th>DTO</th>
<th>NTC Issue Date</th>
<th>Upgrade Type</th>
<th>Source Study</th>
<th>No. of Upgrades</th>
<th>Estimated Cost of New Upgrades</th>
<th>Estimated Cost of Previously Approved Upgrades</th>
</tr>
</thead>
<tbody>
<tr>
<td>200267</td>
<td>WR</td>
<td>7/1/2014</td>
<td>Transmission Service</td>
<td>Aggregate Study</td>
<td>1</td>
<td>$16,427,688</td>
<td></td>
</tr>
<tr>
<td>200269</td>
<td>OGE</td>
<td>7/1/2014</td>
<td>Transmission Service</td>
<td>Aggregate Study</td>
<td>1</td>
<td>$1,131,409</td>
<td></td>
</tr>
<tr>
<td>200291</td>
<td>WR</td>
<td>8/4/2014</td>
<td>Regional Reliability</td>
<td>Aggregate Study</td>
<td>3</td>
<td>$14,600,846</td>
<td></td>
</tr>
<tr>
<td>200294</td>
<td>NPPD</td>
<td>8/26/2014</td>
<td>Regional Reliability</td>
<td>2014 ITPNT</td>
<td>2</td>
<td>$34,593,371</td>
<td></td>
</tr>
<tr>
<td>200295</td>
<td>OPPD</td>
<td>9/2/2014</td>
<td>Regional Reliability</td>
<td>2014 ITPNT</td>
<td>3</td>
<td>$35,091,946</td>
<td></td>
</tr>
<tr>
<td>200296</td>
<td>WR</td>
<td>9/2/2014</td>
<td>Zonal Reliability/ Regional Reliability</td>
<td>2014 ITPNT</td>
<td>2</td>
<td>$109,830,963</td>
<td></td>
</tr>
<tr>
<td>200299</td>
<td>OGE</td>
<td>9/18/2014</td>
<td>Regional Reliability</td>
<td>2014 ITPNT</td>
<td>4</td>
<td>$21,492,965</td>
<td></td>
</tr>
<tr>
<td>200298</td>
<td>AEP</td>
<td>9/30/2014</td>
<td>Transmission Service</td>
<td>Aggregate Study</td>
<td>1</td>
<td>$6,566,217</td>
<td></td>
</tr>
<tr>
<td>200305</td>
<td>AEP</td>
<td>9/30/2014</td>
<td>Regional Reliability</td>
<td>2014 ITPNT</td>
<td>1</td>
<td>$24,880,495</td>
<td></td>
</tr>
</tbody>
</table>

**Table 3: Q4 2014 NTC Issuance Summary**

<p>| | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>18</td>
<td>$24,125,314</td>
<td>$240,490,586</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NTC Withdraw**

Two (2) NTCs were withdrawn since the last quarterly report.

One project that had its associated NTC withdrawn was previously issued as part of the 2014 ITPNT, but was requested to be withdrawn by the DTO.
The other project that had its associated NTC withdrawn was previously issued due to Generation Interconnection Request GEN-2010-056, but subsequently had the Generation Interconnection Agreement terminated by the Interconnection Customer.

Table 4 lists the NTC Withdraw activity from June 1, 2014 through September 30, 2014. NTC ID values in bold font indicate NTC-Cs.

<table>
<thead>
<tr>
<th>Previous NTC ID</th>
<th>DTO</th>
<th>Previous NTC Issue Date</th>
<th>NTC Withdraw Issue Date</th>
<th>Upgrade Type</th>
<th>Source Study</th>
<th>No. of Upgrades</th>
<th>Estimated Cost of Withdrawn Upgrades</th>
</tr>
</thead>
<tbody>
<tr>
<td>200242</td>
<td>WR</td>
<td>2/19/2014</td>
<td>8/8/2014</td>
<td>Regional Reliability</td>
<td>2014 ITPNT</td>
<td>1</td>
<td>$258,795</td>
</tr>
<tr>
<td>200266</td>
<td>NPPD</td>
<td>4/16/2014</td>
<td>9/29/2014</td>
<td>Generation Interconnection</td>
<td>GI Study</td>
<td>1</td>
<td>$471,716</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td><strong>$730,511</strong></td>
</tr>
</tbody>
</table>

*Table 4: Q4 2014 NTC Withdraw Summary*

**Completed Projects**

Forty-three (43) Network Upgrades with NTCs and one Generation Interconnection Network Upgrade were completed during the reporting period, totaling an estimated $675.2 million.

Southwestern Public Service Company (SPS) and Oklahoma Gas and Electric Co. (OGE) reported that the new double circuit 345 kV line from Hitchland to Woodward District EHV in western Oklahoma was placed into service on May 16th. SPS constructed approximately 30 miles, while OGE built approximately 92 miles of the new 122-mile line. The total estimated cost of the project is $223.6 million.

Prairie Wind Transmission (PW) and Westar Energy, Inc. (WR) reported that the new 78-mile double circuit 345 kV line from Thistle to Wichita was energized on June 4th. PW completed the construction of the transmission line, while WR upgraded its Wichita substation to accommodate the new 345 kV circuits. The project is estimated to cost $136.6 million, and was originally not expected to be complete until late December.

Table 5 lists the Network Upgrades completed during the reporting period. Table 6 summarizes the completed projects over the previous year. Figure 6 reflects the completed projects by upgrade type on a cost basis for the current year and the following year based on current projected in-service dates. Tables 7 and 8 summarize all Network Upgrades that include construction of transmission lines, both for the current year and the following year. **Note: Previous quarter’s updated results are listed as the Transmission Owners may make adjustments to final costs and status of projects completed during the year.**
<table>
<thead>
<tr>
<th>UID</th>
<th>Network Upgrade Name</th>
<th>Owner</th>
<th>NTC Source Study</th>
<th>Cost Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>10932</td>
<td>Stateline - Woodward EHV 345 kV</td>
<td>OGE</td>
<td>Balanced Portfolio</td>
<td></td>
</tr>
<tr>
<td>10933</td>
<td>WOODWARD DISTRICT EHV 345/138KV TRANSFORMER CKT 2</td>
<td>OGE</td>
<td>Balanced Portfolio</td>
<td>$115,000,000</td>
</tr>
<tr>
<td>10937</td>
<td>Stateline 345 kV</td>
<td>OGE</td>
<td>Balanced Portfolio</td>
<td></td>
</tr>
<tr>
<td>10300</td>
<td>COLONY - FT SMITH 161 KV CKT 1 #2</td>
<td>OGE</td>
<td>2009 STEP</td>
<td>$2,120,000</td>
</tr>
<tr>
<td>10858</td>
<td>PRATT - ST JOHN 115KV CKT 1</td>
<td>MKEC</td>
<td>2009 STEP</td>
<td>$15,079,303</td>
</tr>
<tr>
<td>11021</td>
<td>Hastings Sub 115 kV</td>
<td>SPS</td>
<td>2009 STEP</td>
<td>$1,048,295</td>
</tr>
<tr>
<td>11085</td>
<td>TUCO INTERCHANGE 345/230KV TRANSFORMER CKT 2</td>
<td>SPS</td>
<td>2009 STEP</td>
<td>$16,234,558</td>
</tr>
<tr>
<td>11241</td>
<td>Hitchland Interchange - Woodward District EHV 345 kV CKT 1(SPS)</td>
<td>SPS</td>
<td>Priority Projects</td>
<td>$55,608,451</td>
</tr>
<tr>
<td>11242</td>
<td>Hitchland Interchange - Woodward District EHV 345 kV CKT 2(SPS)</td>
<td>SPS</td>
<td>Priority Projects</td>
<td></td>
</tr>
<tr>
<td>11244</td>
<td>Hitchland Interchange - WOODWARD DISTRICT EHV 345 kV CKT 1 (OGE)</td>
<td>OGE</td>
<td>Priority Projects</td>
<td>$168,000,000</td>
</tr>
<tr>
<td>11245</td>
<td>Hitchland Interchange - WOODWARD DISTRICT EHV 345 kV CKT 2 (OGE)</td>
<td>OGE</td>
<td>Priority Projects</td>
<td></td>
</tr>
<tr>
<td>11258</td>
<td>Thistle - Wichita 345 kV ckt 1 (PW)</td>
<td>PW</td>
<td>Priority Projects</td>
<td>$61,200,000</td>
</tr>
<tr>
<td>11259</td>
<td>Thistle - Wichita 345 kV ckt 2 (PW)</td>
<td>PW</td>
<td>Priority Projects</td>
<td>$61,200,000</td>
</tr>
<tr>
<td>11497</td>
<td>Wichita 345 kV</td>
<td>WR</td>
<td>Priority Projects</td>
<td>$14,155,302</td>
</tr>
<tr>
<td>11378</td>
<td>CHERRY SUB - HASTINGS SUB 115VK CKT 1</td>
<td>SPS</td>
<td>2010 STEP</td>
<td>$5,540,583</td>
</tr>
<tr>
<td>11411</td>
<td>Franklin - Mulberry 69 kV Ckt 1</td>
<td>WR</td>
<td>2010 STEP</td>
<td>$6,904,214</td>
</tr>
<tr>
<td>11412</td>
<td>Franklin - Sheffield 69KV Ckt 1</td>
<td>WR</td>
<td>2010 STEP</td>
<td>$1,440,427</td>
</tr>
<tr>
<td>11413</td>
<td>Franklin 161 kV</td>
<td>WR</td>
<td>2010 STEP</td>
<td>$9,059,933</td>
</tr>
<tr>
<td>11444</td>
<td>Franklin 161/69KV TRANSFORMER CKT 1</td>
<td>WR</td>
<td>2010 STEP</td>
<td>$6,854,823</td>
</tr>
<tr>
<td>10195</td>
<td>Tuco Interchange 115/69 kV Transformer Ckt 3</td>
<td>SPS</td>
<td>2012 ITPNT</td>
<td>$3,212,132</td>
</tr>
<tr>
<td>10699</td>
<td>Maid - Redden 69 kV Ckt 1</td>
<td>GRDA</td>
<td>2012 ITPNT</td>
<td>$2,104,778</td>
</tr>
<tr>
<td>11078</td>
<td>Albion - Genoa 115 kV Ckt 1</td>
<td>NPPD</td>
<td>2012 ITPNT</td>
<td>$1,049,361</td>
</tr>
<tr>
<td>11171</td>
<td>Carthage - Rock Hill 69 kV Ckt 1 #2</td>
<td>AEP</td>
<td>2012 ITPNT</td>
<td>$11,830,128</td>
</tr>
<tr>
<td>50398</td>
<td>Auburn Road 230/115/13.8 kV Ckt 1 Auto Upgrade</td>
<td>WR</td>
<td>2012 ITPNT</td>
<td>$32,936,593</td>
</tr>
<tr>
<td>50402</td>
<td>Move lines from Lea County to Hobbs 230/115 kV</td>
<td>SPS</td>
<td>2012 ITPNT</td>
<td>$11,282,344</td>
</tr>
<tr>
<td>50405</td>
<td>Coweta 69 kV</td>
<td>AEP</td>
<td>2012 ITPNT</td>
<td>$1,428,440</td>
</tr>
<tr>
<td>10415</td>
<td>Hoover South - Tyler 69 kV Ckt 1</td>
<td>WR</td>
<td>2013 ITPNT</td>
<td>$4,737,867</td>
</tr>
<tr>
<td>10647</td>
<td>Northwest Henderson - Poynter 69 kV Ckt 1</td>
<td>AEP</td>
<td>2013 ITPNT</td>
<td>$7,815,833</td>
</tr>
<tr>
<td>11243</td>
<td>Hitchland Interchange 345/230 kV Transformer Ckt 2</td>
<td>SPS</td>
<td>2013 ITPNT</td>
<td>$4,723,219</td>
</tr>
<tr>
<td>50519</td>
<td>Pheasant Run - Seguin 115 kV Ckt 1</td>
<td>MIDW</td>
<td>2013 ITPNT</td>
<td>$11,128,231</td>
</tr>
<tr>
<td>50561</td>
<td>Potash Junction 115/69 kV Transformer Ckt 2</td>
<td>SPS</td>
<td>2013 ITPNT</td>
<td>$2,289,368</td>
</tr>
<tr>
<td>50507</td>
<td>Howard 115 kV Capacitors</td>
<td>SPS</td>
<td>DPA Studies</td>
<td>$1,127,389</td>
</tr>
<tr>
<td>11129</td>
<td>Mehan - Cushing 138 kV Ckt 1</td>
<td>OGE</td>
<td>DPA Studies</td>
<td></td>
</tr>
<tr>
<td>11130</td>
<td>Stillwater - Spring Valley 138 kV Ckt 1</td>
<td>OGE</td>
<td>DPA Studies</td>
<td>$10,600,000</td>
</tr>
<tr>
<td>11132</td>
<td>Spring Valley - Knipe 138 kV Ckt 1</td>
<td>OGE</td>
<td>DPA Studies</td>
<td></td>
</tr>
<tr>
<td>Project Code</td>
<td>Project Description</td>
<td>Owner</td>
<td>Studies</td>
<td>Cost</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------------------------------------------------</td>
<td>-------</td>
<td>----------</td>
<td>-----------</td>
</tr>
<tr>
<td>11133</td>
<td>Bristow - Cushing 138 kV Ckt 1</td>
<td>OGE</td>
<td>DPA Studies</td>
<td></td>
</tr>
<tr>
<td>50589</td>
<td>Grant County 138/69 kV Transformer</td>
<td>OGE</td>
<td>DPA Studies</td>
<td>$1,173,170</td>
</tr>
<tr>
<td>50630</td>
<td>Medford Tap 138 kV</td>
<td>OGE</td>
<td>DPA Studies</td>
<td>$185,400</td>
</tr>
<tr>
<td>50233</td>
<td>BURLINGTON JUNCTION - COFFEY COUNTY NO. 3 WESTPHALIA 69KV Ckt 1</td>
<td>WR</td>
<td>Aggregate Study</td>
<td>$3,027,106</td>
</tr>
<tr>
<td>50236</td>
<td>COFFEY COUNTY NO. 3 WESTPHALIA - GREEN 69KV Ckt 1</td>
<td>WR</td>
<td>Aggregate Study</td>
<td>$6,726,750</td>
</tr>
<tr>
<td>11203</td>
<td>MEDICINE LODGE - PRATT 115KV Ckt 1</td>
<td>MKEC</td>
<td>Aggregate Study</td>
<td>$13,645,827</td>
</tr>
<tr>
<td>11440</td>
<td>PRATT - ST JOHN 115KV Ckt 1 #2</td>
<td>MKEC</td>
<td>Aggregate Study</td>
<td>$100,000</td>
</tr>
<tr>
<td>50319</td>
<td>OGALLALA 230/115KV TRANSFORMER Ckt 1</td>
<td>NPPD</td>
<td>Aggregate Study</td>
<td>$4,183,802</td>
</tr>
<tr>
<td>50646</td>
<td>Osage - Shidler 138kV</td>
<td>OGE</td>
<td>GI Study</td>
<td>$399,300</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>$675,152,927</strong></td>
</tr>
</tbody>
</table>

*Table 5: Q4 2014 Completed Network Upgrades*
<table>
<thead>
<tr>
<th>Upgrade Type</th>
<th>Q4 2013</th>
<th>Q1 2014</th>
<th>Q2 2014</th>
<th>Q3 2014</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Reliability</td>
<td>14</td>
<td>19</td>
<td>23</td>
<td>28</td>
<td>84</td>
</tr>
<tr>
<td></td>
<td>$31,590,184</td>
<td>$77,028,184</td>
<td>$150,274,163</td>
<td>$155,232,414</td>
<td>$414,124,945</td>
</tr>
<tr>
<td>Transmission Service</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>$4,235,570</td>
<td>$4,781,255</td>
<td>$0</td>
<td>$23,399,683</td>
<td>$32,416,508</td>
</tr>
<tr>
<td>Balanced Portfolio</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>$0</td>
<td>$165,000,000</td>
<td>$0</td>
<td>$131,234,558</td>
<td>$296,234,558</td>
</tr>
<tr>
<td>High Priority</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>$15,277,233</td>
<td>$538,071</td>
<td>$4,212,722</td>
<td>$364,886,972</td>
<td>$384,914,998</td>
</tr>
<tr>
<td>ITP10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Zonal Reliability</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Generation</td>
<td>0</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Interconnection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$23,260,311</td>
</tr>
<tr>
<td></td>
<td>$0</td>
<td>$22,462,011</td>
<td>$399,000</td>
<td>$399,300</td>
<td></td>
</tr>
</tbody>
</table>

*Table 6: Completed Project Summary through 3rd Quarter 2014*
**Table 7: Line Upgrade Summary for Previous 12 Months**

<table>
<thead>
<tr>
<th>Voltage Class</th>
<th>Number of Upgrades</th>
<th>Miles of New</th>
<th>Miles of Rebuild/Reconductor</th>
<th>Miles of Voltage Conversion</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>69</td>
<td>14</td>
<td>14.0</td>
<td>73.1</td>
<td>0.0</td>
<td>$67,115,228</td>
</tr>
<tr>
<td>115</td>
<td>16</td>
<td>82.8</td>
<td>73.4</td>
<td>15.7</td>
<td>$137,718,569</td>
</tr>
<tr>
<td>138</td>
<td>13</td>
<td>7.0</td>
<td>11.2</td>
<td>93.3</td>
<td>$44,924,718</td>
</tr>
<tr>
<td>161</td>
<td>6</td>
<td>10.5</td>
<td>19.3</td>
<td>0.0</td>
<td>$25,886,743</td>
</tr>
<tr>
<td>230</td>
<td>1</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
<td>$3,792,408</td>
</tr>
<tr>
<td>345</td>
<td>9</td>
<td>61.21</td>
<td>0.0</td>
<td>0.0</td>
<td>$671,753,051</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>726.4</td>
<td>177.0</td>
<td>109.0</td>
<td>$951,190,717</td>
</tr>
</tbody>
</table>
### Table 8: Line Upgrade Projections for Next 12 Months

<table>
<thead>
<tr>
<th>Voltage Class</th>
<th>Number of Upgrades</th>
<th>Miles of New</th>
<th>Miles of Rebuild/Reconductor</th>
<th>Miles of Voltage Conversion</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>69</td>
<td>17</td>
<td>34.9</td>
<td>36.4</td>
<td>0.0</td>
<td>$83,856,916</td>
</tr>
<tr>
<td>115</td>
<td>17</td>
<td>178.2</td>
<td>4.1</td>
<td>3.0</td>
<td>$159,957,346</td>
</tr>
<tr>
<td>138</td>
<td>25</td>
<td>84.2</td>
<td>90.0</td>
<td>84.8</td>
<td>$160,349,556</td>
</tr>
<tr>
<td>161</td>
<td>1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>$4,636,045</td>
</tr>
<tr>
<td>230</td>
<td>5</td>
<td>61.0</td>
<td>0.0</td>
<td>122.0</td>
<td>$64,253,240</td>
</tr>
<tr>
<td>345</td>
<td>10</td>
<td>677.8</td>
<td>0.0</td>
<td>0.0</td>
<td>$662,761,973</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75</strong></td>
<td><strong>1036.07</strong></td>
<td><strong>130.42</strong></td>
<td><strong>209.81</strong></td>
<td><strong>$1,135,815,075</strong></td>
</tr>
</tbody>
</table>

Q4 2014 Project Tracking Report
**Project Status Summary**

SPP assigns a project status to all Network Upgrades based on the projected in-service dates provided by the DTOs relative to the Need Date determined for the project. Project status definitions are provided below:

- **Complete:** Construction complete and in-service
- **On Schedule < 4:** On Schedule within 4-year horizon
- **On Schedule > 4:** On Schedule beyond 4-year horizon
- **Delayed:** Projected In-Service Date beyond Need Date; interim mitigation provided or project may change but time permits the implementation of project
- **Within NTC Commitment Window:** NTC/NTC-C issued, still within the 90-day written commitment to construct window and no commitment received
- **Within NTC-C Project Estimate Window:** Within the NTC-C Project Estimate (CPE) window
- **Re-evaluation:** NTC/NTC-C active; pending re-evaluation
- **NTC Suspension:** NTC/NTC-C suspended; pending re-evaluation

Figure 7 reflects a summary of project status by upgrade type on a cost basis.

![Figure 7: Project Status Summary on a Cost Basis](chart)

Q4 2014 Project Tracking Report
Balanced Portfolio

Approved in April 2009, the Balanced Portfolio was an initiative to develop a group of economic transmission upgrades that benefit the entire SPP region, and to allocate those project costs regionally. The projects that were issued NTCs as a result of the study include a diverse group of projects, estimated to add approximately 717 miles of new 345 kV transmission line to the SPP system.

The total cost estimate for the projects making up the Balanced Portfolio decreased by less than one percent from the previous quarter during the 3rd quarter 2014 update cycle to a total of $815.0 million.

SPS completed its portion of the 327-mile 345 kV line from Tuco to Woodward District EHV in the northern panhandle of Texas on September 25th. OGE previously reported the completion of their portion of the line in western Oklahoma on May 19th.

Figure 8 below depicts a historical view of the total estimated cost of the Balanced Portfolio. Table 9 provides a project summary of the projects making up the Balanced Portfolio. Table 10 lists construction status updates for the Balanced Portfolio projects not yet completed.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>705/709</td>
<td>WFEC/OGE</td>
<td>Gracemont Substation 345 kV</td>
<td>N/A</td>
<td>$8,000,000</td>
<td>$14,921,070</td>
<td>$14,921,070</td>
<td>0.0%</td>
</tr>
<tr>
<td>707/708</td>
<td>ITCGP/NPPD</td>
<td>Spearville - Post Rock - Axtell 345 kV</td>
<td>223.0</td>
<td>$236,557,015</td>
<td>$203,559,673</td>
<td>$203,559,673</td>
<td>0.0%</td>
</tr>
<tr>
<td>698/699</td>
<td>OGE/GRDA</td>
<td>Sooner - Cleveland 345 kV</td>
<td>36.0</td>
<td>$33,530,000</td>
<td>$49,718,139</td>
<td>$49,718,139</td>
<td>0.0%</td>
</tr>
<tr>
<td>702</td>
<td>KCPL</td>
<td>Swissvale - Stilwell Tap 345 kV</td>
<td>N/A</td>
<td>$2,000,000</td>
<td>$2,910,227</td>
<td>$2,866,604</td>
<td>-1.5%</td>
</tr>
<tr>
<td>700</td>
<td>OGE</td>
<td>Seminole - Muskogee 345 kV</td>
<td>100.0</td>
<td>$129,000,000</td>
<td>$165,000,000</td>
<td>$165,000,000</td>
<td>0.0%</td>
</tr>
<tr>
<td>701/704</td>
<td>SPS/OGE</td>
<td>Tuco – Woodward 345 kV</td>
<td>327.0</td>
<td>$227,727,500</td>
<td>$313,627,516</td>
<td>$313,627,516</td>
<td>0.0%</td>
</tr>
<tr>
<td>703</td>
<td>TSMO</td>
<td>Iatan – Nashua 345 kV</td>
<td>31.0</td>
<td>$54,444,000</td>
<td>$65,342,070</td>
<td>$65,342,070</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>717.0</strong></td>
<td><strong>$691,258,515</strong></td>
<td><strong>$815,078,695</strong></td>
<td><strong>$815,035,072</strong></td>
<td><strong>-0.0%</strong></td>
</tr>
</tbody>
</table>

**Table 9: Balanced Portfolio Summary**

<table>
<thead>
<tr>
<th>Project ID</th>
<th>Project Name</th>
<th>Projected In-Service Date</th>
<th>Engineering</th>
<th>Siting and Routing</th>
<th>Environmental Studies</th>
<th>Permits</th>
<th>Material Procurement</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>701</td>
<td>Tuco – Woodward 345 kV (OGE)</td>
<td>5/19/2014</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>Complete</td>
</tr>
<tr>
<td>704</td>
<td>Tuco – Woodward 345 kV (SPS)</td>
<td>9/25/2014</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>Complete</td>
</tr>
<tr>
<td>703</td>
<td>Iatan – Nashua 345 kV</td>
<td>6/1/2015</td>
<td>IP</td>
<td>IP</td>
<td>IP</td>
<td>N/A</td>
<td>IP</td>
<td>IP</td>
</tr>
</tbody>
</table>

**Table 10: Balanced Portfolio Construction Status**
Priority Projects

In April 2010 the SPP Board of Directors and Members Committee approved for construction a group of "priority" high voltage electric transmission projects estimated to bring benefits of at least $3.7 billion to the SPP region over 40 years. The projects issued NTCs as a result of the study are estimated to add 258 miles of new single circuit 345 kV transmission line and 422 miles of double circuit 345 kV transmission to the SPP region.

In October 2010 the SPP Board of Directors approved an overall cost increase for the Priority Projects due to line rerouting and addition costs for reactive compensation. The total cost estimate for the Priority Projects after the variances were approved was $1.42 billion.

The total cost estimate for the projects making up the Priority Projects increased by 0.1% from the previous quarter during the 3rd quarter 2014 update cycle to a total of $1.40 billion.

Figure 9 below depicts a historical view of the total estimated cost of the Priority Projects. Table 11 provides a project summary of the projects making up the Priority Projects. Table 12 lists construction status updates for the Priority Projects not yet completed.
Figure 9: Priority Projects Cost Estimate Trend
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>937</td>
<td>AEP</td>
<td>Tulsa Power Station 138 kV Reactor</td>
<td>N/A</td>
<td>$842,847</td>
<td>$960,895</td>
<td>$960,895</td>
<td>0.0%</td>
</tr>
<tr>
<td>940/941</td>
<td>SPS/OGE</td>
<td>Hitchland – Woodward District 345 kV Dbl Ckt</td>
<td>120.0</td>
<td>$221,572,283</td>
<td>$228,331,670</td>
<td>$228,331,670</td>
<td>0.0%</td>
</tr>
<tr>
<td>942/943</td>
<td>PW/OGE</td>
<td>Thistle – Woodward District 345 kV Dbl Ckt</td>
<td>109.4</td>
<td>$201,940,759</td>
<td>$192,640,000</td>
<td>$189,640,000</td>
<td>-1.6%</td>
</tr>
<tr>
<td>945</td>
<td>ITCGP</td>
<td>Spearville – Ironwood – Clark Co. – Thistle 345 kV Dbl Ckt</td>
<td>113.5</td>
<td>$293,235,000</td>
<td>$300,000,001</td>
<td>$304,793,640</td>
<td>1.6%</td>
</tr>
<tr>
<td>946</td>
<td>PW/WR</td>
<td>Thistle – Wichita 345 kV Dbl Ckt</td>
<td>77.5</td>
<td>$163,488,000</td>
<td>$136,555,302</td>
<td>$136,555,302</td>
<td>0.0%</td>
</tr>
<tr>
<td>936</td>
<td>AEP</td>
<td>Valliant – NW Texarkana 345 kV</td>
<td>76.3</td>
<td>$131,451,250</td>
<td>$127,995,000</td>
<td>$127,995,000</td>
<td>0.0%</td>
</tr>
<tr>
<td>938/939</td>
<td>OPPD/TSMO</td>
<td>Nebraska City – Mullin Creek – Sibley 345 kV</td>
<td>181.2</td>
<td>$403,740,000</td>
<td>$407,791,450</td>
<td>$407,791,450</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>677.9</td>
<td>$1,416,270,139</td>
<td>$1,394,274,318</td>
<td>$1,396,067,957</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

Table 11: Priority Projects Summary

<table>
<thead>
<tr>
<th>Project ID</th>
<th>Project Name</th>
<th>Projected In-Service Date</th>
<th>Engineering</th>
<th>Siting and Routing</th>
<th>Environmental Studies</th>
<th>Permits</th>
<th>Material Procurement</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>940</td>
<td>Hitchland – Woodward District 345 kV Dbl Ckt (SPS)</td>
<td>5/1/2014</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>941</td>
<td>Hitchland – Woodward District 345 kV Dbl Ckt (OGE)</td>
<td>5/19/2014</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>946</td>
<td>Thistle – Wichita 345 kV Dbl Ckt</td>
<td>6/4/2014</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>942</td>
<td>Thistle – Woodward District 345 kV Dbl Ckt (OGE)</td>
<td>12/31/2014</td>
<td>IP</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>IP</td>
<td>IP</td>
</tr>
<tr>
<td>943</td>
<td>Thistle – Woodward District 345 kV Dbl Ckt (PW)</td>
<td>12/31/2014</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>IP</td>
<td>C</td>
<td>IP</td>
</tr>
<tr>
<td>945</td>
<td>Spearville – Ironwood – Clark Co. – Thistle 345 kV Dbl Ckt</td>
<td>12/31/2014</td>
<td>IP</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>IP</td>
<td>IP</td>
</tr>
<tr>
<td>936</td>
<td>Valliant – NW Texarkana 345 kV</td>
<td>10/1/2015</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>IP</td>
<td>IP</td>
<td>IP</td>
</tr>
<tr>
<td>938</td>
<td>Nebraska City – Mullin Creek – Sibley 345 kV (TSMO)</td>
<td>6/1/2017</td>
<td>IP</td>
<td>IP</td>
<td>IP</td>
<td>IP</td>
<td>IP</td>
<td>NS</td>
</tr>
<tr>
<td>939</td>
<td>Nebraska City – Mullin Creek – Sibley 345 kV (OPPD)</td>
<td>6/1/2017</td>
<td>IP</td>
<td>C</td>
<td>IP</td>
<td>IP</td>
<td>NS</td>
<td>NS</td>
</tr>
</tbody>
</table>

Table 12: Priority Projects Construction Status
Out-of-Bandwidth Projects

In adherence to the Business Practice 7060, SPP reports projects that have updated cost values that exceed their established baseline values based upon a ±20% bandwidth. Variances are determined by total project cost.

One project with a cost estimate greater than $5 million was identified as having exceeded the ±20% bandwidth requirement during the reporting. The identified project was placed into service on July 25, 2014.

Table 13 provides summary information and Table 14 lists the cost detail for the out-of-bandwidth project for Q4 2014.

<table>
<thead>
<tr>
<th>PID</th>
<th>Project Name</th>
<th>Owner</th>
<th>NTC Source Study</th>
<th>Upgrade Type</th>
<th>In-Service Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1073</td>
<td>Mulberry - Franklin - Sheffield 69 kV &amp; Franklin 161/69 Transformer</td>
<td>WR</td>
<td>2010 STEP</td>
<td>Regional Reliability</td>
<td>7/25/2014</td>
</tr>
</tbody>
</table>

**Table 13: Out-of-Bandwidth Project Summary**

<table>
<thead>
<tr>
<th>PID</th>
<th>Baseline Cost Estimate</th>
<th>Baseline Cost Estimate Year</th>
<th>Baseline Cost Estimate with Escalation</th>
<th>Latest Estimate or Final Cost</th>
<th>Variance</th>
<th>Variance %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1073</td>
<td>$31,042,479</td>
<td>2014</td>
<td>$31,042,479</td>
<td>$24,259,397</td>
<td>($6,783,082)</td>
<td>-21.9%</td>
</tr>
</tbody>
</table>

**Table 14: Out-of-Bandwidth Project Cost Detail**
Southwest Power Pool, Inc.

Responsiveness Report

Table 15 and Figures 10 and 11 provide insight into the responsiveness of DTOs constructing Network Upgrades within SPP in the Quarterly Project Tracking Report for Q4 2014. Note: Network Upgrades with statuses of “Within NTC Commitment Window” and “Within NTC-C Project Estimate Window” were excluded from this analysis.

<table>
<thead>
<tr>
<th>Project Owner</th>
<th>Number of Upgrades</th>
<th>Number of Upgrades Reviewed</th>
<th>Reviewed %</th>
<th>Number of ISD Changes</th>
<th>ISD Change %</th>
<th>Number of Cost Changes</th>
<th>Cost Change %</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEP</td>
<td>68</td>
<td>68</td>
<td>100%</td>
<td>7</td>
<td>10.3%</td>
<td>9</td>
<td>13.2%</td>
</tr>
<tr>
<td>CUS</td>
<td>3</td>
<td>3</td>
<td>100%</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>GMO</td>
<td>11</td>
<td>11</td>
<td>100%</td>
<td>0</td>
<td>0.0%</td>
<td>6</td>
<td>54.5%</td>
</tr>
<tr>
<td>GRDA</td>
<td>12</td>
<td>12</td>
<td>100%</td>
<td>1</td>
<td>8.3%</td>
<td>2</td>
<td>16.7%</td>
</tr>
<tr>
<td>ITCGP</td>
<td>18</td>
<td>18</td>
<td>100%</td>
<td>0</td>
<td>0.0%</td>
<td>8</td>
<td>44.4%</td>
</tr>
<tr>
<td>KCPL</td>
<td>8</td>
<td>8</td>
<td>100%</td>
<td>0</td>
<td>0.0%</td>
<td>2</td>
<td>25.0%</td>
</tr>
<tr>
<td>LES</td>
<td>4</td>
<td>4</td>
<td>100%</td>
<td>0</td>
<td>0.0%</td>
<td>1</td>
<td>25.0%</td>
</tr>
<tr>
<td>MIDW</td>
<td>10</td>
<td>10</td>
<td>100%</td>
<td>4</td>
<td>40.0%</td>
<td>3</td>
<td>30.0%</td>
</tr>
<tr>
<td>MKEC</td>
<td>30</td>
<td>15</td>
<td>50%</td>
<td>3</td>
<td>10.0%</td>
<td>8</td>
<td>26.7%</td>
</tr>
<tr>
<td>NPPD</td>
<td>32</td>
<td>32</td>
<td>100%</td>
<td>5</td>
<td>15.6%</td>
<td>12</td>
<td>37.5%</td>
</tr>
<tr>
<td>OGE</td>
<td>70</td>
<td>69</td>
<td>99%</td>
<td>5</td>
<td>7.1%</td>
<td>12</td>
<td>17.1%</td>
</tr>
<tr>
<td>OPPD</td>
<td>14</td>
<td>14</td>
<td>100%</td>
<td>3</td>
<td>21.4%</td>
<td>5</td>
<td>35.7%</td>
</tr>
<tr>
<td>PW</td>
<td>4</td>
<td>2</td>
<td>50%</td>
<td>2</td>
<td>50.0%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>SEPC</td>
<td>6</td>
<td>3</td>
<td>50%</td>
<td>1</td>
<td>16.7%</td>
<td>2</td>
<td>33.3%</td>
</tr>
<tr>
<td>SPS</td>
<td>135</td>
<td>47</td>
<td>35%</td>
<td>25</td>
<td>18.5%</td>
<td>47</td>
<td>34.8%</td>
</tr>
<tr>
<td>TSMO</td>
<td>5</td>
<td>5</td>
<td>100%</td>
<td>0</td>
<td>0.0%</td>
<td>5</td>
<td>100.0%</td>
</tr>
<tr>
<td>WFEC</td>
<td>61</td>
<td>11</td>
<td>18%</td>
<td>11</td>
<td>18.0%</td>
<td>5</td>
<td>8.2%</td>
</tr>
<tr>
<td>WR</td>
<td>58</td>
<td>18</td>
<td>31%</td>
<td>16</td>
<td>27.6%</td>
<td>9</td>
<td>15.5%</td>
</tr>
<tr>
<td>Total</td>
<td>549</td>
<td>350</td>
<td>64%</td>
<td>83</td>
<td>15.1%</td>
<td>136</td>
<td>24.8%</td>
</tr>
</tbody>
</table>

Table 15: Responsiveness Summary by Project Owner
Figure 10: In-Service Date Changes by Project Owner

Figure 11: Cost Changes by Project Owner
Appendix I

See accompanying list of Network Upgrades
<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
<th>Type</th>
<th>Cost Estimate</th>
<th>Cost</th>
<th>Cost</th>
<th>Cost</th>
<th>Notes</th>
</tr>
</thead>
</table>
| 816 | Albion - Genoa 115 kV Ckt 1 | Regional Reliability | 6/1/2014 | 6/1/2014 | 4/9/2012 | 2012 ITPNT | $1,240,000 | 2012 $1,302,775 | $1,049,361
| 817 | Albion - Spalding 115 kV Ckt 1 | Regional Reliability | 6/1/2013 | 6/1/2013 | 2/8/2010 | 2009 STEP | $1,200,869 | $1,240,000 | $1,090,000
| 11088 | Lea - LeFevre - Lea County Rec-Gaines 69 kv Ckt 1 | Regional Reliability - Non OATT | 4/8/2013 | 6/1/2012 | $1,000,000 | $1,000,000 | $1,000,000

**Notes:**
- Delay - Mitigation
- Complete
- Updated ISD
- Updated Mitigation Plan
- Updated Final ISD
- Updated Final ISD
- Updated Final ISD
- Updated Final ISD
- Updated ISD
DELAY - MITIGATION

This estimate does include terminating the existing Tatonga or Mathewson substations. Those costs are included in the NPPD Cherry Co. Substation 345 kV ITP10 1/1/2018 1/1/2018 3/11/2013 2012 ITP10 $146,065,000 2013 $149,716,625 $146,065,000

Transmission line to utilize previously obtained Right of Way along the existing Woodward EHV to Tatonga (1st circuit) line.

Due to uncertainty of Presidential Permit, TransCanada has extended their in-service date to June 2017. No mitigation is needed.

This is one of multiple components of the "rPLAN" project cost. Line reactor costs are new included with the substation costs.

This estimate is based on following assumptions: 1) The capacitor bank addition at Eagle Creek will be installed simultaneously with (1) 345kV line to Campbell Creek wind farm, (1) 345kV line to Cimarron and (1) 345kV line to Woodring.

Relay & Control Panels. 3) The AC & DC Systems have sufficient extra capacities to support new electrical equipment. 4) The RTU will be upgraded.

The transformer will be purchased as a dual voltage type GCB 4H365) in the capacitor bank terminal bay are rated to withstand capacitor switching. Cost updated (during committment ON SCHEDULE < 4

The Real line base has not been determined at this time. Therefore line sagging is a concern. The Substations - Subtrans project will provide a new subtrans on the newly reactivated area and help mitigate the system since 1) Load growth has now been determined and 2) new generation will be added in the area.

Arrival of wrap around transformer scheduled for 4th Qtr 2014. 

Delay - Mitigation
5/29/2014 $4,929,607 $10,262,813
2013 $1,658,214 $1,554,313
30436 50531 AEP New Gladewater - Perdue 138 kV Ckt 1 Regional Reliability 6/1/2016 6/1/2016 2/20/2013 2013 ITPNT $1,000,000 2013 $1,025,000 $1,000,000
2013 $1,155,574 $1,127,389
7/25/2013 - Identified as needed again in 2014 ITP Near Term Study. 4th Q 2011- SPP notified Westar that the RTO need date
30414 50507 SPS Howard 115 kV Capacitors Regional Reliability
50466 MIDW Rice - Lyons 115 kV Ckt 1 Generation Interconnection 4/1/2013 $3,245,758
$1,127,389
30376 50452 SPS Hobbs 345/230 kV Ckt 1 Transformer High Priority 6/1/2018 6/1/2018 5/19/2014 HPILS
30411 50504 SPS Howard 115/69 kV Transformer Ckt 1 Regional Reliability 8/31/2014 12/1/2012 1/18/2013
200197
200283
200220
30416
30385
30384
30381
<table>
<thead>
<tr>
<th>Project Description</th>
<th>Region</th>
<th>Segment</th>
<th>Segment Head</th>
<th>Segment Tail</th>
<th>Year Begun</th>
<th>Year Completed</th>
<th>Year Forecasted</th>
<th>Estimated Cost</th>
<th>Actual Cost</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rebuild Mason-EEC 138/69 kV Ckt 1</td>
<td>OGE</td>
<td>Division Ave - Lakeside</td>
<td>138 kV Ckt 1</td>
<td>138 kV Ckt 1</td>
<td>2019</td>
<td>2020</td>
<td>2019</td>
<td>$1,720,000</td>
<td>$1,720,000</td>
<td>Delay - Mitigation</td>
</tr>
<tr>
<td>Rebuild WR Crestview - Northeast 69 kV Ckt 1</td>
<td>OGE</td>
<td></td>
<td></td>
<td></td>
<td>2014</td>
<td>2015</td>
<td>2014</td>
<td>$29,069,150</td>
<td>$29,069,150</td>
<td>On Schedule &gt; 4</td>
</tr>
<tr>
<td>Rebuild WR Neosho 138/69 kV Ckt 1 Transformer</td>
<td>OGE</td>
<td></td>
<td></td>
<td></td>
<td>2016</td>
<td>2015</td>
<td>2014</td>
<td>$7,790,221</td>
<td>$7,790,221</td>
<td>On Schedule &gt; 4</td>
</tr>
<tr>
<td>Rebuild SPS Potash Junction - Road Runner 230 kV Ckt 1</td>
<td>OGE</td>
<td></td>
<td></td>
<td></td>
<td>2015</td>
<td>2017</td>
<td>2015</td>
<td>$3,606,519</td>
<td>$3,606,519</td>
<td>On Schedule &gt; 4</td>
</tr>
<tr>
<td>Rebuild SPS New Amherst 115 kV Terminal Upgrades Ckt 1</td>
<td>OGE</td>
<td></td>
<td></td>
<td></td>
<td>2014</td>
<td>2014</td>
<td>2014</td>
<td>$6,943,260</td>
<td>$8,208,578</td>
<td>Delay - Mitigation</td>
</tr>
<tr>
<td>Rebuild SPS Bailey Co Pump - Sundan Rural 115 kV Ckt 1</td>
<td>OGE</td>
<td></td>
<td></td>
<td></td>
<td>2014</td>
<td>2014</td>
<td>2014</td>
<td>$38,499,353</td>
<td>$38,499,353</td>
<td>On Schedule &gt; 4</td>
</tr>
<tr>
<td>Rebuild SPS CV Pines - Price 115 kV Ckt 1</td>
<td>OGE</td>
<td></td>
<td></td>
<td></td>
<td>2015</td>
<td>2017</td>
<td>2015</td>
<td>$4,158,668</td>
<td>$4,158,668</td>
<td>On Schedule &gt; 4</td>
</tr>
<tr>
<td>Rebuild AEP Hallsville - Longview Heights 69 kV Ckt 1</td>
<td>OGE</td>
<td></td>
<td></td>
<td></td>
<td>2017</td>
<td>2015</td>
<td>2014</td>
<td>$8,851,677</td>
<td>$8,851,677</td>
<td>On Schedule &gt; 4</td>
</tr>
<tr>
<td>Rebuild GMO Harrisonville 161 kV Ckt 2 Terminal Upgrades</td>
<td>OGE</td>
<td></td>
<td></td>
<td></td>
<td>2014</td>
<td>2014</td>
<td>2014</td>
<td>$1,005,220</td>
<td>$1,005,220</td>
<td>On Schedule &gt; 4</td>
</tr>
<tr>
<td>Rebuild SPS Mustang - Shell CO2 115 kV Ckt 1 Rebuild</td>
<td>OGE</td>
<td></td>
<td></td>
<td></td>
<td>2014</td>
<td>2014</td>
<td>2014</td>
<td>$51,513,963</td>
<td>$51,513,963</td>
<td>On Schedule &gt; 4</td>
</tr>
<tr>
<td>Rebuild SPS Mustang - Shell CO2 115 kV Ckt 1 Rebuild</td>
<td>OGE</td>
<td></td>
<td></td>
<td></td>
<td>2014</td>
<td>2014</td>
<td>2014</td>
<td>$6,749,202</td>
<td>$6,749,202</td>
<td>On Schedule &lt; 4</td>
</tr>
<tr>
<td>Project ID</td>
<td>Project Name</td>
<td>Description</td>
<td>Priority</td>
<td>Start Date</td>
<td>End Date</td>
<td>Revisions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>--------------</td>
<td>-------------</td>
<td>----------</td>
<td>------------</td>
<td>----------</td>
<td>-----------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30590</td>
<td>OPPD S906-S924 69 kV Ckt 1 Rebuild</td>
<td>Regional Reliability</td>
<td>2014 ITPNT</td>
<td>6/1/2019</td>
<td>6/1/2019</td>
<td>2/19/2014</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30695</td>
<td>SPS Cardinal 115 kV Substation</td>
<td>High Priority</td>
<td>5/19/2014</td>
<td>6/1/2018</td>
<td>6/1/2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30625</td>
<td>OGE Jenson - Jenson Tap 138 kV Ckt 1 Terminal Upgrades</td>
<td>High Priority</td>
<td>5/19/2014</td>
<td>6/1/2018</td>
<td>6/1/2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30675</td>
<td>SPS Yeso Hills 115 kV Substation</td>
<td>High Priority</td>
<td>5/19/2014</td>
<td>6/1/2018</td>
<td>6/1/2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30612</td>
<td>OGE Hefner - Tulsa 138 kV Ckt 1 Transmission Service</td>
<td>6/1/2014</td>
<td>6/1/2019</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30638</td>
<td>SPS China Draw - North Loving 345 kV Ckt 1 High Priority</td>
<td></td>
<td>5/19/2014</td>
<td>6/1/2018</td>
<td>6/1/2018</td>
<td>5/19/2014</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30639</td>
<td>SPS Road Runner 345 kV Substation Conversion</td>
<td>High Priority</td>
<td>5/19/2014</td>
<td>6/1/2016</td>
<td>6/1/2018</td>
<td>5/19/2014</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30625</td>
<td>OPPD S924-S912 69 kV Ckt 1 Terminal Upgrades</td>
<td>Regional Reliability</td>
<td>2014 ITPNT</td>
<td>6/1/2019</td>
<td>6/1/2019</td>
<td>2/19/2014</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- **High Priority** indicates projects with the highest priority for completion.
- **Regional Reliability** refers to projects aimed at improving the reliability of the regional electrical grid.
- **ITPNT** denotes the Initial Time-phasing Plan.
- **RE-EVALUATION** indicates projects that have undergone a re-evaluation process.
- **Due** dates are specified when applicable.
- **Entering TRM** dates indicate when the projects were initiated or reviewed.
- **Cost updates** during the commitment window reflect adjustments made to the initial estimates.
- Project descriptions include key components such as substations, line terminals, and equipment upgrades.

*Details on specific project details and costs are available in the original document.*
<table>
<thead>
<tr>
<th>Project Name</th>
<th>Start Date</th>
<th>End Date</th>
<th>Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEP Darlington - Red Rock 138 kV Ckt 1</td>
<td>6/1/2015</td>
<td>5/19/2014</td>
<td>HPILS</td>
</tr>
<tr>
<td>WR Tallgrass 138 kV Substation</td>
<td>6/1/2015</td>
<td>5/19/2014</td>
<td>HPILS</td>
</tr>
<tr>
<td>NPPD Madison County 230kV Substation Generation Interconnection</td>
<td>12/23/2013</td>
<td>$5,900,000</td>
<td>ON SCHEDULE</td>
</tr>
<tr>
<td>OPPD S1398 161 kV Substation</td>
<td>6/28/2013</td>
<td>6/1/2015</td>
<td>HPILS</td>
</tr>
<tr>
<td>NPPD Twin Church - Dixon County 230kV Line Upgrade Generation Interconnection</td>
<td>10/24/2015</td>
<td>$100,000</td>
<td>DELAY - MITIGATION</td>
</tr>
<tr>
<td>MIDW Post Rock 230kV Substation GEN-2008-092 Addition Generation Interconnection</td>
<td>9/1/2014</td>
<td>$599,380</td>
<td>ON SCHEDULE</td>
</tr>
<tr>
<td>MKEC Milton 138 kV Substation</td>
<td>6/1/2015</td>
<td>5/19/2014</td>
<td>HPILS</td>
</tr>
<tr>
<td>NPPD Fort Randall - Madison County 230kV Ckt 1</td>
<td>12/23/2013</td>
<td>$1,450,000</td>
<td>ON SCHEDULE</td>
</tr>
<tr>
<td>WR Tap on Wolf Creek - LaCygne</td>
<td>2/10/2015</td>
<td>$13,197,769</td>
<td>ON SCHEDULE</td>
</tr>
<tr>
<td>NPPD Kelly - Madison County 230kV Ckt 1</td>
<td>12/23/2013</td>
<td>$1,450,000</td>
<td>ON SCHEDULE</td>
</tr>
<tr>
<td>OGE Mathewson 345kV Substation GEN-2011-007 Addition Generation Interconnection</td>
<td>3/15/2015</td>
<td>$2,554,395</td>
<td>ON SCHEDULE</td>
</tr>
<tr>
<td>OPPD S1260 161 kV Substation</td>
<td>12/1/2014</td>
<td>6/1/2015</td>
<td>HPILS</td>
</tr>
<tr>
<td>MKEC Spearville 345kV Substation GEN-2006-006 Addition Generation Interconnection</td>
<td>$4,691,397</td>
<td>5/19/2014</td>
<td>HPILS</td>
</tr>
<tr>
<td>SPS Hitchland 115kV Interchange GEN-2007-046 Addition Generation Interconnection</td>
<td>9/1/2014</td>
<td>$513,231</td>
<td>ON SCHEDULE</td>
</tr>
<tr>
<td>SPS Potash Junction 230/115 kV Ckt 1 High Priority</td>
<td>6/1/2015</td>
<td>6/1/2015</td>
<td>HPILS</td>
</tr>
<tr>
<td>SPS Battle Axe 115 kV Substation</td>
<td>6/1/2018</td>
<td>$1,973,375</td>
<td>ON SCHEDULE</td>
</tr>
<tr>
<td>SPS China Draw - Wood Draw 115 kV Ckt 1 High Priority</td>
<td>6/1/2018</td>
<td>6/1/2018</td>
<td>HPILS</td>
</tr>
<tr>
<td>SPS Hitchland 115kV Interchange GEN-2007-046 Addition Generation Interconnection</td>
<td>9/1/2014</td>
<td>$513,231</td>
<td>ON SCHEDULE</td>
</tr>
<tr>
<td>SPS Potash Junction 230/115 kV Ckt 1 High Priority</td>
<td>6/1/2015</td>
<td>6/1/2015</td>
<td>HPILS</td>
</tr>
<tr>
<td>SPS Battle Axe 115 kV Substation</td>
<td>6/1/2018</td>
<td>$1,973,375</td>
<td>ON SCHEDULE</td>
</tr>
<tr>
<td>SPS China Draw - Wood Draw 115 kV Ckt 1 High Priority</td>
<td>6/1/2018</td>
<td>6/1/2018</td>
<td>HPILS</td>
</tr>
<tr>
<td>SPS Hitchland 115kV Interchange GEN-2007-046 Addition Generation Interconnection</td>
<td>9/1/2014</td>
<td>$513,231</td>
<td>ON SCHEDULE</td>
</tr>
<tr>
<td>SPS Potash Junction 230/115 kV Ckt 1 High Priority</td>
<td>6/1/2015</td>
<td>6/1/2015</td>
<td>HPILS</td>
</tr>
<tr>
<td>SPS Battle Axe 115 kV Substation</td>
<td>6/1/2018</td>
<td>$1,973,375</td>
<td>ON SCHEDULE</td>
</tr>
<tr>
<td>SPS China Draw - Wood Draw 115 kV Ckt 1 High Priority</td>
<td>6/1/2018</td>
<td>6/1/2018</td>
<td>HPILS</td>
</tr>
<tr>
<td>SPS Hitchland 115kV Interchange GEN-2007-046 Addition Generation Interconnection</td>
<td>9/1/2014</td>
<td>$513,231</td>
<td>ON SCHEDULE</td>
</tr>
<tr>
<td>SPS Potash Junction 230/115 kV Ckt 1 High Priority</td>
<td>6/1/2015</td>
<td>6/1/2015</td>
<td>HPILS</td>
</tr>
<tr>
<td>SPS Battle Axe 115 kV Substation</td>
<td>6/1/2018</td>
<td>$1,973,375</td>
<td>ON SCHEDULE</td>
</tr>
<tr>
<td>SPS China Draw - Wood Draw 115 kV Ckt 1 High Priority</td>
<td>6/1/2018</td>
<td>6/1/2018</td>
<td>HPILS</td>
</tr>
<tr>
<td>SPS Hitchland 115kV Interchange GEN-2007-046 Addition Generation Interconnection</td>
<td>9/1/2014</td>
<td>$513,231</td>
<td>ON SCHEDULE</td>
</tr>
<tr>
<td>SPS Potash Junction 230/115 kV Ckt 1 High Priority</td>
<td>6/1/2015</td>
<td>6/1/2015</td>
<td>HPILS</td>
</tr>
<tr>
<td>SPS Battle Axe 115 kV Substation</td>
<td>6/1/2018</td>
<td>$1,973,375</td>
<td>ON SCHEDULE</td>
</tr>
<tr>
<td>SPS China Draw - Wood Draw 115 kV Ckt 1 High Priority</td>
<td>6/1/2018</td>
<td>6/1/2018</td>
<td>HPILS</td>
</tr>
<tr>
<td>SPS Hitchland 115kV Interchange GEN-2007-046 Addition Generation Interconnection</td>
<td>9/1/2014</td>
<td>$513,231</td>
<td>ON SCHEDULE</td>
</tr>
<tr>
<td>SPS Potash Junction 230/115 kV Ckt 1 High Priority</td>
<td>6/1/2015</td>
<td>6/1/2015</td>
<td>HPILS</td>
</tr>
<tr>
<td>SPS Battle Axe 115 kV Substation</td>
<td>6/1/2018</td>
<td>$1,973,375</td>
<td>ON SCHEDULE</td>
</tr>
<tr>
<td>SPS China Draw - Wood Draw 115 kV Ckt 1 High Priority</td>
<td>6/1/2018</td>
<td>6/1/2018</td>
<td>HPILS</td>
</tr>
<tr>
<td>SPS Hitchland 115kV Interchange GEN-2007-046 Addition Generation Interconnection</td>
<td>9/1/2014</td>
<td>$513,231</td>
<td>ON SCHEDULE</td>
</tr>
<tr>
<td>SPS Potash Junction 230/115 kV Ckt 1 High Priority</td>
<td>6/1/2015</td>
<td>6/1/2015</td>
<td>HPILS</td>
</tr>
<tr>
<td>SPS Battle Axe 115 kV Substation</td>
<td>6/1/2018</td>
<td>$1,973,375</td>
<td>ON SCHEDULE</td>
</tr>
<tr>
<td>SPS China Draw - Wood Draw 115 kV Ckt 1 High Priority</td>
<td>6/1/2018</td>
<td>6/1/2018</td>
<td>HPILS</td>
</tr>
<tr>
<td>SPS Hitchland 115kV Interchange GEN-2007-046 Addition Generation Interconnection</td>
<td>9/1/2014</td>
<td>$513,231</td>
<td>ON SCHEDULE</td>
</tr>
<tr>
<td>SPS Potash Junction 230/115 kV Ckt 1 High Priority</td>
<td>6/1/2015</td>
<td>6/1/2015</td>
<td>HPILS</td>
</tr>
<tr>
<td>SPS Battle Axe 115 kV Substation</td>
<td>6/1/2018</td>
<td>$1,973,375</td>
<td>ON SCHEDULE</td>
</tr>
<tr>
<td>SPS China Draw - Wood Draw 115 kV Ckt 1 High Priority</td>
<td>6/1/2018</td>
<td>6/1/2018</td>
<td>HPILS</td>
</tr>
<tr>
<td>SPS Hitchland 115kV Interchange GEN-2007-046 Addition Generation Interconnection</td>
<td>9/1/2014</td>
<td>$513,231</td>
<td>ON SCHEDULE</td>
</tr>
</tbody>
</table>