Monday, October 24, 2011
8:00 - 12:00 Noon
El Dorado Hotel - Anasazi Ballroom
Santa Fe, New Mexico
SPP – RSC Educational Briefing Session

1. WELCOME & INTRODUCTIONS ................................................................. Jeff Davis

2. HISTORY OF SPP ..................................................................................... Nick Brown

3. SPP’S MARKETS ..................................................................................... Carl Monroe

4. RSC (GOVERNANCE & AUTHORITY) ..................................................... Paul Suskie

5. RSC’S HISTORY
   Evolution of Cost Allocation Methodologies ........................................... Paul Suskie

6. MISCELLANEOUS ISSUES
   SPP’s Waiver Process .............................................................................. Katherine Prewitt
   Calculation of Benefit Metrics Used in Cost/Benefit Analysis ................. Katherine Prewitt

7. REVIEW & DISCUSSION TOPICS ............................................................. All
SPP-RSC Educational Meeting

October 25, 2011

Paul Suskie
psuskie@spp.org  ·  501.688.2535

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

- Founded 1941 with 11 members
  - Utilities pooled electricity to power Arkansas aluminum plant needed for critical defense
- Maintained after WWII to continue benefits of regional coordination
SPP Milestones

1968  Became NERC Regional Council
1980  Implemented telecommunications network
1991  Implemented operating reserve sharing
1994  Incorporated as non-profit
1997  Implemented reliability coordination
1998  Implemented tariff administration
2001  Implemented regional scheduling
2004  Became FERC-approved Regional Transmission Organization
2006  Implemented contract services
2007  Launched EIS market, became NERC Regional Entity
2009  Integrated Nebraska utilities
2010  FERC approved Highway/Byway cost allocation methodology and Integrated Transmission Planning Process

The SPP Difference

• Relationship - Based
• Member - Driven
• Independence Through Diversity
• Evolutionary vs. Revolutionary
• Reliability and Economics Inseparable
SPP at a Glance

- Located in Little Rock
- ~500 employees
- $139 million operating budget (2011)
- 24 x 7 operation
- Full redundancy and backup site

Regulatory Environment

- Incorporated in Arkansas as 501(c)(6) non-profit corporation
- FERC - Federal Energy Regulatory Commission
  - Regulated public utility
  - Regional Transmission Organization
- NERC - North American Electric Reliability Corporation
  - Founding member
  - Regional Entity
3 Electric Interconnections / 8 NERC Regions

Independent System Operator (ISO) / Regional Transmission Organization (RTO) Map
64 SPP Members

- Cooperatives
- Municipals
- State Agencies
- Marketers
- Investor-Owned
- Independent Transmission Companies
- Independent Power Producers / Wholesale Generation

Members in 9 states
- Arkansas
- Kansas
- Louisiana
- Mississippi
- Missouri
- Nebraska
- New Mexico
- Oklahoma
- Texas

Provide services to Entergy on contract basis (ICT)
Operating Region 2010

- 370,000 miles service territory
- 859 generating plants
- 6,101 substations
- 48,930 miles transmission:
  - 69 kV – 12,722 miles
  - 115 kV – 10,143 miles
  - 138 kV – 10,009 miles
  - 161 kV – 5,097 miles
  - 230 kV – 3,787 miles
  - 345 kV – 7,079 miles
  - 500 kV – 93 miles

2010 RTO Generating Capacity and Energy

63 GW Capacity
- Natural Gas 42%
- Coal 4%
- Dual Fuel 6%
- Hydro 4%
- Wind 3%
- Nuclear 1%
- Biomass/Pumped Storage 4%

227,000 GWh Energy Produced
- Natural Gas 24%
- Coal 62%
- Dual Fuel/Pumped Storage/Biomass 9%
- Hydro 7%
- Wind 0%
- Nuclear 1%

12% annual planning capacity requirement
2010 Wholesale Energy Market

- 32 participants
- 405 generating resources
- 2010 transactions = $1.28 billion
- 45 GW peak load
- 223 TWh energy consumption
- 16 Balancing Authorities
- 1,500 MW wholesale demand response

Did You Know?

- SPP’s members serve over 15 million people
- In 2010, SPP members completed 78 transmission projects totaling $468 million.
- SPP’s transmission owners collect ~$800 million annually to recoup costs of transmission, and have over $4.7 billion in net transmission investment.
- 48,930 miles of transmission lines in SPP’s footprint would circle the earth - almost twice!
**IT Facts**

- ~75,000 data points updated every 10-30 seconds
- Operations model solves 20,000 x 20,000 matrix every 2 minutes
- 614 servers
- 496 Terabytes of data storage
- Fully redundant networks with 100% availability
- Operate two data centers

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**SPP Strategically**

- **BUILD A ROBUST TRANSMISSION SYSTEM**
- **DEVELOP EFFICIENT MARKET PROCESSES**
- **CREATE MEMBER VALUE**
SPP’s Services, Transmission Planning & Markets

Carl Monroe
Executive Vice-President & COO

SERVICES
Our Major Services

- Facilitation
- Reliability Coordination
- Transmission Service/Tariff Administration
- Market Operation

- Standards Setting
- Compliance Enforcement
- Transmission Planning
- Training

Facilitation: Helping our members work together
Reliability Coordination

- Monitor grid 24 x 365
- Anticipate problems
- Take preemptive action
- Coordinate regional response
- Independent

As “air traffic controllers,” our operators comply with...

...over 1,300 pages of reliability standards and criteria

Compliance Enforcement and Standards Setting

- SPP Regional Entity enforces compliance with federal NERC reliability standards
- Creates regional reliability standards with stakeholder input
- Provides training and education to users, owners, and operators of bulk power grid
Training

- 2010 Training program awarded over 21,000 continuing education hours to 410 operators from 25 member companies

- SPP offers:
  - Regional/sub-regional restoration drills
  - System operations conferences
  - Regional emergency operations sessions
  - Train-the-Trainer classes

Services

TRANSMISSION MARKET
What kind of markets does SPP have now?

- **Transmission Service**: Participants buy and sell use of regional transmission lines that are owned by different parties
- **Energy Imbalance Service (EIS)**: Participants buy and sell wholesale electricity in real-time
  - Market uses least expensive energy from regional resources to serve demand (load) first
  - Sometimes it’s less expensive for a participant to purchase power from another provider than to generate
  - SPP monitors resource/load balance to ensure system reliability

**Transmission Service**

- Provides “one-stop shopping” for use of regional transmission lines
- Consistent rates, terms, conditions for all users
- Independent
- Process ~9,200 transactions/month
- 2010 transmission customer transactions = $698 million
Transmission Service

Without SPP
To get from a generator in Utility A to a customer in Utility C, electricity must flow through lines owned by Utilities A, B, and C, each with its own set of operating rules and associated costs.

$30

A
$4

B
$6

C
$5

$15 transmission service + $30 energy = $45

Transmission Service

With SPP
SPP moves electricity across Utilities A, B, and C in one transaction for a single service fee, then shares revenues with each party.

$30

A

SPP

B

C

$5 transmission service + $30 energy = $35
How transmission service works

- Reserving transmission service
  - Like buying e-ticket to reserve seat on plane
  - Customer specifies priority, time, source/sink, capacity
  - Tariff administrator approves if capacity exists

- NERC Tag is issued
  - Like receiving boarding pass for plane
  - Won’t be approved if improper use of reservation

- Schedule is created from Tag. When approved:
  - Like sitting on the plane
  - Generators ramp to provide energy for transaction
  - May be curtailed if transmission system overloaded

Services

WHOLESALE ENERGY MARKET
Market Operation

- Monitors supply/demand balance
- Ensures economic dispatch of generation while maintaining reliability
- Provides settlement data
- 32 participants
- 405 generation resources
- 2010 wholesale market transactions = $1.28 billion

SPP’s energy market is like the “NYSE”...

...and follows over 200 pages of market protocols

Benefits of current real-time energy market

A utility has three ways to serve its customers: generate its own power, buy power from another provider, or buy from the SPP market. The EIS market allows participants to compare real-time prices from many sources to make the most cost-effective decisions. Sometimes a participant can buy power for less than it would cost to generate its own energy.
Independent monitors ensure markets operate as designed and are efficient/effective

- SPP’s internal Market Monitoring Unit (MMU) reports directly to Board and Oversight Committee
  - Independent from SPP Regional Transmission Organization
- FERC Order 719 allows ISO/RTO markets to be overseen by internal, external, or hybrid monitor
  - 2 ISOs/RTOs have external, 2 have internal, 2 have hybrid
  - SPP’s use of internal MMU brings cost-savings and allows easy access to real-time operations
- MMU reviews real-time/historic data and reports any issues to FERC for investigation

Future Services

INTEGRATED MARKETPLACE
Why develop new markets?

• SPP conducts complex cost-benefit studies before beginning new market development
  – Under Regional State Committee oversight
  – 2005 Charles River Associates analysis of EIS market:
    • Estimated benefit of $86 million for first year
    • Actual benefit of $103 million for first year

• Integrated Marketplace will bring estimated annual average additional net benefits of $100 million
  – According to 2009 Ventyx analysis
  – 2014 launch

What type of new markets is SPP implementing?

• Integrated Marketplace will:
  – Provide participants with greater access to reserve energy
  – Improve regional balancing of supply and demand
  – Facilitate integration of renewable resources

• Includes:
  – **Day Ahead:** SPP determines what generating units should run the next day for maximum cost-effectiveness
  – **Operating Reserves:** Market to buy and sell reserve energy that
    • Meets emergency needs
    • Regulates instantaneous load and generation changes
    • Maintains electricity quality (keeping voltage up, etc.)
Day Ahead market makes regional generation choices

SPP’s Day Ahead market selects the most cost-effective and reliable mix of generation for the region.

- Fuel Oil: $40
- Nuclear: $10
- Coal: $20
- Natural Gas: $30
- Wind: -$25

Day Ahead market offers regional diversity

The centralized market could provide access to a more diverse fuel mix than might be available to an individual utility.

Fuel Mix: Utility A

Fuel Mix: Day Ahead Market
Benefits of Operating Reserves market

- Greater access to reserve electricity
- Improve regional balancing of supply and demand
- Facilitate integration of renewable resources

If the wind gusts and turbines trip, another type of reserve generation, such as gas, needs to immediately replace that supply. The Operating Reserves market offers reserve energy for sale.

SPP will balance load/supply for region

SPP’s Consolidated Balancing Authority will balance supply and demand for the entire market footprint.
GRID CONGESTION
Impacts markets and transmission planning

What is congestion?

- Congestion or “bottlenecks” happen when you can’t get energy to customers along a certain path
  - Desired electricity flows exceed physical capability
- Congestion caused by:
  - Lack of transmission, often due to load growth
  - Line and generator maintenance outages
  - Unplanned outages such as storms or trees on lines
  - Too much generation pushed to grid in a particular location
  - Preferred energy source located far from customers
- Results in inability to use least-cost electricity to meet demand
Congestion prevents access to lower-cost generation

Congestion’s Impact on Wholesale Market Prices

January 26, 2010 Interval Ending 12:15 PM

LAKALAJASTR: Lake Road – Alabama 161kV (MPS) Hilo Iatan – Stranger Creek 345kV (KCPPL)

North–South flow from Northwest Missouri – Kansas
SMP $25.26
Price Scale: $50, $25.26, $10 $/MWh
Finding Balance

Minimum for Reliable Delivery to Customer

SPP Today

More Transmission Needed

Expand Transmission

Customer Energy Cost

Services

TRANSMISSION PLANNING: BASIC CONCEPTS
"Manufacturing", "transportation", and "delivery" must occur instantaneously
Other ways electric industry is unique

- Location of “manufacturing” plants is limited
  - Wind farms must be in areas of high wind, solar farms in areas with strong sun, hydro plants on a river
  - Coal and natural gas can only be extracted where fuel is
    - Coal mine may be far from coal-fired power plants – Expensive to transport coal long distances
    - Location of coal and gas plants have limitations

- Manufacturing plants may be far from people, and “roads” may not exist to deliver product to consumers
- Some products are only available at certain times

Transmission planners consider:

- What parts of grid need strengthening to “keep the lights on”? (keep the lights on’?
  - Redundancies necessary to account for a line being out
- Where is current and future generation located?
- Where are electricity consumers located?
- Where on the grid do we frequently see congestion (more traffic than roads can accommodate)?
- Will laws mandating more renewable energy or a carbon tax impact traffic?
- How do coal/gas prices impact traffic?
  - People will use more coal if gas prices rise, and vice versa
- How do regional temperatures impact traffic?
  - If temperature differs across region, one area may need more energy
Generation = 60% Retail Electricity Rates

Without transmission, we can’t deliver this capital-intensive generation to where it’s needed across region.

Transmission = 10% Retail Electricity Rates

Transmission enables optimal use of our region’s diverse generating resources, including coal, natural gas, hydroelectric, nuclear, and wind energy.
Larger transmission reduces Right of Way

Services

TRANSMISSION PLANNING AT SPP
Why do we need more transmission?

- In the past, built least-cost transmission to meet local needs
- Today, proactively building “highways” to benefit region

How does SPP decide what and where transmission is needed?

- **Generation Interconnection Studies**
  - Determines transmission upgrades needed to connect new generation to electric grid

- **Aggregate Transmission Service Studies**
  - Determines transmission upgrades needed to transmit energy from new generation to load
  - Shares costs of studies and new transmission

- **Specific transmission studies**
- **Integrated Transmission Planning process**
Integrated Transmission Planning: Economics and Reliability Analysis

**ITPNT**
- Annual Near-Term plan
- Reliability is primary focus
- Identifies potential problems and needed upgrades
- Coordinates with ITP10, ITP20, Aggregate and Generation Interconnection study processes

**ITP10**
- Analyzes transmission system for 10-year horizon
- Establishes timing of ITP20 projects

**ITP20**
- Develops 345 kV+ backbone for 20-year horizon
- Studies broad range of possible futures

Services

TRANSMISSION PLANNING MAPS
Projects Constructed 2005-2010

Projects with Notifications to Construct

230 kV + Projects with Notification To Construct or Under Construction (as of February 17, 2011)

All SPP Transmission Expansion Plans are subject to change.
2010 Plan for 2030

2010 ITP20 Plan
Approved by SPP Board of Directors
January 2011

All High Voltage Planned Expansion

230 kV + Planned Expansion
(as of February 17, 2011)

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All SPP Transmission Expansion Plans are subject to change.
Regional Plans

Conceptual and Approved Expansion In and Around SPP
(February 2011)

Generating Resources
Conceptual and Approved Plans

WIND ENERGY
Wind Energy Development

- Wind “Saudi Arabia”: Kansas, Oklahoma, Texas Panhandle, New Mexico, Nebraska
  - 60,000-90,000 MW potential
  - More wind energy than SPP uses during peak demand
- ~3,900 MW capacity of in-service wind
- ~28,000 MW wind in-service and being developed
  - Includes wind in Generation Interconnection queue and with executed Interconnection Agreements

Annual Average Wind Speed - 80 meters
Challenges with developing wind energy

- Intermittent
  - Must be supplemented with constant generating sources
- Wind in remote areas
  - Expensive new transmission needed
- “Not in my backyard” siting issues
- Seams agreements
- Renewable Energy Standards

Renewable Portfolio Standards
Wind In Service

Generation Interconnection Requests
SPP’s Regional State Committee

Paul Suskie
Senior Vice-President & General Counsel

Facilitation: Helping our members work together
RSC & CAWG

<table>
<thead>
<tr>
<th></th>
<th>Regional State Committee (RSC)</th>
<th>Cost Allocation Working Group (CAWG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>Commissioner Reeves</td>
<td>Sam Loudenslager/Pat Mosier</td>
</tr>
<tr>
<td>Kansas</td>
<td>Chairman Wright</td>
<td>Tom DeBaun/James Sanderson</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>Commissioner Murphy</td>
<td>Trent Campbell</td>
</tr>
<tr>
<td>Missouri</td>
<td>Commissioner Davis</td>
<td>Adam McKinnie</td>
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<tr>
<td>Nebraska</td>
<td>Chairman Siedschlag</td>
<td>Tim Texel</td>
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<tr>
<td>New Mexico</td>
<td>Commissioner Lyons</td>
<td>Craig Dunbar</td>
</tr>
<tr>
<td>Texas</td>
<td>Chairman Nelson</td>
<td>Richard Greffe</td>
</tr>
</tbody>
</table>

What role do state regulators play?

- **Regional State Committee - Retail regulatory commissioners from:**
  - Arkansas
  - Nebraska
  - Oklahoma
  - Kansas
  - New Mexico
  - Texas
  - Missouri

  *Louisiana maintains active observer status*

- **Primary responsibility for:**
  - Cost allocation for transmission upgrades
  - Approach for regional resource adequacy
  - Allocation of transmission rights in SPP’s markets
### Who pays for transmission?

<table>
<thead>
<tr>
<th>Type</th>
<th>Reliability</th>
<th>Economic</th>
<th>Sponsored</th>
<th>Highway/Byway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funded</td>
<td>“Base Plan Funding”</td>
<td>“Balanced Portfolio”</td>
<td>Directly assigned w/ revenue credits</td>
<td>Postage Stamp</td>
</tr>
<tr>
<td>Reason</td>
<td>Criteria or Designated Resource</td>
<td>Aggregate and Individual Transmission Owner Benefits / Cost ≥ 1</td>
<td>Sponsor(s) nominate projects</td>
<td>ITP projects</td>
</tr>
<tr>
<td>Voltage</td>
<td>Transmission</td>
<td>345 kV and above</td>
<td>2009</td>
<td>2009 2009 2009 2010</td>
</tr>
<tr>
<td>Effective</td>
<td>2005</td>
<td>2008</td>
<td>2009</td>
<td>2010</td>
</tr>
</tbody>
</table>

#### Highway/Byway

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Paid for by Region</th>
<th>Paid for by Local Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>300 kV and above</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>above 100 kV and below 300 kV</td>
<td>33%</td>
<td>67%</td>
</tr>
<tr>
<td>100 kV and below</td>
<td>0%</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Who pays for these transmission projects?

- **Sponsored:** Project owner builds and receives credit for use of transmission lines
- **Directly-assigned:** Project owner builds and is responsible for cost recovery
- **Highway/Byway:** Most SPP projects paid for under this methodology

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Region Pays</th>
<th>Local Zone Pays</th>
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<td>100%</td>
</tr>
</tbody>
</table>
ARTICLE I

1. NAME: The organization shall be known as the Southwest Power Pool Regional State Committee (“SPP RSC”). The principal office of the SPP RSC shall be at such location, within the United States, as the SPP RSC Board of Directors shall from time to time establish. The SPP RSC may also maintain such branch offices and places of business as the SPP RSC Board of Directors may deem necessary or appropriate in the conduct of its business.

2. PURPOSE: The SPP RSC shall provide collective state regulatory agency input and participation in the Southwest Power Pool, Inc. (“SPP”) and SPP’s Board of Directors, committees, working groups and task forces, including any independent transmission system operator (“ISO”) or regional transmission organization (“RTO”) formed by the SPP. Such input and participation shall include but not be limited to: whether and to what extent participant funding will be used for transmission enhancements; whether license plate or postage stamp rates will be used for the regional access charge; determination of Financial Transmission Rights (“FTR”) allocations where a locational price methodology is used; determination of the transition mechanism to be used to assure that existing firm customers receive FTRs equivalent to the customers’ existing firm rights; determination of the approach for resource adequacy across the entire region; determination of whether transmission upgrades for remote resources will be included in the regional transmission planning process; and determination of the role of transmission owners in proposing transmission upgrades in the regional planning process.

3. Nothing in the formation or operation of the SPP RSC as a FERC recognized regional state committee is in any way intended to diminish existing state regulatory jurisdiction and authority. Each state regulatory agency expressly reserves the right to exercise all lawful means available to protect its existing jurisdiction and authority.

ARTICLE II – MEMBERSHIP

1. MEMBERSHIP: Membership shall be open to all official governmental entities that:

   (a) Regulate the retail electricity or distribution rates or approve retail service areas of transmission-owning members or transmission-dependent utility members of the SPP; or

   (b) Are the primary regulatory agency responsible for siting electric transmission facilities in states where there are transmission-owning members of the SPP or independent transmission companies that own or operate transmission facilities associated with the SPP.

2. ASSOCIATE MEMBERSHIP: Associate membership shall be open to all official governmental agencies that:

   (a) Are involved with energy planning, and or environmental issues that relate to electric transmission; or
(b) Are involved with consumer advocacy issues that relate to electric transmission; or

(c) To all other entities that are approved by the SPP RSC Board of Directors for associate member status.

ARTICLE III – ANNUAL MEETING

The Annual Meeting of the SPP RSC (Annual Meeting) shall be held each year in conjunction with the fall meeting of the SPP Board of Directors, and/or at such time and place as may be determined by the SPP RSC Board of Directors. Notice of the time, place, and purpose of the meeting, shall be provided by mail or electronic means to each Member and Associate Member of the SPP RSC not less than fifteen (15) calendar days prior to the meeting, except that the agenda may be amended up to three (3) calendar days prior to the meeting in accordance with Article XI. At the Annual Meeting, all member regulatory agencies may have a seat and voice. The business of the Annual Meeting will be conducted by vote of the SPP RSC Board of Directors as provided for in these Bylaws.

ARTICLE IV – BOARD OF DIRECTORS

1. POWERS, RESPONSIBILITIES AND ACCOUNTABILITIES: The corporate business and affairs of the SPP RSC shall be managed by the SPP RSC Board of Directors, except as may be otherwise provided for in these Bylaws and/or the articles of incorporation (Articles of Incorporation) adopted by the SPP RSC Board of Directors.

2. COMPOSITION: Each member regulatory agency, as defined in Article II.1 of these Bylaws, may designate one Commissioner to serve on the SPP RSC Board of Directors. In the case of member state regulatory agencies organized without commissioners, an official of similar level may be designated. When any such person ceases to be the duly authorized representative of that Member, he or she shall be replaced on the SPP RSC Board of Directors by another representative from his or her state regulatory agency. A member state regulatory agency may replace its Director by notifying the Secretary of the SPP RSC by mail, facsimile transmission and/or electronic mail at least one business day in advance of any meeting of the SPP RSC Board of Directors.

3. RESPONSIBILITIES: The SPP RSC Board of Directors shall elect the officers of the SPP RSC and determine the general policies and direction of the SPP RSC. The SPP RSC Board of Directors may amend the Articles of Incorporation and Bylaws, take all other action requiring membership vote, and conduct other business as delineated in Article IX.

4. REGULAR MEETINGS: Regular meetings of the SPP RSC Board of Directors shall be held at such time and place as may be determined by the SPP RSC Board of Directors, except that the SPP RSC Board of Directors shall meet no less than one time each calendar year, in addition to the Annual Meeting. Notice of the time, place and purpose of the meeting(s) shall be provided by mail, facsimile transmission and/or electronic means to each Member and Associate Member of the SPP RSC.
not less than seven (7) calendar days prior to the meeting, except that the agenda may be amended up to three (3) calendar days prior to the meeting in accordance with Article XI. Public notice shall also be given at the same time that it is given to each Member and Associate Member of the SPP RSC in accordance with Article XI.

5. SPECIAL MEETINGS: The President may call a special meeting(s) of the SPP RSC Board of Directors. Notice of the time, place and purpose of the meeting(s) shall be provided by mail, facsimile transmission and/or electronic means to each Member and Associate Member of the SPP RSC not less than three (3) calendar days prior to the meeting(s).

6. QUORUM: If a Director from each of a majority of the member state regulatory authorities is present (either in person, by authorized telephonic or electronic means, or by designated proxy), a quorum exists for the transaction of business at any meeting of the SPP RSC Board of Directors, but if less than such majority is present at a meeting, a majority of the members that are present may adjourn the meeting without further notice. The SPP RSC Directors present at a properly noticed meeting may continue to transact business until adjournment, notwithstanding the withdrawal of enough members to leave less than a quorum. A member state regulatory agency may allow a proxy from the same agency to participate as a substitute for its designated SPP RSC Director at a meeting(s) of the SPP RSC Board of Directors by notifying the Secretary of the SPP RSC as provided for in these Bylaws.

7. PROXY: A request of a member state regulatory agency for recognition by the SPP RSC Board of Directors of a proxy to participate in a meeting of the SPP RSC Board of Directors must be received by the Secretary of the SPP RSC at least one business day in advance of the meeting at which the proxy is to be exercised. Where prior written notice is not possible, the designating Director shall submit written confirmation of this proxy no later than ten (10) calendar days after the applicable Board meeting takes place. The person who is identified as exercising the proxy cannot be the person submitting the request for recognition of the proxy. Notices of proxies must be sent by mail, facsimile transmission and/or electronic mail to the Secretary of the SPP RSC and identify the date of the meeting of the SPP RSC Board of Directors for which the proxy is authorized and identify by name, and position at the member state regulatory agency, the person who is authorized to exercise the proxy. The Secretary of the SPP RSC must receive a new request for recognition of a proxy for each meeting of the SPP RSC Board of Directors at which the proxy will be sought to be recognized. The SPP RSC Board of Directors will not recognize, for more than one meeting at a time, a proxy request by a member state regulatory agency. The request for recognition of a proxy must not identify more than one person as being authorized to exercise the proxy.

8. VOTING PROCEDURES: Each SPP RSC Director present (either in person, by authorized telephonic or electronic means, or by representation of the member state regulatory agency by a properly designated proxy) shall be entitled to one equally weighted vote. However, if a state has more than one state regulatory agency that is a Member of the SPP RSC, voting rights shall be divided equally among the SPP RSC Directors from that state present and voting (equating to one total vote per
Elections shall be by ballot in contested elections and may be by voice or other means in uncontested elections. A plurality of votes cast shall elect. Changes in the Bylaws shall require a vote consistent with Article XII of this document. All other matters shall be determined by a majority of the SPP RSC Directors present and voting, unless otherwise provided by the laws of the state where the SPP RSC is incorporated or these Bylaws.

9. ELECTRONIC VOTING: The President has the option and authority to conduct an electronic vote on non-policy, administrative matters, such as approval of minutes or appointment of the annual SPP RSC auditor, or on policy matters that have been discussed during a prior RSC meeting.

10. POSITIONS ON POLICY ISSUES: The SPP RSC Board of Directors will give direction to formation of issue statements, which will then be referred to member state regulatory agencies. A position approved by a majority of the SPP RSC Board of Directors may be issued as the SPP RSC’s position with identification of the participating and non-participating member state regulatory agencies. Individual member state regulatory agencies retain all rights to object to, support, or otherwise comment on, issue statements of the SPP RSC, including the attachment of a minority report or dissenting opinion, provided it is submitted in a timely manner. The SPP RSC Board of Directors may authorize intervention in proceedings before federal regulatory agencies and in related judicial proceedings to express the SPP RSC’s positions, and may retain legal counsel to represent the SPP RSC in such proceedings. Consistent with Article I, § 3 above, each individual state regulatory agency shall also retain all rights to intervene in and/or comment on such federal regulatory agency proceedings and/or related judicial proceedings.

ARTICLE V - OFFICERS

1. NUMBER AND TITLE: The officers of the SPP RSC shall be the President, Vice-President, Secretary, and Treasurer.

2. ELECTION, TERM, VACANCIES: The President, Vice-president, Secretary, and Treasurer shall be elected by the SPP RSC Board of Directors for a term of one year, or until their successors are elected. Officers shall be elected at the Annual Meeting to take office on the first day of January following the Annual Meeting at which elections are held. The SPP RSC Board of Directors may fill a vacancy among the officers other than the President to serve until the next scheduled election. In the case of a permanent vacancy in the office of the President, the Vice-President will succeed until the next scheduled election. The terms of the officers elected in 2004 shall be deemed partial terms. In the event of a vacancy or temporary inability to serve, the duties of the Secretary or Treasurer may be fulfilled by a designee of the SPP RSC Board of Directors.

3. GEOGRAPHIC BALANCE: The officers elected shall be SPP RSC Directors from different states.

4. DUTIES: The duties of the officers shall be as follows:
(a) The PRESIDENT shall be the principal officer of the SPP RSC and shall preside at the Annual Meeting and all meetings of the SPP RSC Board of Directors, shall be responsible for seeing that the lines of direction given by the SPP RSC Board of Directors are carried into effect – including the representation and presentation of all SPP RSC majority positions and minority reports and dissenting opinions of the member state regulatory authorities, and shall have such other powers and perform such other duties as may be assigned by the SPP RSC Board of Directors; including but not limited to: serving as the SPP RSC's non-voting representative at the meetings of the SPP's Board of Directors, performing or delegating presentations/speeches on behalf of the SPP RSC, designating member state regulatory agency staff members proposed by the state regulatory agency to carry out daily functions and operations of the SPP RSC, assigning member state regulatory agency staff members proposed by the state regulatory agency to committees and work-groups created by the SPP RSC and requesting technical support from SPP as necessary. The President (or other officer serving as the RSC representative at meetings of the SPP Board of Directors) shall also be responsible for requesting recusal of a Director where a conflict of interest may arise and for clearly stating on all matters whether he/she is representing the position of the SPP RSC or solely his/her member state regulatory agency.

(b) In the temporary absence or disability of the President, the VICE-PRESIDENT shall preside at meetings of the SPP RSC Board of Directors and have such other powers and perform such other duties as performed by the President. The Vice-President shall also serve as the SPP RSC's non-voting representative at the meetings of the SPP's Board of Directors. He or she shall have such other powers and perform such other duties as performed by the President or as may be assigned by the SPP RSC Board of Directors.

(c) The SECRETARY shall be responsible for keeping a roll of the Members and seeing that notices of all meetings of the SPP RSC Board of Directors are issued and shall see that minutes of such meetings are kept. The Secretary shall be responsible for the custody of corporate books, records and files, shall exercise the powers and perform such other duties usually incident to the office of Secretary, and shall exercise such other powers and perform such other duties as may be assigned by the President or the SPP RSC Board of Directors.

(d) The TREASURER shall be responsible for monitoring the receipt and custody of all monies of the SPP RSC and for monitoring the disbursement thereof as authorized, for assuring that accurate accounts of monies received and disbursed are kept, for execution of contracts or other instruments authorized by the SPP RSC Board of Directors, and for overseeing the preparation and issuance of financial statements and reports. The Treasurer shall give a report of the SPP RSC’s finances at the Annual Meeting. The Treasurer shall be an ex officio member of the finance committee, if such a committee shall be established by the SPP RSC Board of Directors, shall exercise the powers and perform such other duties usually incident to the office of Treasurer, and shall perform such other duties as may be assigned by the President or SPP RSC Board of Directors.
5. REMOVAL: An officer of the SPP RSC may be removed with or without cause by written vote of two-thirds of the total membership of the SPP RSC Board of Directors.

ARTICLE VI – MEMBER STATE REGULATORY AGENCY STAFF MEMBER PARTICIPATION

Member state regulatory agency staff members shall participate at the discretion of their respective member state regulatory agency, including but not limited to: attendance at SPP RSC and SPP Board of Directors meetings in support of or in lieu of member state regulatory agency commissioners, attendance and active participation in assigned SPP committees, working groups and task forces (including providing summaries of meetings and reporting to the SPP RSC members and associate members), active representation of the majority positions and minority reports or dissenting opinions of the SPP RSC member state regulatory authorities, and attending and actively participating in assigned SPP RSC committees and work-groups created by the SPP RSC Board of Directors (including providing summaries of meetings and reporting to the SPP RSC members and associate members). Member state regulatory agency staff members must clearly indicate whether they are representing the SPP RSC or solely their member state regulatory agency.

ARTICLE VII - COMMITTEES

1. ESTABLISHED: The SPP RSC Board of Directors may establish SPP RSC committees and work-groups as it deems necessary and provide for their governance.

2. COMPOSITION AND APPOINTMENT: The President shall appoint members of the SPP RSC committees. Unless otherwise provided by the SPP RSC Board of Directors, a committee may elect its chair. Members and Associate Members may participate in the work of committees and work-groups that relate to matters within their jurisdiction.

ARTICLE VIII – MEMBERS AND ASSOCIATE MEMBERS NOT BOUND

No vote of, or resolution passed by, the SPP RSC Board of Directors has any binding effect upon any member state regulatory agency, or any associate member, in the exercise of that entity’s powers.

ARTICLE IX - FISCAL RESPONSIBILITIES OF THE SPP RSC BOARD OF DIRECTORS

1. FISCAL YEAR: The SPP RSC Board of Directors shall establish the fiscal year of the SPP RSC.

2. FUNDING: Any funds shall be accepted or collected only as authorized by the SPP RSC Board of Directors.
3. DEPOSITORIES: All funds of the SPP RSC shall be deposited to the credit of the SPP RSC in fully insured accounts.

4. DELEGATED AUTHORITY: For routine payment of meeting and travel expenses incurred by SPP RSC Members and their designees, including designated State Commission Staff members, the SPP RTO may act as agent for the RSC and make payment of such expenses in accordance with the RSC’s then-current Expense Reimbursement Policy. Such expenses shall be paid from the RSC’s approved budget. For items of non-routine and more financially significant nature, such as an RSC-commissioned cost-benefit study or a large conference or event, the RSC Board of Directors may provide approval to the appropriate person within the SPP RTO to pay for such expenses, acting as agent for the RSC.

5. BONDING: All persons having access to or major responsibility for the handling of monies and securities of the SPP RSC shall be bonded as provided by resolution of the SPP RSC Board of Directors.

6. INDEMNIFICATION AND INSURANCE: Indemnification and Directors and Officers insurance shall be provided by resolution of the SPP RSC Board of Directors in accordance with the Articles of Incorporation and the laws of the state where the SPP RSC is incorporated.

7. BUDGET: The annual budget of estimated income and expenditures shall be prepared for the fiscal year and approved by the SPP RSC Board of Directors in conjunction with the Annual Meeting. No expenses shall be incurred in excess of approved budget levels without prior approval of the SPP RSC Board of Directors.

8. CONTRACTS AND DEBTS: Contracts may be entered into or debts incurred only as directed by resolution of the SPP RSC Board of Directors.

9. AUDITS: A certified public accountant or other independent public accountant shall be retained by the SPP RSC Board of Directors to make an annual examination of the financial accounts of the SPP RSC. A report of this examination shall be submitted to the SPP RSC Board of Directors and made available to the general membership of the SPP RSC and the public.

10. LEGAL COUNSEL: Independent legal counsel may, if deemed necessary and appropriate, be retained by the SPP RSC Board of Directors to: (a) insure compliance with federal and state requirements; (b) review and advise on any and all legal instruments the SPP RSC Board of Directors executes, such as leases, contracts, property purchases, or sales; (c) for interventions before federal regulatory agencies and related judicial proceedings; or (d) for any other matters as determined necessary by the SPP RSC Board of Directors – including those matters that are deemed to be administrative in nature.

11. PROPERTY: Title to all property shall be held in the name of the SPP RSC, unless otherwise approved by the SPP RSC Board of Directors; or otherwise required by law.
12. INVESTMENT: The Treasurer shall invest the funds of the SPP RSC in accordance with the direction of the SPP RSC Board of Directors or any committee of the SPP RSC Board of Directors appointed for such purpose.

ARTICLE X - PARLIAMENTARY AUTHORITY

All meetings shall be conducted in a manner that will allow the fullest possible participation by all members. In the event of a dispute, Robert’s Rules of Order, newly revised, shall be the parliamentary authority governing the meetings of the SPP RSC Board of Directors and all committees, subject to the laws of the state where the SPP RSC is incorporated, the Articles of Incorporation, these Bylaws, and any special rules of order adopted by the SPP RSC.

ARTICLE XI - OPEN MEETINGS

The Annual Meeting and all meetings of the SPP RSC Board of Directors and subordinate committees and work-groups shall be open meetings, except that discussion of commercially sensitive, legal, and personnel issues may be conducted in closed session. For the purposes of these Bylaws, open meeting means:

(a) Notice of the time, place, and purpose of the meeting, as provided in Articles III and IV, shall be made available to the public, through printed or electronic means, provided however, that the agenda for any annual, regular, or special meeting may be amended up to three (3) calendar days prior to the meeting date, as long as the amendment does not involve a change to the Bylaws or otherwise affect the substantive rights of Members.

(b) Minutes of the SPP RSC Board of Directors and subordinate committee meetings shall be made available to the public, through printed or electronic means, as soon as practical.

(c) The public may attend all open meetings of the SPP RSC.

(d) The SPP RSC Board of Directors may provide for participation by telephone or electronic means.

ARTICLE XII- AMENDMENTS

Except as otherwise stated herein, these Bylaws may be amended by a two-thirds vote of a quorum at the Annual Meeting and any regular meeting of the SPP RSC Board of Directors, provided that the proposed amendment(s) must have been included in the notice of the meeting in which such changes were to be considered.

Exceptions to two-thirds voting requirement: Any amendment(s) to Article I, § 3; Article IV, § 9 or Article VIII shall require the unanimous vote of the entire Board of Directors.

ARTICLE XIII- EXECUTIVE DIRECTOR
1. EMPLOYMENT: The SPP RSC Board of Directors may select an Executive Director. Where an Executive Director is hired, the SPP RSC Board of Directors shall determine the terms and conditions of the employment of the Executive Director. Thereafter, the Executive Director's employment may be terminated by a majority of all serving SPP RSC Directors.

2. RESPONSIBILITIES: If deemed necessary and appropriate, where an Executive Director is hired, the Executive Director shall be the chief executive of the SPP RSC under the supervision and day-to-day policy guidance of the President of the SPP RSC Board of Directors. The Executive Director shall be responsible for providing advice and assistance to the SPP RSC Board of Directors, the President and other officers, and any subordinate committees and work-groups; and shall be responsible for administering the operations of the SPP RSC. The Executive Director shall have such other powers and perform such other duties as may be provided by the SPP RSC Board of Directors. The Executive Director shall be an ex officio non-voting member of the SPP RSC Board of Directors.
Review of Aggregate Study Waivers Approved by SPP Board of Directors 2006-2011

Prepared for Markets and Operations Policy Committee
September 2011

Oklahoma Gas and Electric Company Reservation No. 1032973; Centennial Wind Farm

Background

On October 10, 2006, SPP made a recommendation to the MOPC that a waiver be granted to OG&E, based on the fact that OG&E’s service commitment exceeded five years. The MOPC requested the CAWG to review the recommendation, as it was the first such request to be fully considered, and also asked SPP’s Board of Directors to allow additional time for such consideration by the CAWG. The CAWG reviewed the waiver request in their meetings on November 1, 2006, and November 29, 2006. The CAWG also reviewed the request during a special meeting on December 20, 2006, and recommended that the MOPC grant the waiver and allow [an additional] $747,000 to be Base Plan funded. The MOPC accepted the CAWG’s analysis in the January 17, 2007 meeting and recommended that SPP’s Board of Directors grant the waiver. SPP’s Board of Directors approved the waiver at its January 30, 2007 meeting, contingent on the approval of the RSC. The RSC approved the waiver on March 1, 2007.

Subsequently, SPP determined that one of the assigned upgrades for Reservation No. 1032973 did not require a waiver because a modeling error during the study falsely indicated that the assigned upgrade was needed. The revised study indicated that the new allocated costs to Reservation No. 1032973 without the upgrade was below the $180,000/MW Safe Harbor threshold. Therefore, the issue of the waiver request for the assigned upgrade was moot.

Notes on Analysis

• First request to go through the entire process and be acted on by the Board.
• Issue of MW amount to be used for wind requests – since resolved by revised tariff language.
• Issue of Regional/Zonal benefit of upgrades for wind – since resolved by revised tariff language.
• First discussion of how to consider request with terms in excess of the 5-year minimum to qualify for base plan funding. SPP Staff proposed a formula which included a MW-mi calculation to determine...
Regional/Zonal benefit. Staff’s formula used a 1.25% / year adder to the Safe Harbor Cost Limit based on:
- 2.5% / year addition given a 40-year life span for upgrades. (100% / 40 years = 2.5% / year)
- Customer should bear at least 50% of the cost;
- Because it was the first waiver, the MOPC recommended and the Board concurred that “unusual circumstances” existed justifying extending the deadline for the Board’s action past 120 days.
- CAWG’s recommendation to MOPC stated, “The CAWG specifically does not adopt the assumptions and analysis specifics employed by SPP staff in reaching their conclusion to recommend the waiver amount of $747,000 (additional SHCL). However, the CAWG did confirm through its own review and analysis the reasonableness of the amount recommended by the SPP staff.”

### Westar Energy Reservation No. 1086655; Rose Hill – Sooner 345 kV Project

**Background**

On October 13, 2006, SPP received a request for waiver from Westar Energy, Inc. ("Westar") for the Rose Hill – Sooner 345 kV project, Reservation No. 1086655. In a letter dated November 10, 2006 to Westar, SPP staff clarified certain facts about the Westar waiver request and the Tariff.

The CAWG reviewed Westar’s waiver request and recommended to the MOPC on January 24, 2007, that the Westar waiver to increase the Base Plan funding required by building the Rose Hill – Sooner 345 kV upgrade from $40,500,000 to an estimated $54,788,600 be approved. SPP’s staff also recommended to the MOPC that it recommend to the SPP’s Board of Directors to approve the Westar waiver request in a special meeting on January 26, 2007. The RSC approved the waiver during their January 29, 2007 meeting. SPP’s Board of Directors approved the waiver, as recommended by the MOPC, in their January 30, 2007 meeting.

**Notes**

- SPP recommended the Rose Hill – Sooner 345 kV project to provide service in lieu of 138 kV rebuilds of several flowgates between Northeast OK and Southeast KS, citing:
  - Regional and long term benefits
  - Increase in wholesale competition
  - Need for project to accommodate Red Rock outlet

### Arkansas Electric Cooperative Corporation Reservation No. 1161209; Turk Power Plant

**Background**

On January 31, 2007, SPP received a waiver request from the Arkansas Electric Cooperative Corporation ("AECC"). The waiver request was for upgrade costs associated with transmission from a new Designated Resource of 70 MW, i.e. the John W. Turk, Jr. Generation Facility ("Turk Power Plant") to be located in Hempstead County, Arkansas, with a term of service of 20 years. On March 2, 2007, SPP’s staff requested additional information from AECC by letter. On March 13, 2007, AECC provided the additional information by letter.
AECC’s waiver request was discussed in the February 21 and March 28, 2007 meetings of the CAWG. Based on the discussion held in these meetings, the CAWG advised the RSC to recommend that SPP’s Board of Directors grant AECC’s waiver request. The RTWG held a brief discussion of the AECC waiver request at its March 29, 2007 meeting, but took no action.

SPP’s staff made a recommendation to the MOPC to grant a waiver to the extent that the project required for AECC’s new Designated Resource was fully Base Plan funded. The MOPC recommended the conditional waiver on April 11, 2007, and the RSC recommended it on April 23, 2007. On April 24, 2007, SPP’s Board of Directors approved the MOPC’s proposal for waiver.

**SPP Benefit Analysis presented to CAWG in Support of Recommendation**

- Capacity needed to meet anticipated Load Growth
- Fuel diversity for project participants
- SWEPCO CCN filings represent the Turk Power plant option as the better of four evaluated options including two pulverized coal options and two IGCC (integrated gasification combined cycle) options.
- Unit is dispatchable
- Full load heat rate – 8992 BTU/kWh
- Not near a non-attainment area
- SWEPCO projects an 87.6% unit availability
- Life of plant commitment

**Oklahoma Municipal Power Authority Reservation No. 1159596; Turk Power Plant**

**Background**

On January 31, 2007, SPP received a waiver request from Oklahoma Municipal Power Authority (“OMPA”). The waiver request was for upgrade costs associated with transmission from a new Designated Resource of 41 MW, i.e. the Turk Power Plant. OMPA requested a waiver based upon its commitment to a reservation of 20 years. SPP’s staff requested additional information from OMPA by letter on March 2, 2007. OMPA responded to SPP’s request with additional information on March 13, 2007.

The CAWG discussed OMPA’s waiver request at its February 21 and March 28, 2007 meetings. Based on the discussion held in these meetings, the CAWG advised the RSC to recommend that SPP’s Board of Directors grant OMPA’s waiver request. The RTWG held a brief discussion of the OMPA waiver request at its March 29, 2007 meeting, but took no action.

SPP’s staff made a recommendation to the MOPC to grant OMPA’s waiver to the extent that the projects required for the new OMPA Designated Resources were fully Base Plan funded. The MOPC recommended the conditional waiver on April 11, 2007, and the RSC recommended it on April 23, 2007. On April 24, 2007, SPP’s Board of Directors approved the MOPC’s proposal for waiver.

**Notes**

- Considered at the same time and on the same basis as the AECC waiver request for same Designated Resource.
Empire District Electric Reservation No. 1222640; Cloud County Wind Farm

Background

On August 23, 2007, EMDE submitted a waiver request for Reservation No. 1222640. EMDE specifically requested that SPP waive the application of provisions of Section III.B.3 of Attachment J to the Tariff. On October 4, 2007, SPP’s staff submitted a letter to EMDE requesting additional information regarding the basis for the waiver. EMDE provided additional information on October 12, 2007.

At the October 24, 2007 CAWG meeting, representatives from SPP and EMDE separately provided the CAWG a presentation of the EMDE waiver request. SPP’s staff recommended denial of the waiver request, but allowance of a waiver for a specific amount based on a preliminary Aggregate Study that resulted in an increase of Base Plan funding of $16,740 based on the term of the contract. On November 19, 2007, EMDE provided through a letter a response and clarification to SPP staff’s October 24, 2007 recommendation.

Based on revised results to the Aggregate Study, SPP’s staff provided a revised presentation to the CAWG on January 4, 2008. During this meeting, the CAWG determined that it should recommend to the RSC that it direct further CAWG discussion and evaluation leading to modifications to the Tariff language to address the manner in which wind resources are treated for Base Plan funding purposes. The CAWG also recommended that the EMDE waiver receive full Base Plan funding based on three factors: (a) stronger incentives for long-term contracts should be provided; (b) the Base Plan funding credit policy for wind resources is currently under review and likely to be changed; and (c) the substantial investment made by EMDE to accomplish the interconnection of the Designated Resource.

At its January 15-16, 2008 meeting, the MOPC voted to recommend to SPP’s Board of Directors that it approve the EMDE waiver request for full Base Plan funding. On January 28, 2008, the CAWG made a presentation to the RSC on the EMDE waiver, and the RSC agreed to grant the waiver. On January 29, 2008, SPP’s Board of Directors, acting upon the MOPC and the RSC recommendations, granted the EMDE waiver for full Base Plan funding in conjunction with the CAWG recommendation.

The final posting of the Aggregate Study for the EMDE request indicated an allocated cost of $13,379. Because this revised cost did not exceed the $180,000/MW Safe Harbor threshold, the waiver issue was moot.

Notes

- Under the current Tariff, no waiver would have been needed, because the Safe Harbor Cost Limit would have been calculated on the requested capacity instead of the net dependable capacity.
- Based on the same calculation used for the OGE and the GSEC waiver and assuming one zone benefiting on this commitment SPP recommended an increase of $16,740/MW [in SHCL].
- Issue of Fuel Diversity was addressed in SPP presentation at October 24, 2007 CAWG meeting:
  - SPP Staff will not recommend changing SPP policy to grant a waiver based on a request to encourage fuel diversity because it would be premature to do so. [references to CFR]
  - FERC rejected language in SPP’s Attachment J that would have permitted a waiver in order to foster fuel diversity. SPP must be able to show how parties paying the costs associated with the waiver benefit from increased fuel diversity.
  - EPAct 2005 directs states to take up the issue and consider the value of fuel diversity.
• Most of the states in the SPP region are addressing this issue, but they are not all at the same stage in their investigations.
• There is a significant sentiment within the industry that integrated resource planning, including the consideration of fuel diversity, is driven by specific issues within the load serving entity.

**American Electric Power Reservation No. 1162214; Turk Power Plant**

**Background**

On November 2, 2007, SPP received a waiver request from American Electric Power Service Corporation (“AEP”). The waiver request was for upgrade costs associated with transmission from a new Designated Resources for 455 MW, the Turk Power Plant. AEP requested a waiver based upon Section III.C.2.iv of Attachment J for “other circumstances” because of fuel type, requesting the “lesser of” language in Section III.B.a or b be considered.

AEP’s waiver request was discussed in the November 28, 2007 and the January 4, 2008 meetings of the CAWG. Based on the discussion held in these meetings, the CAWG recommended that the RSC approve the AEP waiver and fully Base Plan fund the project.

At its meeting on January 15-16, 2008, the MOPC voted to recommend to SPP’s Board of Directors that it approve the AEP waiver request for full Base Plan funding. The RSC approved the AEP waiver during its January 28, 2008 meeting. On January 29, 2008, SPP’s Board of Directors approved the MOPC’s recommendation to approve 100% of the AEP waiver and permit Base Plan funding.

**Notes**

• Same justifications were used as had been used for the AECC and OMPA Turk requests.

**Kansas Electric Power Cooperative, Inc. Reservation 1352938; Westar PPA**

**Background**

On April 30, 2008, SPP received a waiver request from Kansas Electric Power Cooperative, Inc. (“KEPCO”). The waiver request was for upgrade costs associated with transmission from a new Designated Resources for 68 MW from Westar. KEPCO requested a waiver based upon Section III.B.3 of Attachment J of the Tariff. Section III.B.3 of the Tariff sets a Safe Harbor Cost Limit of $180,000/MW, or $12,240,000 for Network Upgrades related to KEPCO’s Designated Resource.

KEPCO’s waiver request was discussed in the June 26, 2008 meeting of the CAWG. Based on the discussion held in these meetings, the CAWG recommended that the RSC approve the KEPCO waiver and fully Base Plan fund the project.

On July 15, 2008, the MOPC voted to recommend to SPP’s Board of Directors that it approve the KEPCO waiver request for full Base Plan funding. The RSC approved the KEPCO waiver during its July 28, 2008 meeting. On July 29, 2008, SPP’s Board of Directors approved the MOPC’s recommendation to approve 100% of the KPP waiver and permit Base Plan funding.
The final posting of the Aggregate Study for the KEPCO request indicated an allocated cost of $262,400. Because this revised cost did not exceed the $180,000/MW Safe Harbor threshold, the waiver was not needed.

Notes

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**Kansas Power Pool Reservation 1222932; Westar Fleet**

On May 29, 2008, SPP received a waiver request from the Kansas Power Pool ("KPP"). The waiver request was for upgrade costs associated with transmission from a new Designated Resource for 45 MW from the Westar fleet. KPP requested a waiver based the “other circumstances” provisions of the Tariff because of fuel type, requesting the “lesser of” language in Section III.B.a or b be considered.

KPP’s waiver request was discussed in the June 26, 2008 meeting of the CAWG. Based on the discussion held in these meetings, the CAWG recommended that the RSC approve the KPP waiver and fully Base Plan fund the project.

On July 15, 2008, the MOPC voted to recommend to the Board of Directors to approve the KPP waiver request for full Base Plan funding. The RSC approved the KPP waiver during its July 28, 2008 meeting. On July 29, 2008, SPP’s Board of Directors approved the MOPC’s recommendation to approve 100% of the KPP waiver and permit Base Plan funding.

Notes

- SPP Staff recommended approval based on the requested term of 32 years exceeding 5 years and its addition of fuel diversity to KPP’s fleet.

**Northeast Texas Electric Cooperative Reservation 1161974; Turk Power Plant**

**Background**

On June 11, 2008, SPP received a waiver request from Northeast Texas Electric Cooperative Corporation ("NTEC"). The waiver request was for upgrade costs associated with transmission from a new Designated Resource for 52 MW for the Turk Power Plant. NTEC requested a waiver based upon for the “other circumstances” provisions of the Tariff because of fuel type, requesting the “lesser of” language in Section III.B.a or b be considered.

NTEC’s waiver request was discussed in the June 26, 2008 meeting of the CAWG. Based on the discussion held in these meetings, the CAWG recommended that the RSC approve the NTEC waiver and fully Base Plan fund the project.

On July 15, 2008, the MOPC voted to recommend to SPP’s Board of Directors that it approve the NTEC waiver request for full Base Plan funding. The RSC approved the NTEC waiver during its July 28, 2008 meeting. On July 29, 2008, SPP’s Board of Directors approved the MOPC’s recommendation to approve 100% of the NTEC waiver and permit Base Plan funding.
Notes

- Same justifications were used as had been used for the AEP, AECC and OMPA Turk requests.

City of Coffeyville, Kansas. Reservation 1352193; GRDA

Background

On September 11, 2008, SPP received a waiver request from the City of Coffeyville, Kansas (“CMLP”) regarding transmission network facility upgrade costs in excess of the Safe Harbor Cost Limits of the Tariff. The waiver request was for upgrade costs associated with CMLP’s network transmission reservation in the 2007-AG3-AFS-4 study. CMLP requested a waiver to allow the engineering and construction costs of the required network facility upgrades to be eligible for full Base Plan funding because of the long-term service request by the City. CMLP’s 34-year reservation request far exceeds the minimum service requirement of five (5) years indicated in Section III.C of Attachment J of the Tariff.

CMLP’s waiver request was discussed in the September 24, 2008 meeting of the CAWG. Based on the discussion held in these meetings, the CAWG recommended that the RSC recommend to SPP’s Board of Directors that it approve the waiver and permit Base Plan funding for the SPP jurisdictional upgrades. This recommendation specifically excluded from the waiver the required upgrades owned by the city of Coffeyville.

On October 15, 2008, the MOPC recommended to SPP’s Board of Directors that it approve the waiver request to permit the full funding of the projects excluding the CMLP-owned direct assignment upgrades, based on the 34-year reservation and realizing an anticipated Safe Harbor limit using 91 MW would allow full funding of the project with the exclusion of the CMLP owned direct assignment upgrades. The RSC approved the CMLP waiver during its October 27, 2008 meeting. On October 28, 2008, SPP’s Board of Directors approved the MOPC’s recommendation to fully fund the project up to 91MW x $180,000= $16,380,000.

On May 15, 2009, SPP received a request from CMLP to amend its waiver regarding transmission network facility upgrade costs in excess of the Safe Harbor Cost Limits for its existing network transmission reservation request studied in the 2007-AG3 study. The purpose of the amended waiver request was to request similar treatment of those CMLP facilities that will be placed under the Tariff.

On June 12, 2009 the MOPC recommended approval of the amended waiver request to fully fund the project including the CMLP-owned direct assignment upgrades at such time that the city owned facilities are brought under the Tariff. The RSC approved the CMLP amended waiver request during its July 27, 2009 meeting. On July 28, 2009, SPP’s Board of Directors approved the CMLP’s amended waiver request and to fully fund the project with the exception of the third party upgrades.

Notes

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Westar Energy Reservation No. 1286201; Central Plains Wind
Background
On September 15, 2009, SPP received a waiver request from Westar for upgrade costs associated with 99 MW of capacity from the Central Plains wind farm located in Wichita County, Kansas for an initial term of 10-years. Westar will own and operate this wind farm, which will be designated as a Network Resource to serve Westar’s native load customers. Westar expects to take service from this facility far exceeding both the five (5) year minimum commitment for Base Plan funding eligibility and the ten (10) year term of Westar’s original request. As the owner and operator, Westar expects the useful life of this facility to significantly exceed the 10-year period of its request. Westar requested a waiver based upon Section III.C.2.ii & iv of Attachment J of the Tariff.

Westar’s waiver request was discussed at the September 24, 2008 meeting of the CAWG. A special teleconference was held on October 9, 2008. Based on the discussion and action of the CAWG during the special meeting, the CAWG recommended that the SRSC recommend to SPP’s Board of Directors that it approve the waiver and permit an increase in Base Plan funding in accordance with the RSC approved new policy for the direct assignment portion for the wind resources. This would approve 67% of the upgrade cost to be regionally funded. This would leave 33% to be directly assigned to Westar.

Westar’s waiver request was withdrawn as a result of the final iteration of the Aggregate Facilities Study resulting in no assigned service upgrades thus waiver was not required.

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Westar Energy Reservation No. 1346837; Meridian Way Wind

Background
On March 27, 2009, SPP received a waiver request from the Westar. The waiver request was for upgrade costs associated with transmission from 96 MW of capacity of the new Meridian Was Wind Farm, recently installed in north central Kansas, as a Designated Network Resource (“DNR”). Westar has a 20-year Purchase Power Agreement (“PPA”) for output from this wind farm. The initial term for this request is 10 years, which exceeds the five (5) year minimum commitment for Base Plan funding eligibility. Westar’s waiver request was discussed in the April 29, 2009 meeting of the CAWG. The CAWG recommended that the RSC recommend to SPP’s Board of Directors that it approve the waiver request.

During a June 12, 2009 teleconference, the MOPC voted and recommended to the SPP Board of Directors that it approve the Westar waiver request for the DNR. On July 28, 2009, the SPP Board of Directors approved the MOPC’s recommendation to approve the Westar waiver request based on new Attachment J criteria.

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Westar Energy Reservation No. 1346842; Flat Ridge Wind
Background

On March 27, 2009, Westar submitted to SPP a request for waiver under Attachment J of the Tariff for costs in excess of the Safe Harbor Cost Limit for Base Plan funding. The waiver request was for upgrade costs associated with transmission from a new Designated Resource for 100 MW from the Flat Ridge wind farm. Westar sought approval of this waiver request based on the New Attachment J criteria for wind farms. Specifically, Westar requested a waiver based upon Section III.C.2.ii of Attachment J.

This waiver request was discussed in the April 29, 2009, meeting of the “CAWG.” Based on the discussion held in that meeting, the CAWG recommended that the “MOPC” approve the Westar waiver for such amount to Base Plan fund the projects involved according to the Section III.A of Attachment J.

During a June 12, 2009, teleconference the MOPC voted and recommended to SPP’s Board of Directors that it approve the Westar waiver request for Designated Resource 100 MW. On July 28, 2009, the Board of Directors approved the MOPC’s recommendation to approve the Westar waiver request based on new Attachment J criteria.

Notes

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Oklahoma Municipal Power Authority No. 75196276; 3 MW

Background

(Note: Not included in 2011 Safe Harbor Report because request was still in study mode.)

On April 7, 2011, SPP received a request from Oklahoma Municipal Power Authority (OMPA) for waiver under Attachment J of the SPP Tariff of costs in excess of the Safe Harbor Cost Limit for Base Plan funding for a new Designated Resource of 3 MW. OMPA sought a waiver for this cost above the Safe Harbor Limit so that all of the allocated expenses associated with OMPA’s request are eligible for Base Plan funding. SPP’s 120-day deadline under Attachment J was August 5, 2011.

Analysis

OMPA requested the waiver based on Section III.C.2.ii of Attachment J, which provides for consideration to be given for terms that exceed the minimum five years required for Base Plan funding. The term of the requested service is 15 years, 10 months. The waiver request was reviewed by the Cost Allocation Working Group (CAWG) at its regular June 28, 2011 meeting. The CAWG voted unanimously to recommend to the Regional State Committee (RSC) that the Safe Harbor Cost Limit be increased from $540,000 to $742,500, based on an additional amount of Safe Harbor Cost Limit of 2.5% per year over five years. This would leave approximately $857,500 to remain as a Direct Assignment Upgrade Cost in the current iteration of the aggregate study.

On July 13, 2011, the MOPC voted to adopt $1.6 million as the Safe Harbor Cost Limit for the request. The RSC approved the waiver during its July 25, 2011 meeting. On July 26, 2011, SPP’s Board of Directors voted to establish the allocated E&C cost of $1.6 million as the Safe Harbor Limit.
Oklahoma Municipal Power Authority No. 75180762; 50 MW

Background

(Note: Not included in 2011 Safe Harbor Report because request was still in study mode.)
On April 21, 2011, SPP received a second request from OMPA for waiver under Attachment J of the SPP Tariff of costs in excess of the Safe Harbor Cost Limit for Base Plan funding for a new Designated Resource of 50 MW. OMPA sought a waiver for the cost above the Safe Harbor Limit so that all of the allocated expenses associated with OMPA’s request are eligible for Base Plan funding. SPP’s 120-day deadline under Attachment J was August 19, 2011.

Analysis

OMPA requested the waiver based on Section III.C.2.ii of Attachment J, which provides for consideration to be given for terms that exceed the minimum five years required for Base Plan funding. The term of the requested service is 4 years, 4 months on a calendar basis. OMPA asserts that because the term covers five summer peak seasons, it should satisfy the requirements of Attachment J for a five-year minimum term.

Under Section III.C.2.iii of Attachment J, costs in excess of the Safe Harbor Cost Limit may be waived when the allocated Service Upgrade costs are “significantly less” than the Safe Harbor Cost Limit. The allocated costs in the current iteration of the aggregate study amount to 8% of what the Safe Harbor Cost Limit would be if the request were at least five years. The waiver request was reviewed by the CAWG at its regular June 28, 2011 meeting. SPP staff recommended that the waiver be granted based on the provision in Section III.C.2.iii. The CAWG voted unanimously to recommend to the RSC that the waiver of costs be granted.

On July 13, 2011, the MOPC voted to endorse the waiver request as submitted. The RSC approved the waiver during its July 25, 2011 meeting. On July 26, 2011, SPP’s Board of Directors voted to approve OMPA’s waiver request to set the entire amount of the service upgrade allocated to be Base Plan funded.
2012 ITP10 Metrics Overview

October 24, 2011

Katherine Prewitt
Director Planning

Using and Improving Metrics

• Developed by Metrics Task Force (MTF)
  – Approved on 3/29/10
  – Developed metrics for ITP20
• Reviewed by ESWG for ITP10
Three Types of Metrics

- Those that capture how transmission...
  - Provides direct monetized savings
  - Enables power transfers
  - Encourages a competitive environment for generators in SPP markets

2012 ITP10 Metrics

<table>
<thead>
<tr>
<th>Benefit Discussion</th>
<th>Unit(s)</th>
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<tbody>
<tr>
<td>Adjusted Production Cost Savings (APC)</td>
<td>$</td>
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<tr>
<td>Value of replacing previously approved projects</td>
<td>$</td>
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<tr>
<td>Reduced Losses</td>
<td>$</td>
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<tr>
<td>Positive Impact on Losses Capacity</td>
<td>$</td>
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<tr>
<td>Reduction of Emissions Rates and Values</td>
<td>$</td>
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<tr>
<td>Value of Improved Available Transfer Capabilities</td>
<td>MW, %</td>
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<tr>
<td>Limited Export/Import Improvements</td>
<td>MW, %</td>
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<tr>
<td>Ability to Serve New Load</td>
<td>MW, %</td>
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<tr>
<td>Levelization of LMP's</td>
<td>Std Dev $ and %</td>
</tr>
<tr>
<td>Improved Competition in SPP Markets</td>
<td>Std Dev $ and %</td>
</tr>
</tbody>
</table>
Capturing Monetary Value

• Adjusted Production Cost Savings (APC)
  – Production cost, including fuel and operating expenses, adjusted for energy purchases and sales

• Value of replacing projects
  – Accounts for dollars not spent due to delays or mitigations of projects

Capturing Monetary Value

• Reduced emissions
  – Savings due to reduced output of emissions

• Reduced losses
  – Value of reduced costs from changes to losses and capacity margins
Enabling Power Transfer

- Value of Improved Available Transfer Capabilities
  - Qualitative assessment of the improvement to system transfer capabilities
- Limited Export/Import Improvements
  - Measures improvement in power transfer capability across SPP seams

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Enabling Power Transfer

- Ability to Serve New Load
  - Measures the ability of the transmission system to serve unexpected, new loads
Providing a Competitive Environment

• Levelization of LMPs
• Improved Competition in SPP Markets
  – Each is standard deviation measurement
  – Ease for generators to compete in the market on an equal basis

Continuous Improvement

• Possible additional metrics for future development
  – Backstop to catastrophic events
  – Reduction in market price volatility
• Possible future enhancements
  – Stochastic planning to capture natural variations in fuel prices, load, etc.
  – Probabilistic transmission outage consideration