1. CALL TO ORDER

2. PRELIMINARY MATTERS
   a. Declaration of a quorum
   b. Adoption of April 21, May 28, and June 16, 2008 Minutes

3. UPDATES
   a. RSC Financial Report
   b. Other RSC officer reports
      1. Connecticut Department of Public Utility Control v. Federal Energy Regulatory Commission and New England Power Pool Participants Committee .............................Chairman Jeff Davis
   c. FERC
   d. SPP
   e. RE

4. BUSINESS MEETING
   a. Update on the Strategic Plan development.............................................................Michael Desselle
   b. A review of the Cost Benefit Task Force input assumptions.................................Casey Cathey
   c. CAWG Report ..............................................................................................................Dr. Mike Proctor
      1. Waivers for KEPCo, Northeast Texas Electric Cooperative and KPP (action item)
      2. Approval of the tariff language related to the cost allocation for economic upgrades and the balanced portfolio (action item)
      3. Economic Evaluation for the EHV Overlay

5. SCHEDULING OF NEXT REGULAR MEETING, SPECIAL MEETINGS OR EVENTS

6. ADJOURNMENT
Southwest Power Pool  
REGIONAL STATE COMMITTEE  
Skirvin Hilton, Oklahoma City, OK  
April 21, 2008  

• M I N U T E S •

Administrative Items:  
Members in attendance or represented by proxy were:  
Julie Parsley, Public Utility Commission of Texas (PUCT)  
Stacy Starr-Garcia; for David King, New Mexico Public Regulation Commission (NMPRC)  
Jeff Cloud, Oklahoma Corporation Commission (OCC)  
Jeff Davis, Missouri Public Service Commission (MPSC)  
Mike Moffet, Kansas Corporation Commission (KCC)  
Colette Honorable, Arkansas Public Service Commission (APSC)

President Parsley called the meeting to order at 1:05 p.m. Cheryl Robertson (SPP) called roll and a quorum was declared. There were 68 in attendance (Attendance & Proxies – Attachment 1). Others in attendance via phone were: Sandra Hochstetter (AECC), Pat Mosier (APSC), Ed Stoneburg (Trans-Elect Dev. Co.), Paul Malone (NPPD), and Tom DeBaun (KCC).

President Parsley asked for adoption of the January 28, 2008 meeting minutes (RSC Minutes 1/28/08 - Attachment 2). **Mike Moffett moved to approve the January minutes as presented. Jeff Cloud seconded the motion. The minutes were approved unanimously.**

Updates  
RSC Financial Update  
Les Dillahunty (SPP) presented the RSC Financial Report (RSC Financial Report – Attachment 3). Mr. Dillahunty reported that the RSC remained under budget for 2008. The cost benefit study line item does not indicate expenditures as of the date of this report, but the studies are underway and expenditures will begin soon.

Sam Loudenslager reported that the agreement with Patricia Salman & Associates of Little Rock for the 2007 RSC Financial Audit was ready for execution. This is the same firm that provided this service in prior years. It was determined that the selection of an auditor did not require formal action.

FERC Update  
Patrick Clarey (FERC) provided an update on FERC activities. On April 21, 2008, the Commission conditionally accepted SPP’s revised proposal to allow external generators to participate in the EIS Market through a pseudo-tie mechanism.

At the April open meeting, the Commission:  
• Clarified its new market-based rate policy and largely affirmed its findings in the market-based rate final rule enacted last year.
Regional State Committee
April 21, 2008

- Opened an inquiry into Electric Utilities’ Annual Charges in order to determine whether its method of assessing annual charges from public utilities remains fair, or whether it should adopt a different one. Comments are due 30 days after publication in the Federal Register.

At the March open meeting, the Commission directed the ISO/RTOs to report within 30 days the status of their efforts to improve the interconnection process. The ISO/RTOs recently made these filings with the Commission.

Other FERC events:
- Senior staff from the Office of Energy Market Regulation (OEMR) has been participating in ongoing outreach to the state commissions covered under the SPP ICT arrangement with Entergy.
- Tony Ingram recently left FERC to take a position in Washington D.C. with EEI.
- Michael Donnini and Kerry Noone were named Deputy Directors in OEMR Central. Mr. Donnini will focus on electric issues while Mr. Noone will focus on gas and oil matters. Ms. Penny Murrell is the Director of OEMR Central.

SPP Update
Nick Brown provided an SPP update:
- As noted by Mr. Clarey, FERC issued a notice of inquiry for FERC fees. This is exciting as Mr. Brown and several others, including Sandra Hochstetter of AECC, met with the commissioners on October 24 to share concern regarding the equity of fee allocation.
- Gratitude was expressed to the Cost Allocation Working Group (CAWG) and the Regional Tariff Working Group (RTWG) on initiatives regarding tariff language for the Balanced Portfolio of Economic Upgrades. The RTWG is expected to complete their recommendation on tariff language by May. This may require a special RSC and Board of Directors meeting in the June time frame.
- Mr. Brown called attention to two bills before the Legislature, HR5547 and S2660, labeled as providing “the lowest reasonable cost for reliable service”. These bills merit watching. Jim Eckelberger, SPP Board of Directors Chairman, stated that we should work to make cost control a regional decision and not a national decision. President Parsley asked that the RSC be kept updated on the matter.
- At the October meeting, it was stated that the generation interconnection queue could become an issue. In 2006 SPP had 23 requests representing 3,633 MW; in 2007 44 requests representing 8,327 MW and as of April 4, 2008 there were 105 requests representing 26,611 MW with 93 requests for wind at 24,323 MW.
- EPRI is developing research initiatives for demonstration projects to respond to global warming. The industry needs to step up and give this issue serious consideration.

SPP Regional Entity Trustees
Michael Desselle (SPP) provided an update of the group’s activities:
- On March 21, 2008, the Regional Entity Delegation Agreement was approved with instructions for modifications. The Trustees are working with NERC to make these revisions.
- The Trustees are developing the 2009 Budget with NERC. The first draft will be reviewed on April 23, 2008 with a filing projected in the August 2008 timeframe.
- The under frequency load shedding effort is underway.
- Work is continuing on the Compliance Standards effort.
- There are no violations to report.

Business Meeting
Cost Allocation Working Group Report

- Revisions to the Base Plan Funding Policy for Wind
Dr. Mike Proctor provided a presentation regarding the proposals for cost allocation of designated
wind resources (Cost Allocation for Wind Resources – Attachment 4). Four proposals were discussed with two remaining for consideration: a modified compromise and a proposal from the transmission owners. The two differences in these proposals are: 1) how the costs of upgrades in the non-sink zone should be divided between a postage stamp rate and charges directly assigned to the requestor, and 2) whether the limit placed on the designated wind resources should be 20% of Forecasted Summer Peak or 20% of Designated Resource Net Capacity. It was determined that rather than the RSC voting today, they would delay a vote until after the CAWG meets on April 30 to gain consensus on a final recommendation. President Parsley suggested a teleconference be scheduled to vote on and approve the recommendation, which is permissible under the RSC Bylaws.

- **Cost Allocation for Economic Upgrades**
  Dr. Proctor provided an update on the Balanced Portfolio of Economic Upgrades, tariff language development and the portfolio selection process (Balanced Portfolio of Economic Upgrades – Attachment 5). SPP has asked Accenture to develop proposed tariff language which hopefully will be completed by the first week in May. The RSC may call a special meeting in June in conjunction with the MARC meeting to adopt this tariff language. Four draft portfolios have been developed. Portfolio 3 represents the highest benefit to cost ratio and appears to be the most balanced draft portfolio.

Initiatives on Seams Agreements, Balancing Authority Consolidation and Future Market Cost/Benefit Analysis
Lanny Nickell (SPP) reviewed seams agreements, the Balancing Authority Consolidation effort and future market cost/benefit analysis (Seams, BA Consolidation & Future Market Cost/Benefit Report – Attachment 6). Mr. Nickell provided the status of SPP seams agreements and announced that Sam Loudenslager agreed to lead a group of regulator and member representatives to work with SPP in review of these agreements.

Mr. Nickell provided comments on the Consolidated Balancing Authority Steering Committee that has been formed by the Markets and Operations Policy Committee (MOPC). The committee has two task forces: the Technical Task Force and the Policy Task Force.

The Cost/Benefit Task Force addressing future market opportunities finalized an RFP to outsource portions of the cost/benefit study in January 2008. Ventyx has been selected to perform the study with a contract to be finalized on April 9, 2008. The final report is expected in October 2008.

**OEPTTF and Updated EHV Reports**
Jay Caspary provided a report of the Oklahoma Electric Power Transmission Task Force (OEPTTF) and Extra High Voltage (EHV) Overlay update (OEPTTF & EHV Report – Attachment 7). The OEPTTF was created by the Oklahoma Legislature and identified a need for an SPP study to identify transmission expansion needs for Oklahoma and beyond. A final report was posted March 31, 2008.

Mr. Caspary also reported on the Quanta Technology update of the EHV Overlay Study Report including wind integration and the sequencing of construction. This updated study is posted on the SPP website. Long term EHV Overlay needs to compliment interregional and coordinated planning efforts are included in the report. Mr. Caspary also addressed SPP’s role in the Joint Coordinated System Plan (JCSP) where work continues to coordinate eastern interconnection efforts regarding wind integration and economic transmission fundamentals.

**Customer Response Task Force (CRTF)/Demand Response Survey and the Upcoming July 27-28, 2008 Demand Response Education Forum**
Bill Wylie reported that the CRTF had been very active. A survey of the SPP Membership will be conducted during April to determine the total vision of Demand Response capabilities in the SPP footprint. This survey was developed by Lawrence Berkley and will be in two parts: oral and written. Mr. Wylie encouraged participation which is very important to the success of the survey.

A Demand Response Education Forum is scheduled on July 27 and 28 prior to the RSC meeting in Kansas City. This forum is to develop a common understanding of Demand Response. The RSC will be asked to review eight topics and help choose the top four or five to address during the forum. President Parsley
Regional State Committee  
April 21, 2008

commended Bill on his worked and promised feedback from the RSC.

Project Tracking 
A written report was provided for review (Project Tracking – Attachment 8).

**Scheduling of Next Regular Meeting, Special Meetings or Events:** 
President Parsley noted that the next regularly scheduled RSC meeting is in Kansas City on July 28, 2008. In the event of a called teleconference to adopt tariff language regarding revisions to the Base Plan Funding Policy for wind, the group will be given a one week notice.

With no further business, Colette Honorable moved to adjourn and Mike Moffet seconded the motion. The meeting was adjourned.

Respectfully Submitted,

Les Dillahunty
Southwest Power Pool
REGIONAL STATE COMMITTEE

May 28, 2008
Teleconference

• M I N U T E S •

Administrative Items:
Members in attendance were:
  Julie Parsley, Public Utility Commission of Texas (PUCT)
  Jeff Cloud, Oklahoma Corporation Commission (OCC)
  Jeff Davis, Missouri Public Service Commission (MPSC)
  Mike Moffet, Kansas Corporation Commission (KCC)
  Colette Honorable, Arkansas Public Service Commission (APSC)

Dr. Mike Proctor called the meeting to order at 2:35 p.m. during the Cost Allocation Working Group (CAWG) meeting and explained that those in attendance would be counted present for the RSC teleconference with the CAWG attendance sheet used as a record (CAWG Attendance – Attachment 1). Cheryl Robertson (SPP) called roll and a quorum was declared.

Others in attendance via phone were:
  Ed Stoneburg, Trans-Elect Dev. Co.
  Joe Dudak, ITC Great Plains
  Sam Loudenslager, Arkansas Public Service Commission
  Mike Palmer, Empire District
  Gary Roulet, Western Farmers
  Walt Shumate, Edison Electric Institute
  Harry Silton, Noble Power
  Christine Wright, Public Utility Commission of Texas
  Robert Pennybaker, American Electric Power
  Bob Tumilty, American Electric Power
  Jessica Collins, Xcel Energy
  Denise Hill, Horizon Wind

Dr. Proctor explained that this was an informational meeting regarding cost allocation for designated wind resources and that no action was expected to be taken. He did ask for a consensus on the policy concept and an agreement to move forward. It is hoped that the cost allocation policy proposal for wind resources can be approved at a meeting held in conjunction with the MARC meeting on June 16 in order that tariff language can be written and presented for approval at the October 2008 RSC meeting.

Dr. Proctor then reviewed the two proposals under consideration (Background – Attachment 2). One is a modified compromise and the second is a proposal prepared by the Transmission Owners. The two main differences are: 1) non-sink zone costs and 2) how limits are determined. Waivers will continue to be allowed in both proposals. The CAWG recommends the following proposal:
Regional State Committee
May 28, 2008

- **Safe Harbor**
  - Uses Requested Transmission Capacity (e.g., name plate capacity)
  - Applies to all costs assigned to transmission service request

- **Sink Zone Costs**
  - 1/3 Postage Stamp
  - 2/3 MW-Mile

- **Non-Sink Zone Costs**
  - 2/3 Postage Stamp
  - 1/3 Direct Assignment

- **Limits**
  - Wind DR MW of Transmission Service ≤ 20% (Forecasted Summer Peak)
  - For the capacity limit of 125% of load, a designated wind resource's capacity should be evaluated at its accredited capacity (e.g., 10% of name plate capacity).

- **Waivers**
  - Waivers will be considered

- **Caps**
  - None

The meeting was then opened for questions. One question raised concerning the assignment of costs after the “Limits” had been reached will be addressed by the CAWG and included in the final recommendation. Commissioner Moffet urged the group to move forward as quickly as possible and encouraged prompt implementation. Chairman Honorable stated that Arkansas leaned toward a more direct assignment of costs, but agreed to move forward with the consensus in reliance understanding this arrangement to be temporary and to be revisited at a later date. It was agreed that RSC will vote on the CAWG recommendation for cost allocation for wind resources concept in June and finalize tariff language this summer through the SPP process: Regional Tariff Working Group, Markets and Operations Policy Committee and then to the Board of Directors for approval no later than the October meeting. President Parsley joined the meeting in progress having been detained by another conflict. She agreed with the group consensus and commended the work of the committee and staff.

With no further business, the meeting was adjourned.

Respectfully Submitted,

Les Dillahunty
Southwest Power Pool
REGIONAL STATE COMMITTEE
Skirvin Hilton, Oklahoma City, OK
June 16, 2008

• M I N U T E S •

Administrative Items:
Members in attendance were:
Julie Parsley, Public Utility Commission of Texas (PUCT)
Jeff Cloud, Oklahoma Corporation Commission (OCC)
Jeff Davis, Missouri Public Service Commission (MPSC)
Mike Moffet, Kansas Corporation Commission (KCC)
Colette Honorable, Arkansas Public Service Commission (APSC)

President Parsley called the meeting to order at 5:20 p.m. Cheryl Robertson (SPP) called roll and a quorum was declared. There were 16 in attendance (Attendance – Attachment 1).

Others in attendance via phone were:
Tom Debaun, Kansas Corporation Commission
Patrick Smith, Kansas Corporation Commission
James Sanderson, Kansas Corporation Commission
Larry Holloway, Kansas Corporation Commission
Kip Fox, American Electric Power
Jim Eckelberger, SPP Director
Harry Skilton, SPP Director
Mike Palmer, Empire District
Richard Spring, Kansas City Power and Light
Walt Shumate, Edison Electric Institute
Carl Monroe, Southwest Power Pool

Dr. Proctor provided an update on proposed tariff provisions regarding a Balanced Portfolio for Economic Upgrades (Balanced Portfolio Tariff Provisions – Attachment 2). He credited Pam Kozlowski of Gestalt for her assistance in writing tariff language and her development of the overview material being used in today's discussion. Commissioner Moffet asked about the necessity to capture all scenarios in specific tariff language, hoping instead to allow a focus on process and practicality rather than outcomes. Further discussion reflected upon the existing tariff language dealing with unintended consequences and waivers as possible solutions in these “gray” areas. This process is designed to identify and deal with any red flag issues as well as assure wording is precise and understood. It is hoped that the final tariff language will be complete and presented at the July 28 RSC meeting.

Dr. Proctor then reviewed the proposal approved by the Cost Allocation Working Group (CAWG) for determining the amount of wind resources to be included in Base Plan funding (Designated Wind Resources – Attachment 3).

• Safe Harbor
  – Uses Requested Transmission Capacity (e.g., name plate capacity)
  – Applies to all costs assigned to transmission service request
Regional State Committee  
June 16, 2008

• **Sink Zone Costs**  
  1/3 Postage Stamp  
  2/3 MW-Mile

• **Non-Sink Zone Costs**  
  2/3 Postage Stamp  
  1/3 Direct Assignment

• **Limits**  
  – Wind DR MW of Transmission Service $\leq$ 20% (Forecasted Summer Peak)  
  – For the capacity limit of 125% of load, a designated wind resource’s capacity should be evaluated at its accredited capacity (e.g., 10% of name plate capacity).

• **Waivers**  
  – Waivers will be considered

• **Caps**  
  – None

Dr. Proctor added that the question was raised during the May RSC teleconference as to what would happen to costs assigned to a request if wind designated resources exceeded the 20% peak demand limit. The CAWG unanimously supported having those costs directly assigned to the requestor. President Parsley asked for a motion to approve the revised policy for cost allocation of designated wind resources. **Jeff Davis moved to approve the CAWG recommendation. Mike Moffet seconded the motion, which passed unanimously.**

Carl Monroe provided an update on SPP membership development. Mr. Monroe stated that three Nebraska entities signed a Memorandum of Understanding (MOU) about a month and a half ago to have SPP provide services: Lincoln Electric System, Nebraska Public Power District and the Omaha Public Power District. The transition team effort has begun.

Les Dillahunty reminded the group of the SPP Regional State Committee Demand Response Educational Forum scheduled for July 27 (1:00 p.m. – 5:00 p.m. CDT) and July 28 (8:00 a.m. – 12:00 p.m. CDT) and the RSC meeting on July 28 (1:00 p.m. – 5:00 p.m. CDT) in Kansas City, MO.

With no further business, the meeting was adjourned.

Respectfully Submitted,

Les Dillahunty
### Regional State Committee
For the Six Months Ending June 30, 2008
Budget vs. Actual
DRAFT

<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>35,936</td>
<td>558,721</td>
<td>(522,786) (A)</td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td>35,936</td>
<td>558,721</td>
<td>(522,786)</td>
</tr>
</tbody>
</table>

|                      |             |            |          |
| **Expense**          |             |            |          |
| Travel               | 31,851      | 33,000     | (1,149)  |
| Meetings             | 3,972       | 26,400     | (22,428) |
| Audit                | -           | -          | -        |
| Administrative Costs | 112         | 750        | (638)    |
| Cost Benefit Studies | -           | 498,571    | (498,571) (B) |
| **Total Expense**    | 35,936      | 558,721    | (522,786) |

|                      |             |            |          |
| **Net Income (Loss)**|  -          |  -         |  -       |

(A) YTD revenue is less than budget given that ytd expenses are less than budget.
(B) YTD study costs are less than budget as no studies have been conducted in 2008.
Cost Benefit Task Force Update
Markets and Operations Policy Committee
July 15-16, 2008
Review of Study cases

- A Base Case is made for 2009-2016, consisting of the current SPP EIS Market Footprint

- Change Case II will be run for all study years, which includes an Ancillary Service Market (ASM) & Day-Ahead Market (DAM) with Unit Commitment.
  - A Sensitivity will assess the benefits of a Financial Transmission Rights (FTR) market versus a Transmission Service Rights Option (TSRO)
  - Two additional sensitivities will be to implement ASM in 2009, with DAM in 2011, and vice versa.

Review of Study cases (continued)

- Change Case I - Day-Ahead Market with Unit Commitment Addition only
- Change Case III - Ancillary Service Market only
- Change Case IV – Simplified Day-Ahead Market with Unit Commitment (scheduled amounts could be curtailed from Day-Ahead levels)
Since the last MOPC Meeting

- Cost Benefit Study contract finalized
- Cost Benefit Study kickoff meeting was held in SPP’s Maumelle facility
- CBTF and MWG have finalized the majority of assumptions for Base Case

Also, since the last MOPC Meeting

- CBTF provided comments on the 2007 Benchmark Case
  - Used to sync the model
  - Will be finalized by July
- Ventyx finalizing 8-year Base Case modeling
- CBTF updated weekly by Ventyx on action items
Data Input Assumptions Vetted by CBTF & Ventyx

- Fuel Prices
  - Coal
  - Natural Gas
  - Oil
  - Uranium
- Emissions Forecast

Data Input Assumptions Vetted by CBTF & Ventyx

- Transmission Expansion
- Internal/External Generation Expansion
- Load Forecasting
- Wind Plant Modeling
- Demand Response
Next Steps

- The CBTF and Ventyx will finalize the Benchmark case and derive appropriate Hurdle Rates for all cases.
- The CBTF and MWG will provide the final assumptions for the Simplified DAM (Change Case IV) to Ventyx.
- Ventyx plans to provide the 8-year Base Case and Change Case II to the CBTF on July 16.
- Change Case II is the DAM with Unit Commitment and Co-optimized Ancillary Service Market as referred to on Slide 3.

Monthly and Final Reports

- Ventyx monthly Update Reports due
  - August 7
  - September 4
  - October 2
- 10/2 - CBTF review of Cost Benefit Study Report
- 10/7 - Final Cost Benefit Study Report
Waiver Requests

SPP RSC Meeting
July 28, 2008
## Waiver Request

Reviewed at June CAWG Meeting

<table>
<thead>
<tr>
<th>Requestor</th>
<th>Designated Resource</th>
<th>Safe Harbor Limit</th>
<th>Aggregate Study</th>
<th>Waiver Request</th>
<th>CAWG &amp; MOPC</th>
<th>Revised Aggregate Study</th>
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<tbody>
<tr>
<td>Kansas Power Pool</td>
<td>45</td>
<td>$8.100</td>
<td>$12.819</td>
<td>$4.719</td>
<td>Approve: 20 yr Contract</td>
<td>$10.888</td>
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</tbody>
</table>
Update on Tariff for Balanced Portfolio

SPP RSC
July 28, 2008

Meetings At FERC

• Nick Brown, Les Dillahunty, Julie Parley, Barry Spector (Wright & Talisman) and Mike Proctor met with Senior FERC Staff to discuss the upcoming tariff filing on Balanced Portfolio.
  – The meeting went well with several questions from FERC Staff and what appeared to be an overall positive response to the Balanced Portfolio approach.
  – FERC Staff asked SPP in its letter accompanying the filing to specify those things that are not in the tariff but are to be included in Business Practices (e.g., modeling specifications for measuring benefits).
• Nick, Les, Julie and Mike met with FERC Commissioners and their Staff
  – In the meeting with Chairman Kelliher, Shelton Cannon (Director of the Office of Energy Market Regulation) shared that the SPP is carrying out the vision of Order 890 and potentially sees this filing as a model for the industry to follow.
    • As a follow up, Mike Proctor was asked to present the SPP’s Balanced Portfolio Approach at a MISO workshop on cost allocation held July 10. There was a positive response from stakeholders regarding the Balanced Portfolio Approach.
  – Meetings with Commissioners Spitzer and Wellinghoff and staff from Commissioners Kelly and Moeller also went well.
    • A question raised in the discussion with Commissioners and their Staff was whether or not SPP expects stakeholder opposition to this filing. Given the extensive stakeholder process followed and stakeholder buy in, opposition is not expected. However, this does not mean that interveners will agree with every aspect of the proposed tariff language.
**Balanced Portfolio Approach**

The key concepts behind a Balanced Portfolio approach were developed in CAWG meetings in a three stage process:

1. Determined the appropriate benefit metrics;
2. Specified a portfolio rather than project-by-project approach; and
3. Determined appropriate ways to balance the benefits of a portfolio with a region-wide allocation of the costs of the portfolio.

---

**Economic Assessment and Planning Study Process Flow Chart**

Note: The SPP Board is not required to approve a Balanced Portfolio in every year.
Key Component for Balance: Transfer of Costs from Zonal to Region-Wide Rate

- In order to achieve balance for deficient zones, where allocated costs exceed estimated benefits, the tariff allows for transfers of revenue requirements currently collected from the zonal rate of deficient zones to be collected from the region-wide rate.
- Transfers move cost that are currently being collected 100% from deficient zones to be spread across all zones, resulting in an added benefit to deficient zones and a reduction in benefits to all other zones.

Implementation of Transfers

100% in Rates after 4 year period

100% in Rates before 4 year period
Language on Unintended Consequences

Attachment J
Section IV.B. Reconfiguration of an Approved Balanced Portfolio

1. Conditions Under Which an Approved Balanced Portfolio May Be Reconfigured

Under certain conditions, the Transmission Provider shall review an approved Balanced Portfolio for unintended consequences and may recommend reconfiguring a previously approved Balanced Portfolio. Conditions that would initiate such review include but are not limited to

i. Cancellation of an upgrade that is part of an approved Balanced Portfolio;

ii. Unanticipated decreases in benefits or increases in the costs of upgrades that are part of an approved Balanced Portfolio; and

iii. Significant unanticipated changes in the transmission system.

Tariff Completion

• RTWG completed discussions on tariff language on July 8 and submitted the tariff language for approval by MOPC at its mid-July meeting.

• MOPC approved the tariff language for the Balanced Portfolio approach at its July 16 meeting.

• The expectation is that the tariff language will be submitted by SPP Staff in early August.
Economic Evaluation for EHV Overlay

SPP RSC Meeting
July 28, 2008

Review: SPP RSC Cost Allocations

- Annual Reliability Reviews
- New or Δ Designated Resources
- Economic Upgrades
- EHV Overlay Analysis

- Base Plan Funding
- Wind Resource
- Balanced Portfolio
- ???

- Up for Review by CAWG
- Tariff to be Developed by RTWG
- Ready To File at FERC
- Up for Discussion by RSC
Balanced Portfolio is Not the Correct Economic Evaluation for EHV Overlay

• Purpose of the Balanced Portfolio is to perform a cost-benefit analysis for transmission upgrades added to those required for reliability and deliverability from DRs.
  – Economics compares estimated benefits (currently savings in adjusted production costs) to the costs of portfolio of upgrades.
  – Studies are driven by forecasts of loads and the amounts and types of new generation sources with associated upgrades for delivery to load.
• EHV Overlay is driven by the delivery of power from generation resources being located distant from load.
  – Economics determines the size of an EHV backbone system based on the economies of scale in transmission systems.
  – Studies are driven by the assumptions of new demand for wind resources.
    • 765 kV system is expected to be economic even at relatively low levels of future wind generation (e.g., 4,600 MW).

Economics for EHV Overlay Requires a New Approach

• Much like Integrated Resource Planning (IRP), there are key drivers to the economic evaluation of EHV Overlay.
  – A key driver is the future energy requirements from wind power, including future RPS.
  – Other key drivers include such items as future U.S. carbon policy and future prices for fossil fuels.
• Much like IRP, economic evaluation of EHV Overlay requires an analysis of strategies for alternative futures.
  – Alternative futures include combinations of drivers that are matched to represent a consistent representation of a future outcome.
  – Alternative strategies include the mix and location of generation on the SPP system and the size and location of the EHV Overlay to deliver power from these resources to designated loads.
• Much like IRP, economic evaluation of EHV Overlay requires an evaluation of uncertainties and a determination of the most robust strategies.
  – Robust strategies are those that provide high upside gains while at the same time yield low downside risks.
• Unique to transmission, the economic evaluation of EHV Overlay should include the quantification of strategic benefits from various sizes of EHV Overlays.
The Next Two Slides are from the Following Report

Strategic Benefits Quantification for Transmission Projects

WECC TEPPC

June 12, 2008

by

Joe Eto, Lawrence Berkeley National Lab

Transmission Benefits Can be Grouped into the Following Categories

- **Primary Benefits**
  - Improve network reliability – meet reliability standards and guidelines
  - Lower cost of energy and capacity adjusted for transmission losses as a result of reduced congestion, access to lower cost resources, and increased inter-regional power trading

- **Strategic Benefits**
  - Renewable resource development and integration
  - Fuel Diversity – lower natural gas consumption, gas prices
  - Emissions reduction/environmental
  - Market Power Mitigation
  - Insurance against contingencies
  - Development of new capacity and inter-regional trading

- **Extreme Event Benefits**
  - Reliability – improve network load carrying capacity and ability to reduce or mitigate impact of extreme events resulting from multiple contingencies
  - Market volatility – societal benefit of reduced vulnerability to extreme price volatility due to long term outages and catastrophic events

In addition, there are secondary benefits related to infrastructure development, economic development, tax base, use of right-of-way, and new investment. However, the research did not address quantification of secondary benefits.
### Research Recommendations on Methods to Quantify Strategic Benefits of Transmission Projects

- **Public Good** – long asset life benefit
- **Fuel Diversity Benefit**
- **Reliability Improvement** from Extreme System Multiple Contingency Events
- **Risk Mitigation** for Low Probability/High Impact Extreme Market Events
- **Dynamic Analysis** -- construction of new generation
- Use social rate of discount to calculate the present value of benefits for the new transmission projects since transmission system is a “public good,” assets are long life, and benefits accrue over time
- Assess impact of significant renewable resources development upon price of natural gas
- Assess impact of transmission project in mitigating N-3, N-4, N-5, N-6 events
- Incorporate “transmission reserve margin” concept similar to spinning or planning reserves for generation
- Estimate risk mitigation benefit to society
- Research use of value at risk, option value, and insurance premium approaches
- Recognize changing benefit streams over asset life due to construction of new generation in exporting region

### Additional Studies

- AEP and Westar have committed to an economic analysis of the portion of the EHV overlay that it hopes to build in the near future.
- DOE/NREL (National Renewable Energy Lab) in conjunction with the JCSP is performing an Eastern Wind Integration Transmission Study (EWITS).
- The Midwest ISO has committed to an economic analysis of EHV overlay
Proposal for CAWG

- With the approval of the SPP RSC, the CAWG will begin work on developing a concepts paper for Economic Evaluation of the proposed SPP EHV Overlay.
  - This white paper would not address the cost allocation for an EHV Overlay. Since an EHV Overlay is intended to tie together the entire SPP system, it is assumed that the cost allocation would be a region-wide rate.
  - This white paper would not address seam agreements and cost allocation to those outside SPP. There is a separate group working on this issue.
- The purpose of this concepts paper will be to develop an approach for Economic Evaluation that would be approved by the SPP RSC and then presented to the various state Commissions for review and approval.
- The work on this project would begin at the August CAWG meeting, and the CAWG would give a progress report to the SPP RSC at its October meeting.
- The CAWG will work with SPP staff regarding development and presentations.