

**Comparison of Cost Allocation Proposals  
Presented at June 27, 2007 CAWG Meeting**

<b>Proposed Components</b>	<b>SPP</b>	<b>TOs</b>	<b>TCs</b>
<b>Rate Design</b>	Postage Stamp Rate	Postage Stamp Rate	Postage Stamp Rate
<b>Voltage Restrictions</b>	345 kV only	345 kV, transformers, & terminal equipment Lower voltage needed to integrate high voltage upgrade or to balance portfolio	All transmission level upgrades
<b>Benefits</b>	Expanded List	10 yr. time horizon Must be measurable	Improved competition
<b>Costs</b>	E&C Costs	10 yr. rev. req.	
<b>B/C Criteria</b>	B/C $\geq$ 1 for each project included	B/C $\geq$ 1.25 for portfolio B/C $\geq$ 1? for individual projects	
<b>Beneficiaries Pay</b>		B/C $\geq$ 1 in each pricing zone	Avoid calculating benefits by beneficiaries "Broadly distributed benefits"
<b>Reliability Upgrades</b>		Included if B/C $\geq$ 1?	Includes all qualified economic and reliability upgrades
<b>Seams Allocations</b>		Exclude 1 <sup>st</sup> tier benefits unless cost allocation to beneficiaries in place	Include a direct assignment of cost to benefiting loads outside SPP
<b>Other Restrictions</b>	Annual budget cap of \$500 million in E&C costs	Approved projects go forward without subsequent review. Early buy-in by State Commissions	Some limitations on request-related facilities may be appropriate.

# Summary of Cost Allocation Proposals for Economic Upgrades

CAWG Report to SPP RSC

July 23, 2007

Kansas City, MO

## Three Proposals Presented

- SPP Staff Proposal
- Transmission Owner's Proposal
  - AEP: American Electric Power
  - Aquila
  - EDE: Empire District Electric
  - KCPL: Kansas City Power & Light
  - MWE: Midwest Energy
  - OG&E: Oklahoma Gas & Electric
  - Westar
  - XCEL: Southwest Public Service
- Transmission Customer's Proposal
  - AEC: Arkansas Electric Cooperatives
  - OMPA: Oklahoma Municipal Power Agency
  - ETC: East Texas Cooperatives
  - LAF: City of Lafayette

## Same Rate Design

- All three proposals are based on a region-wide POSTAGE STAMP rate design.
  - Uniform per MW charge to 12 CP demands of all transmission customers (sometimes referred to as a load ratio share)
- HOWEVER, all three proposals differ on transmission upgrade facilities that would be subject to this rate design.

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## Voltage Restrictions

- SPP: Restricted strictly to 345 kV and above facilities (e.g., excludes step down transformers and terminal equipment).
- TOs: Includes 345 kV and above facilities/ projects (including transformers and terminal equipment) and underlying lower voltage upgrades required to “integrate” such 345 kV projects
  - “Integrate” will be discussed at the July 25 CAWG meeting.
  - May also include lower voltage project if needed to balance the portfolio.
- TCs: Only voltage restriction is that upgrades be at transmission level; i.e., is not restricted to EHV projects.

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## Benefit and Cost Measures

- SPP:
  - Benefits
    - Adjusted Production Cost Savings
    - Losses (both energy and peak)
    - Unit Commitment
    - Planning Reserves
    - Storm Hardening (insurance approach)
    - Environmental (emissions costs and carbon tax)
    - Societal benefit (reduced unserved energy, economic development and value to neighboring systems)
    - Homeland Security
    - Black Start, Voltage Control & Ancillary Services
  - Costs measured as Engineering and Construction costs
- TOs:
  - Benefits measure over 10 year planning horizon
  - Costs measured as revenue requirements over same 10 year period.
  - Willing to include additional benefit measures that can be properly quantified.
- TCs:
  - Benefit included improvement in wholesale competition; (i.e., increased access to competitive generation alternatives).

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## Economic Portfolio Criteria

- SPP: All projects that meet a benefit to cost ratio of 1 to 1. Benefit metrics should include more than production cost savings.
- TOs: Economic portfolio should exceed a benefit to cost ratio of 1.25 to 1. This allows projects with less than 1.25 to be included.
  - Further discussion is needed on the minimum B/C allowed for a project to be included in the portfolio.
- TCs: Economic portfolio criteria was not discussed.

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## Beneficiaries Pay Criteria

- SPP: Not discussed.
- TOs: Requires the Portfolio of economic upgrades/projects to meet a benefit to cost ratio in each pricing zone of 1 to 1. This assumes that the costs are allocated to the zones via a region-wide postage stamp rate.
- TCs: Should avoid a “resource intensive process of identifying ‘benefits’ and ‘beneficiaries.’” Supports the more general concept of “broadly distributed benefits.”

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## Reliability Upgrades

(Included in STEP)

- SPP: Not discussed.
- TOs: Reliability upgrades that meet the economic portfolio criteria (Average B/C >1.25 and individual B/C >1?) would be included.
  - Would not include upgrades required for new or changed DRs.
- TCs: Includes all qualified economic and reliability upgrades.
  - Would also include upgrades required for new or changed DRs.

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## Seams Allocations

- SPP: Not discussed
- TOs: Should exclude 1<sup>st</sup> tier benefits from benefit cost calculations, unless there is a seams agreement in place for allocating costs to 1<sup>st</sup> tier beneficiaries.
  - Emphasis on AECl, SWPA, Entergy, MISO
- TCs: Include a direct assignment of cost for facilities that benefit loads outside the region.

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## Other Restrictions

- SPP: Annual Engineering and Construction cost cap of \$500 million.
- TOs: Portfolio based on 10 year planning horizon. Once the portfolio is approved, these projects will go forward without subsequent review; i.e., “buy-in early by State Commissions.
  - This concept will be further discussed at the July 25 CAWG meeting.
- TCs: Some limitations on request-related facilities subject to roll-in may be appropriate.

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