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

<table>
<thead>
<tr>
<th>Proposed Components</th>
<th>SPP</th>
<th>TOs</th>
<th>TCs</th>
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<td><strong>Voltage Restrictions</strong></td>
<td>345 kV only</td>
<td>345 kV, transformers, &amp; terminal equipment. Lower voltage needed to integrate high voltage upgrade or to balance portfolio.</td>
<td>All transmission level upgrades</td>
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<tr>
<td><strong>Benefits</strong></td>
<td>Expanded List</td>
<td>10 yr. time horizon. Must be measurable</td>
<td>Improved competition</td>
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<td><strong>Costs</strong></td>
<td>E&amp;C Costs</td>
<td>10 yr. rev. req.</td>
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<td><strong>B/C Criteria</strong></td>
<td>B/C ≥ 1 for each project included</td>
<td>B/C ≥ 1.25 for portfolio. B/C ≥ 1? for individual projects</td>
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<td><strong>Beneficiaries Pay</strong></td>
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<td>Include a direct assignment of cost to benefiting loads outside SPP</td>
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<td><strong>Other Restrictions</strong></td>
<td>Annual budget cap of $500 million in E&amp;C costs</td>
<td>Approved projects go forward without subsequent review. Early buy-in by State Commissions</td>
<td>Some limitations on request-related facilities may be appropriate.</td>
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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.

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.
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).

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.
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.”

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.
Seams Allocations

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

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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