

December 30, 2015

Mr. Jay Caspary
Director, R&D and Special Studies
Southwest Power Pool
201 Worthen Drive
Little Rock AR 72223-4936

Re: SPP Value of Transmission Study

Dear Jay:

Thank you for giving us the opportunity to review the “Value of Transmission” report and the associated PowerPoint summary presentation prepared by SPP staff in December 2015. The SPP study attempts to quantify the overall value provided by SPP transmission projects placed in service during 2012-2014. Based on our review of the final drafts of your study and several prior rounds of discussions in response to earlier drafts, we are pleased to provide the following comments:

- The SPP Value of Transmission study is a path-breaking effort. It provides a more accurate estimate of the total benefits that a more robust and flexible transmission infrastructure provides to power markets, market participants and, ultimately, retail electric customers.
- Relying on a full “re-run” of SPP’s day-ahead and real-time markets without the evaluated transmission projects for 40 representative days during the first year of operation of SPP’s Integrated Marketplace and comparing the re-run results to actual market results (which include the evaluated transmission projects after they were placed in service) yields a more complete and more accurate estimate of the production cost savings provided by the evaluated projects than the savings estimated in traditional planning studies.
- The estimated present value of the production cost savings in the SPP study likely is understated because: (a) many of major transmission projects evaluated were not yet in service during most of the 40 days that were analyzed; (b) the selected representative days did not include a full spectrum challenging system conditions (such as extreme weather or generation/transmission outage events) that must be expected to occur over the long service life of the evaluated transmission projects; and (c) based on the experience from other SPP transmission benefit studies, the growth rate of the quantified production cost savings may exceed the assumed annual rate of 10% per year.
- The methodologies applied by SPP staff to quantify the range of other transmission-related benefits are consistent with the methodologies applied in the ITP and RCAR evaluation process. Where deviations from the ITP and RCAR processes exist (e.g., in the estimation of public policy benefits), the methodologies applied are reasonable and represent best available industry practice.

For future Value of Transmission studies, we also offer the following recommendations for further consideration:

- Reassess the selection of the typical days used to approximate each season of a study period. For example, in addition to highest and lowest production cost days, more reliable annual estimates might be obtained if (a subset of) the selected days also included a few average production cost days, or represented a combination of highest/lowest/average load days, highest/lowest/average market-price days, or highest/lowest/average congestion-cost days. Additional research would be necessary to establish which combination of typical days would most accurately capture the value of transmission for an entire study period.
- Select a study period which starts after all of the evaluated projects have been placed in service to ensure that the production cost analysis captures the benefit of the entire portfolio in each of the representative days simulated.
- Analyze the actual annual rates at which the production cost savings estimated for the study period are growing over time.
- Refine the methodologies used to estimate public policy benefits and wheeling revenue offsets to more accurately capture the benefits specifically attributable to the portfolio of transmission projects evaluated.
- Quantify the transmission-related benefits that are qualitatively discussed in the report as data and methodologies to estimate the value of those benefits become available. Some of the benefits discussed but not quantified are likely to provide significant additional value. Examples are “insurance” benefits that: (a) reduce the risks of high-cost outcomes during challenging system conditions (such as extreme weather or generation/transmission outage events), or (b) facilitate lower-cost options to address challenging future market conditions (such as those encountered under uncertain but plausible future environmental compliance scenarios).

We appreciate the opportunity to provide these comments on the Value of Transmission study, which we believe is a path-breaking effort that provides a more accurate estimate of the benefits that a more robust and flexible transmission infrastructure provides to power markets, its participants, and retail electric customers.


Sincerely,



Johannes Pfeifenberger
Principal



Judy Chang
Principal



Onur Aydin
Senior Associate