

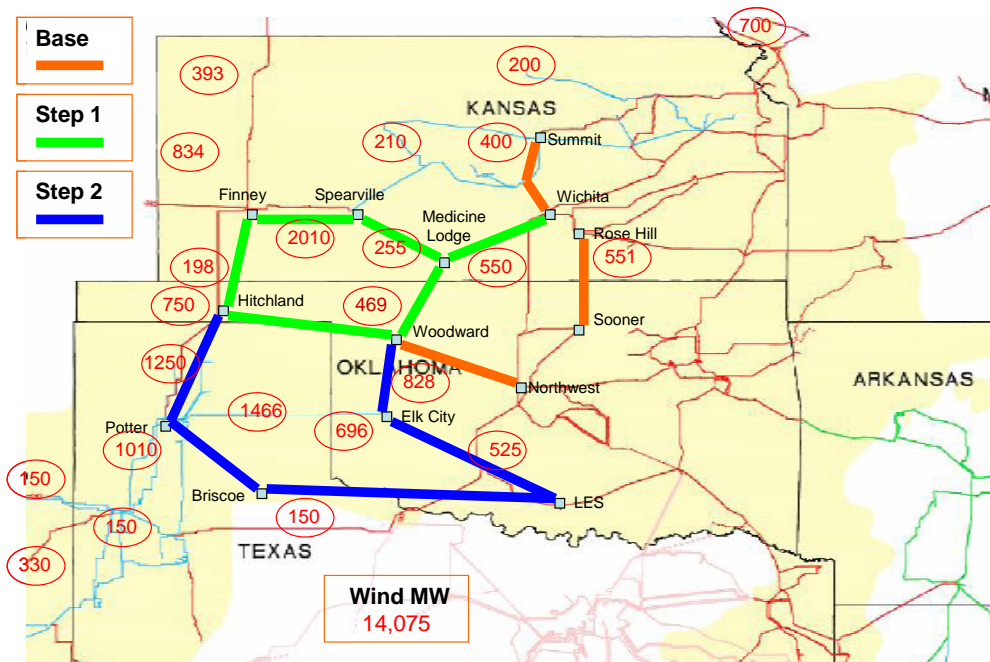
Advantages of Extra-High Voltage within the SPP Region

Earlier this year, Quanta Technology performed a comprehensive study to evaluate the technical benefits of expanding the Southwest Power Pool (SPP) transmission system. In its analysis, Quanta recommended approximately 2,300¹ miles of 765kV and 500kV transmission.

To further the EHV vision outlined by SPP, two Joint Ventures (“Prairie Wind Transmission, LLC” and “Tallgrass Transmission, LLC”)² were announced within the SPP region to begin the buildout of this vision for the six state region. The members of both Prairie Wind and Tallgrass in furtherance of their commitment to these projects engaged Charles River Associates (CRA) to evaluate the economic benefits to the SPP region. While the Quanta study was focused on determining the right technical long-term solution, the CRA study was intended to focus on the benefits that technical solution could have to the six state region.

Scope of Evaluation

The study assumed that the first two loops called for in the Quanta Technology Study would be constructed by 2016 and modeled the system assuming 1,200 miles of the 765kV outlined in the SPP overlay was in place. CRA then took a snapshot of the system to capture the benefits using “*GE-MAPS Production Cost Model.*” This industry-wide accepted model captures a subset of the benefits anticipated with the two 765kV loops.



¹ As noted in Mid Point 2 of the Quanta Technology Study dated March 3, 2008.

² Prairie Wind Transmission LLC is a joint venture between Electric Transmission America and Westar Energy. Tallgrass Transmission LLC is a joint venture between Electric Transmission America and Oklahoma Gas and Electric.

Results of CRA Analysis: Snapshot 2016

- 1 Two loops of 765 kV will allow interconnection of 14,000 MW of wind.
- 2 Annual net benefit of \$600-700 million for SPP customers³.
- 3 Nearly 30 million tons of CO₂ emissions per year avoided.
- 4 Enables more than 20 percent of SPP demand to be supplied by renewable sources.
- 5 1,600,000 MWH of annual power loss savings (765 kV vs. 345 kV), enough to supply 130,000 homes annually.
- 6 More than 10,000 jobs in the SPP region during construction and 5,000 during operation, \$60 million in new annual property taxes and \$500 million per year in economic output.
- 7 **Important note:** *Every state* within the SPP footprint experienced a positive net economic benefit from the construction of the “two loop” projects by 2016.

Tallgrass Transmission
A joint venture between OGE Energy Corp. and ETA


Prairie Wind Transmission
A joint venture between Westar Energy, and ETA

³ Excludes Nebraska.