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Clean Power Plan**

**I-2
Renewable Portfolio
Standard, Wind
Generated Electricity
in Kansas, and
Production Tax Credit**

**I-3
Southwest Power Pool
Market Place**

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Energy and Utilities

I-3 Southwest Power Pool Marketplace

Kansas belongs to the Southwest Power Pool (SPP) regional transmission organization. The SPP covers a geographic area of 575,000 square miles, and manages transmission in all or parts of 14 states: Arkansas, Iowa, Kansas, Louisiana, Minnesota, Missouri, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming. The SPP also has been designated as a regional entity by the North American Electric Reliability Company (NERC), and as such is charged with ensuring that the bulk electric system in a designated area is reliable, adequate, and secure.

Historically, SPP also has operated a Real-Time energy imbalance market. Under this structure, the SPP member utilities had three ways to serve their customers: they could generate their own power; buy power from another provider; or buy from the SPP market. Participants could compare real-time prices from many sources, and in some instances, it might be cheaper for a utility to buy power from others than to generate its own electricity.

Several large regional transmission organizations serving other parts of the United States have operated more extensive energy markets than the SPP for a number of years. The SPP began work on an Integrated Marketplace in 2007. A 2009 outside analysis estimated the Marketplace would generate an additional \$100 million in net benefits annually for the SPP. In March 2014, the SPP's Integrated Marketplace went live.

Components of the Integrated Marketplace

The Integrated Marketplace retains a Real-Time market and adds a Day-Ahead market and an Operating Reserves market.

Prior to the Integrated Marketplace, each of the SPP participants with generation resources evaluated its own demand for electricity (load) and determined which of its generation sources to use to meet its load. Participants could purchase additional energy in the Real-Time market, if needed, or sell excess energy in the market.

In the Integrated Marketplace, the SPP determines which generating units in its region should run the next day for maximum cost-effectiveness. For the Day-Ahead market, each utility must submit its loads and bids for generation by 11:00 a.m. the previous day, and will learn by 4:00 p.m. which of its generators have been selected to run the next day. SPP evaluates the generation bid-in and the estimated

loads and selects the most cost-effective and reliable mix of generation for the region. Because it centralizes available generation over the region, the market may be able to provide access to a more diverse (and presumably less costly) fuel mix than an individual utility could otherwise access.

The Operating Reserves market provides participants greater access to reserve electricity, improves regional balancing of supply and demand, and facilitates integration of renewable resources.

As part of the Marketplace implementation, the SPP has become the single Balancing Authority for the entire region. Previously, load and supply were balanced by 16 different entities within the SPP footprint, each with its own defined area of responsibility. Aggregating the load and supply for the entire region for balancing purposes has reduced excess capacity and led to more efficient dispatch of energy.

State Oversight

Because all of the costs of the Integrated Marketplace flow through to ratepayers, regulators in Kansas and other member states want to ensure that the Marketplace is working as planned and generating the projected savings. The Kansas Corporation Commission (KCC) staff invested significant effort in preparing for the Marketplace, and the workload of the KCC audit staff has increased because of the complexity of transactions in the Marketplace. The auditors have developed processes to monitor utilities'

performance in the Marketplace on a monthly basis and are conducting a comprehensive review that should be completed by the end of 2015. The comprehensive review will be repeated annually and assesses such things as the utilities' internal controls, internal risk management activities, hedging/profitability analysis, and use of shadow settlement software to verify SPP settlement statements.

Early Outcomes

Although it is too soon to be certain, the KCC described results of the first year of operation of the Integrated Marketplace as "promising," noting the following for the State-regulated investor owned utilities (IOUs):

- Empire Electric reduced its Energy Cost Adjustment projections by three percent to account for its internally modeled results of the Marketplace;
- Westar Energy was able to deliver significantly more kilowatt hours of electricity in 2014 than 2013, for an essentially unchanged total fuel cost; and
- Kansas City Power and Light had substantially higher off-system sales in 2014 than 2013.

Sunflower Electric Power Corporation reported a few hurdles with transmission congestion, but officials concluded the new energy market has provided overall value and will continue to provide opportunities to capitalize on beneficial prices going forward. The SPP continues to work on market improvements.

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