



ENERGY PROGRESS

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Renewable Portfolio Standard Impacts



"Wind generation provides value simply for the insurance it furnishes in insulating customers from some of the effects of unexpectedly high and volatile fuel and wholesale energy prices"
- Westar President & CEO William B. Moore, in direct testimony to the KCC on why Westar wished to add approximately 300 MW of wind power to its portfolio, Oct. 2007, 18 months prior to the RPS taking effect.

In May of 2009, Governor Mark Parkinson signed into law Senate Bill 108, the Economic Revitalization and Reinvestment Act which included a provision enacting a Renewable Portfolio Standard (RPS) for the state of Kansas. The RPS requires every regulated public utility to own or purchase renewable generation based on their nameplate capacity. The standard set minimum threshold percentages of the utility's average three-year annual peak retail sales:

- 10 percent for 2011-2015
- 15 percent for 2016-2019
- 20 percent for 2020 and beyond

A key component of the RPS is a one percent cap on the rate impact of complying with this policy. The Kansas Corporation Commission is permitted to exempt any utility that can demonstrate that compliance with the RPS would cause retail rates to increase by one percent or more.

Five regulated Kansas utilities currently own or purchase 1,589.1 MW of wind power from 15 projects in 10 Kansas counties to meet the RPS. Kansas Electric Power Cooperative (KEPCo) is currently meeting their RPS requirement with hydropower.

- Empire District Electric Company - 255 MW wind energy
- Kansas City Power & Light - 390.5 MW wind energy
- Kansas Electric Power Cooperative (KEPCo) - 114 MW hydropower
- Midwest Energy - 49.2 MW wind energy
- Sunflower Electric Cooperative - 230.4 MW wind energy
- Westar - 664 MW wind energy

All SIX regulated electric utilities in Kansas have met the 10% RPS requirement
FOUR of these six have already met the 15% requirement two years in advance
THREE of these six have already met the 20% requirement, seven years early.

Generation Cost Comparison

One myth about Kansas wind energy is that it costs much more than other forms of new peaking generation. When compared to a new natural gas plant, wind is very competitive.

The cost per MWh of power from the new Emporia Energy Center (Natural Gas) is \$45.63, while wind-power from two utility-owned projects (Central Plains and Flat Ridge 1) cost \$44.87/MWh and from two Wind projects where the utility pays for the power only costs \$35.00/MWh.

The electric utilities in Kansas affected by the RPS are all regulated, so therefore are not truly “free-market” businesses. All decisions, from rates to new generation must be approved by the Kansas Corporation Commission, the state’s regulatory body for utilities. In the wisdom of the lawmakers who crafted the state Renewable Energy Standards Act, the KCC was given not only the authority to allow utilities a mechanism to recover reasonable costs of their investment in renewable energy, but also the ability to deny any renewable projects if they cause revenue requirement(s) to increase one percent or greater

Actual Costs Per MWh of New Non-Baseload Generation in Kansas

Natural Gas (Emporia Energy Center)	Wind: Utility-Owned (Central Plains, Flat Ridge)	Wind: Power Purchase Agreements (Ironwood, Post Rock)
\$45.63	\$44.87	\$35.00

Transmission

Even with more than 2,000 MW of wind power in operation in Kansas, there is plenty of room for more. Unfortunately, the current transmission system cannot accommodate it all.

To meet Federal Energy Regulatory Commission regulations, the Southwest Power Pool takes public policy requirements (such as Renewable Portfolio Standards and goals) into consideration when planning transmission lines. To address reliability and congestion and to increase transfer capacity several transmission projects are in the works that will make it possible to move western Kansas wind to eastern markets. Examples of such projects include:

The 230 mile V-Plan is currently under construction from Spearville to Medicine Lodge to Wichita. This double-circuit, 345 kv line will increase grid reliability between western and eastern Kansas and will allow for more wind projects to be transmitted to market.

The KETA line from Spearville to Axtell, Nebraska was fully energized in Dec. 2012.

The Cleanline Energy Grain Belt Express High Voltage DC line from Spearville to Eastern Missouri and Western Tennessee is a \$2 billion privately-funded project that is projected to spur an additional \$7 Billion in economic benefits to the state.

The Renewable Portfolio Standard sends a clear signal to the world that Kansas values wind energy. The RPS supports an expanding wind industry and continues to help Kansas export this important resource ensuring we continue to be known as the “renewables” state.

“Anytime we can harness the Kansas wind at an affordable price from a project that will provide many economic benefits to the region, it’s a great move for our members.” - Stuart Lowery, Sunflower Electric CEO on the agreement to purchase power from the Shooting Star wind farm in Kiowa County. Sept. 7, 2011 press release.