



H-1 Renewable Portfolio Standards, Wind Generated Electricity in Kansas, and Production Tax Credit

H-2 Electric Transmission in Kansas

H-3 Keystone Pipeline System in Kansas

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Kansas Legislator Briefing Book 2014

Energy and Utilities

H-2 Electric Transmission in Kansas

At its most basic level, the transmission system (or “grid”) is an interconnected assembly of high-voltage transmission lines and associated equipment for moving electric energy at high voltages (typically 110 kilovolts [kV] or above) between points of supply and points of delivery. Transmission lines typically operate at higher voltages than distribution lines in order to minimize the amounts of energy lost during transmission.

Kansas is experiencing tremendous growth in new transmission lines. There was no significant build-out of transmission from the mid-1980’s until about 2007. Since that time, the following high-voltage projects have been initiated or completed:

- Westar Energy completed new 345 kV transmission lines from Salina to Wichita, and from Rose Hill to the Kansas-Oklahoma border. From there, the line continues south to Sooner, Oklahoma;
- ITC Great Plains constructed a 345 kV line from Spearville to the Kansas-Nebraska border. From there, the line continues north to Axtell, Nebraska;
- ITC Great Plains and Prairie Wind Transmission (a joint venture between Westar Energy and Electric Transmission America, LLC) are jointly constructing a dual 345 kV project often referred to as the “Y-Plan”. The line, which is scheduled to go into service in December 2014, will run from Spearville to Medicine Lodge to Wichita, with a connection south from Medicine Lodge to the Kansas-Oklahoma border. From the border, it continues south to Woodward, Oklahoma;
- ITC Great Plains and Westar Energy are jointly constructing a 345 kV line from Salina to Concordia, which is estimated to go into service in March 2018; and
- Clean Line Energy Partners is proceeding with planning for the Grain Belt Express, which would be the first high-voltage, direct current (HVDC) transmission line in Kansas, with a voltage of +/- 600 kV. The project proposes to gather wind-generated electricity from western Kansas at a point near Spearville and transport it to the energy markets of the central United States, with the line terminating in western Indiana. The Kansas Corporation Commission (KCC) issued a siting permit for the Kansas portion of the line on November 7, 2013, but required Clean Line to obtain siting approval in Missouri, Illinois, and Indiana before beginning construction in Kansas.

Funding for New Transmission

Kansas belongs to the Southwest Power Pool (SPP) regional transmission organization. The SPP covers a geographic area of 370,000 square miles, and manages transmission in all or parts of nine states: Arkansas, Kansas, Louisiana, Mississippi, Missouri, Nebraska, New Mexico, Oklahoma, and Texas.

One of SPP's responsibilities is regional transmission planning, which includes approving transmission projects that will benefit all or portions of the SPP region by strengthening reliability and reducing congestion on transmission lines. Projects approved by SPP are most often paid for under the Highway/Byway methodology which spreads the costs of projects with a voltage of 300 kV or greater (highway projects) across the entire SPP region. The costs of lower voltage projects are either split between the region and local zone (greater than 100 kV but less than 300 kV), or are borne entirely by the local zone (100 kV or less, called byway projects). Thus the costs of the transmission projects described on the previous page (except Grain Belt Express) are shared by all ratepayers in SPP; by the same token, Kansas ratepayers share in the costs of SPP-approved higher voltage projects in other states in the region.

The Grain Belt Express proposed project would not be funded under the Highway/Byway methodology. It is a "merchant" project. Under this model, Clean Line Energy, LLC incurs all costs of building the project and is solely responsible for recovering those costs. Clean Line expects to recover its costs by selling the electricity on the line in the energy markets of the central United States.

Siting Transmission in Kansas

Under Kansas law, electric utilities must obtain a siting permit from the KCC before they can begin site preparation for a transmission line or exercise the right of eminent domain to acquire land for the line. Initial SPP support for a transmission line addresses the general route, but states control the actual siting of the line. Kansas statutes define a transmission line as a line that is at least five miles

long and which is used for bulk transfer of 230 kV or more of electricity.

The general process for siting a transmission line in Kansas is as follows:

- The utility hires a company to conduct a siting study. The purpose of the study is to gather data and analyze prospective routes;
- The utility then schedules open houses in multiple cities along the proposed routes to provide information, answer questions, and get feedback from interested parties. The utility uses this information to help choose between various routes;

[Note: The actions in the first two bullets are typical, but are not required by Kansas statutes.]

- The utility must submit an application for a siting permit to the KCC, identifying the proposed route. Submission of an application triggers the start of the 120-day period for the KCC to rule on the route;
- The KCC must hold a public hearing on the siting application within 90 days in one of the counties where the line is proposed to be built. The purpose of the hearing is to determine the necessity for and the reasonableness of the location of the proposed line;
 - A notice of the hearing must be published in newspapers; and
 - Written notice, including a copy of the siting application, must be provided via certified mail at least 20 days before the hearing to landowners whose land is proposed to be acquired in connection with the construction of or is located within 660 feet of the center line of the easement where the line is proposed to be located.
- The KCC may conduct an evidentiary hearing on a siting application;
- The KCC must issue a final order on the application within 120 days after the application was filed. The decision of

- the KCC can be appealed to the Kansas Court of Appeals in accordance with the Kansas Judicial Review Act; and,
- If the KCC approves the siting application, the utility begins land acquisition along the approved route. Utilities can exercise the power of eminent domain if agreement cannot be reached with a landowner on compensation.
 - To exercise eminent domain, the utility must file a petition in district court and the court will appoint three appraisers to determine the fair market value of the property. Private property cannot be taken without just compensation.
 - KSA 26-513 details the factors to be considered in determining fair market value.
 - The appraisers must view the land and must take oral and written testimony from the plaintiff and interested parties in a public hearing prior to submitting a report to the court of their appraisal of the value of the land and their determination of damages and compensation to the interested parties resulting from the taking.
 - The plaintiff or any defendant dissatisfied with the appraisers' award may file an appeal in the district court.

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