

#### I-1 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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# **Kansas Legislator Briefing Book**2016

### **Energy and Utilities**

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

#### Renewable Portfolio Standard (RPS)

The 2015 Legislature enacted House Sub. for SB 91, which created a voluntary renewable energy goal and reduced the lifetime property tax exemption for new renewable resources to ten years after December 31, 2016.

The bill established a voluntary goal that 30.0 percent of a utility's peak demand within the state be generated from renewable energy resources by the year 2020. This voluntary goal will become effective on January 1, 2016, as will the repeal of the current renewable energy portfolio standard and the corresponding rule and regulation authority enacted by the 2009 Legislature. Kansas' RPS, in effect through December 31, 2015, requires utilities to obtain net renewable generation capacity constituting at least the following portions of each affected utility's peak demand based on the average of the three prior years:

- 10 percent for calendar years 2011 through 2015;
- 15 percent for calendar years 2016 through 2019; and
- 20 percent for each calendar year beginning in 2020.

Renewable energy may be generated by wind, solar thermal sources, photovoltaic cells and panels, dedicated crops grown for energy production, cellulosic agricultural residues, plant residues, methane from landfills or from wastewater treatment, clean and untreated wood products such as pallets, hydropower, fuel cells using hydrogen produced by one of the other renewable energy resources, and energy storage connected to renewable generation by means of energy storage equipment.

As of June 2015, 29 states, the District of Columbia, and 3 territories had adopted RPS, while another 9 states and 1 territory had adopted a renewable portfolio goal. While the specific guidelines of each state's legislation vary, the most common forms of renewable energy cited in RPS legislation are wind, solar, geothermal, biomass, and hydropower. More information about individual states can be found at <a href="https://www.dsireusa.org">www.dsireusa.org</a>, the website for the Database of State Incentives for Renewables & Efficiency.

#### **Wind-Generated Electricity**

Nearly all of Kansas' renewable generation of electricity comes from wind power. Kansas ranks second in the nation for wind energy potential, but ninth in power capacity installations. Kansas doubled its wind generation in 2012, reflecting \$3.0 billion in new investment, and still growing. As of September 2015, Kansas had approximately 4,000 megawatts (MW) of wind energy generation capacity. In contrast, landfill gas and hydroelectric combined had about 14 MW of generation capacity.

#### **Kansas Property Tax Exemption**

After December 31, 2016, exemptions granted for property primarily used for wholesale sale of renewable energy resources for which applications were filed after December 3, 2016, will be limited to ten years.

#### **Production Tax Credit (PTC)**

PTC is a federal, per kilowatt-hour (kWh) tax credit for electricity generated by certain energy sources. The tax credit has been extended numerous times, most recently in December 2014 when Congress extended the tax credit for projects that were under construction by the end of 2014.

Generally, facilities are eligible for the PTC for ten years after being placed into service. The PTC ranges from 1.1 cents to 2.2 cents per kWh, depending upon the type of renewable energy source. The amount of the credit was established at 1.5 cents per kWh in 1993 dollars (indexed for inflation) for some technologies and half of that amount for others. The first PTC was created by the Energy Policy Act of 1992 and the PTC has been allowed to expire for short periods of time since 1992.

To qualify for the credit, the renewable energy produced must be sold by the taxpayer to an unrelated person during the taxable year. While the credit is the primary financial policy for the wind industry, other renewable energies also qualify. Eligible renewable sources include landfill gas, wind energy, biomass, hydroelectric energy, geothermal electric energy, municipal solid waste, hydroelectric power, anaerobic digestion, small hydroelectric energy, tidal energy, wave energy, and ocean thermal energy.

#### **Community Solar**

Midwest Energy and Clean Energy Collective broke ground on a 3,960-panel, 1 MW community solar array on August 25, 2014, in a pasture north of Colby, Kansas. Construction began in September 2014, and the array began producing energy on February 1, 2015. Midwest Energy stated the array should result in a roughly 30 percent efficiency gain over traditional roof-mounted panels.

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