



Clean Power Plan — What Is The Impact?



Marcus Harris

On June 2, 2014, the United States Environmental Protection Agency (EPA) released a proposed rule intended to reduce emissions of carbon dioxide from existing fossil-fueled power plants. The rule was finalized and released on August 3, 2015.

The EPA's Clean Power Plan (CPP) requires significant reductions in carbon dioxide emissions from the electric utility sector by mandating states to develop implementation plans designed to comply with the new federal requirements. Under the new rule, Kansas is required to reduce its carbon dioxide output to 1,293 pounds of carbon dioxide per megawatt hour. This 44% reduction from 2012 levels tasks Kansas with the fifth-highest percentage reduction in the nation.

The CPP establishes interim and final carbon dioxide emission rates for existing fossil-fuel electric generating units under Section 111(d) of the Clean Air Act, and these rates are translated into interim and final goals for each state. The goals are expressed in two ways, rate-based and mass-based, either of which can be used by a state in its state implementation plan. The Kansas Department of Health and Environment (KDHE) and the Kansas Corporation

Commission (KCC), the two agencies charged with developing the state plan, are working with stakeholders to determine which method is the least detrimental to Kansas.

States may choose from a variety of potential compliance mechanisms, actions and investments to comply with the CPP. Among the many options are: modifications of existing electric generating units (EGUs) to increase their energy production efficiency; implementation of operating limits at EGUs; averaging of emissions across power plants; participation in single-state or multi-state, market-based emission trading programs; reliance on non-fossil fueled generation like nuclear, wind, and solar; institution of programs that reduce demand through energy efficiency; and developing other options that retain and or increase zero to low carbon dioxide emitting resources.

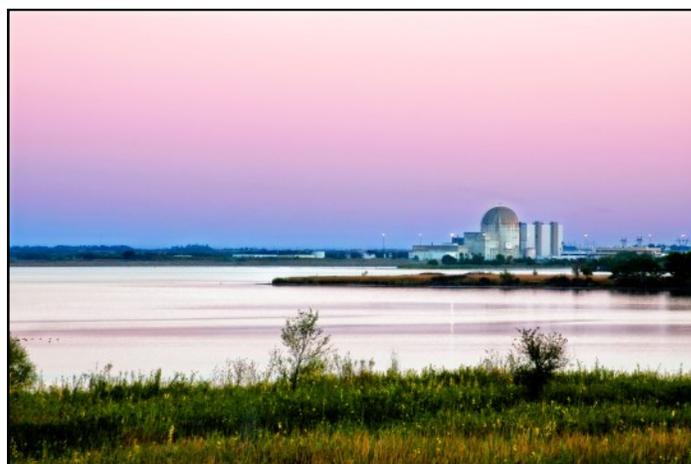
There are several ways in which implementation of the CPP will impact the cost recovery associated with the production and consumption of electricity, causing direct and indirect costs to consumers. For example, the CPP may change the cost to generate electricity at fossil fuel power plants, it may change the demand for different fossil fuels, or it may prompt the retirement of some currently viable generating assets. Cost impacts could also include the costs of retaining some generating

assets that would otherwise retire, and the addition of alternative electricity generation resources that would otherwise not be added. These impacts will likely increase costs in Kansas, regionally through the Southwest Power Pool (SPP), and across the country.

Let's consider two of the main compliance cost drivers of the CPP. First, reducing carbon dioxide from the existing and future generation fleet will increase costs for owners of power plants affected by the CPP, and these costs will be passed along to members through rates. Such costs may show up as increases in variable expenses, or as recovery of CPP compliance capital investments, such as environmental retrofits and new, lower-emitting generation resources. Second, changes in the variable costs of operating different types of power plants will affect their order of dispatch, thus potentially reducing the availability of the most economic generating resources in favor of less carbon intense resources. Dispatching generation resources based upon environmental regulations, rather than traditional economics, in order to comply with the CPP, will cause higher market clearing prices in the SPP region. These additional costs will ultimately be borne by consumers.

What will be the impact of the CPP on KEPCo? KEPCo does not currently own an affected generating unit in Kansas. However, KEPCo will likely be subject to our pro-rata share of CPP compliance costs incurred by our contractual power suppliers and any future power supply we own or contract for. Fortunately, nearly 50 percent of KEPCo's generation resources do not

emit carbon dioxide. Our ownership interest in the Wolf Creek nuclear plant and long-term contractual hydroelectric resources have been, and will continue to be, vital components in our clean energy supply. KEPCo's diverse generation resources will shield its Members from considerable compliance costs associated with a considerable portion of our power supply. KEPCo does own an interest in Iatan 2, a recently built, CPP-affected coal-fired unit in Missouri. Iatan 2 is one of the most efficient coal-fired units in the country, and CPP compliance costs associated with Iatan 2 should be minimal.



Wolf Creek Nuclear Generating Station

As we move forward, the KDHE and KCC, along with the Kansas electric utilities and many others, will tailor approaches and methodologies to meet the requirements of Kansas complying with the CPP. The state implementation plan will define a structure under which each utility will need to act to reduce carbon dioxide emissions from fossil fueled power plants. Ultimately, plans should be developed to comply in the most cost-effective manner possible without jeopardizing grid reliability.

KEPCo Receives Property Tax Refund

Kansas Electric Cooperatives (KEC), along with MarksNelson, a CPA and business advisement firm, successfully appealed to the Kansas Board of Tax Appeals the increase in the capitalization rate (discount rate) used to establish the amount of property tax owed by KEPCo. The successful appeal resulted in a significant refund to KEPCo.

Service Anniversaries

This summer, several KEPCo employees reached service anniversaries. The employees, in alphabetical order, are;

- Mark Doljac / Director of Rates and Regulation - 6 years
- Robert Hammersmith / Senior SCADA/Metering Technician - 8 years
- Shari Koch / Finance & Accounts Payable/Payroll Specialist - 9 years
- Betty Lesline / Administrative Assistant/Receptionist - 15 years
- Mitch Long / Senior SCADA/Metering Technician - 16 years
- Matt Ottman / Information Systems Specialist 2 - 14 years
- Bill Riggins / Senior Vice President, Chief Strategic Officer & General Counsel – 3 years
- Paul Stone / System Operator - 18 years
- Coleen Wells / Vice President and Chief Financial Officer - 14 years

On behalf of KEPCo and its Members, thank you for your dedicated service.

Wolf Creek 30th Anniversary Celebration



Marcus Harris speaking at Wolf Creek 30th anniversary

On September 3rd, the Wolf Creek Nuclear Generating Station turned 30 years of age and in recognition of the milestone, the owners of Wolf Creek, along with WCNOG staff and invited guests, celebrated the historic day. Marcus Harris, KEPCo EVP & CEO, Mark Ruelle, Westar President & CEO, Terry Bassham, Great Plains Energy Chairman, President & CEO, Adam Heflin, WCNOG CEO & CNO, and Jeff Colyer, Kansas Lieutenant Governor, addressed the several hundred employees and dignitaries in attendance. The guest speakers gave appreciation and recognition to the WCNOG staff for their hard work and dedication for the 30 years of successful operation of the facility and the importance of the facility as we enter into a carbon-constrained environment.

Southwest Power Pool Fly-In

Phil Wages, KEPCo's Director of Member Services, Government Affairs, and Business Development, attended a meeting coordinated by the Southwest Power Pool (SPP) in Washington, D.C. to discuss with several members of Congress, FERC Commissioners, and EPA staff the comprehensive energy legislation currently making its way through both chambers of Congress, as well as the EPA's Clean Power Plan Final Rule.

Government officials attending the meeting were;

- FERC Commissioner Tony Clark
- FERC Commissioner Colette Honorable
- EPA Acting Assistant Administrator for the Office of Air and Radiation, Janet McCabe
- U.S. Senator Bill Cassidy (R-LA), Senate Energy and Natural Resources Committee
- U.S. Senator John Boozman (R-AR), Senate Committee on Environment and Public Works
- U.S. Representative Ed Whitfield (R-KY), chair of House Subcommittee on Energy and Power
- U.S. Representative John Shimkus (R-IL), chair of House Subcommittee on Environment and the Economy
- U.S. Representative Steve Womack (R-AR), member of House Appropriations Committee

Meetings were also held with the Kansas delegation to discuss the Clean Power Plan and other utility related issues.



U.S. Capitol, Washington, D.C.