



# Electricity Markets and the Clean Power Plan

*The challenge for the nation is to develop an efficient policy for reducing carbon emissions. The challenge for regional transmission organizations and their regulators is to make clear how environmental policies could mesh well with the necessary electricity market design. Environmental policies that put an explicit price on carbon would fit naturally with efficient markets. Absent an explicit price on carbon, RTOs should be alert to avoiding many variants of implementation mechanisms that lead to fundamentally undermining the operation of electricity markets.*

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*Subsidies are creating a toxic mix of imperfect competition and imperfect regulation working directly at cross-purposes with each other.*

– John Moot, former FERC General Counsel (Moot, 2014)

*We have a lot of state air regulators who certainly didn't know what FERC was probably 12 months ago, and they will be in a major position to also be planning the electric grid, like it or not.*

– Philip Moeller, FERC Commissioner (Moeller, 2015)

## I. Introduction

The Environmental Protection Agency issued a final rule that defines a broad and complicated set of standards for controlling carbon dioxide (CO<sub>2</sub>) emissions from affected electricity generating units (Environmental Protection Agency, 2015b). The proposed national average reduction by 2030 is 32 percent

from the 2005 level of emissions, about half of which has already occurred ([Environmental Protection Agency, 2015j](#)). The rules for new power plants are relatively straightforward and imply little more than reinforcing the current economic choice of natural-gas-fired over coal-fired generation, given current projections for the price of natural gas. The Clean Power Plan rules for existing power plants arise under a different section of the Clean Air Act and present a more complicated picture. The result has implications for the nature and degree of future limitations on carbon dioxide emissions from the electricity sector. In addition, some versions of the possible implementation plans could have material implications for the operations of regional transmission organizations under the regulations of the Federal Energy Regulatory Commission (FERC). The purpose here is to highlight some of the possible directions for relevant policies of electricity system operators.

## II. Carbon Pollution Standards

After a long period of debate and litigation, the Supreme Court ruled that carbon dioxide is a pollutant under the meaning of the Clean Air Act (CAA) ([U.S. Supreme Court, 2007](#)). The Environmental Protection Agency (EPA) then issued an endangerment finding and

precipitated the required regulation of carbon emissions. After a series of appeals, the legal issue was settled as to the jurisdictional question.

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debate on the merits of carbon regulation under the CAA. It is one thing to say that the general term “pollutant” legally encompasses carbon dioxide emissions; it is quite another thing to say that the CAA was designed with carbon dioxide in mind. The design of the CAA and the precedents of court decisions suggest that carbon dioxide is different than other pollutants.

For example, the CAA specifies certain levels of emissions that require regulation. The EPA recognized that these levels were (much) too low to be applied to carbon dioxide and other

greenhouse gas (GHG) emissions as discussed in its so-called “Tailoring Rule”:

The rule establishes a schedule that will initially focus CAA permitting programs on the largest sources with the most CAA permitting experience. . . . The CAA permitting program emissions thresholds for criteria pollutants such as lead, sulfur dioxide and nitrogen dioxide, are 100 and 250 tons per year (tpy). While these thresholds are appropriate for criteria pollutants, they are not feasible for GHGs because GHGs are emitted in much higher volumes. . . . Without this tailoring rule, the lower emissions thresholds would take effect automatically for GHGs on January 2, 2011. PSD and title V requirements at these thresholds would lead to dramatic increases in the number of required permits — tens of thousands of PSD permits and millions of title V permits. State, local, and tribal permitting authorities would be overwhelmed and the programs’ abilities to manage air quality would be severely impaired. ([Environmental Protection Agency, 2010](#))

Hence, EPA set a schedule that delays regulation of many sources of carbon dioxide emissions until some indefinite time in the future, while focusing immediately on the largest emitters.

Debates continue over the merits of the resulting regulations. Different authorities apply to mobile sources, new stationary sources and existing stationary sources. Some authorities allow for federal implementation, and others require state implementation plans.

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