

Environmental, Telecomm, Utilities & Energy Law

Regulating Climate Change: Linking Energy to Environmental Protection

By Maureen Smith

The US Environmental Protection Agency (EPA) took a controversial but timely step to address climate change this past summer by proposing to limit emissions of carbon dioxide, a greenhouse gas, from existing power plants.

The EPA proposal would mandate a nationwide carbon emission reduction of 30 percent by 2030 from the power sector, as well as a 25 percent reduction in other health-threatening pollutants.

Although the “Clean Power Plan” is slated to be finalized by June 2015, almost 2,000 public comments already have been submitted, and both litigation and Congressional action threaten to block the rule. If the rule becomes final and survives legal challenge, implications from both an environmental and energy perspective will be far-reaching.

Fossil-fueled power plants are the largest carbon emitters among stationary sources, with coal-fired plants emitting roughly twice the amount of carbon emitted by natural gas-fired units for the same amount of energy.

EPA’s proposal draws from the Clean Air Act’s section 111(d) “best system of emission reduction” criterion to allow each state to choose a unique mix of measures or “standards of performance” that would meet EPA’s state-specific emission reduction targets. The “building blocks” available for state plans include: reducing carbon-emission rates from coal-fired plants through efficiency investments; shifting generation to less carbon-intensive units like natural gas combined-cycle technology and zero-emitting options, like wind and solar; and reducing generation with demand-side and efficiency programs. Each state can leverage new and existing generation capacity, as well as programs to reduce demand, but must adopt enforceable programs to achieve the state’s emission-reduction goals.

Despite the flexibility provided to states, the proposal presents challenges.

Carbon emissions from the power sector are a function of highly dynamic, regional wholesale electricity markets. Dispatch of generation is based on cost and other factors not related to emissions.

EPA’s proposal to link electricity production to carbon reduction goals will require states to evaluate both policy and market

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forces that can influence the move away from carbon-intensive fuels. Finding an appropriate mix of generation resources must include consideration of cost and reliability.

Moving towards cleaner power without interfering with the competitive markets that ensure the lowest prices for consumers will require collaboration among regulators, industry and others. Siting issues for new

generation and transmission facilities, especially in light of recent amendments to statutory siting criteria, must also be considered.

In the meantime, New Hampshire appears well-positioned to meet its obligations within the proposed compliance period. New Hampshire has existing zero-carbon generation sources, such as our nuclear and wind facilities, as well as hydroelectric sources, and two efficient natural gas-fired power plants that have contributed to reducing regional power sector carbon emissions.

The state already participates in a market-based, regional program that requires power plants to purchase auctioned allowances for each ton of carbon emitted. The regional program would likely provide a basis for meeting the rules and could be enhanced by allocating more regional auction proceeds toward energy efficiency programs.

The state also has a renewable portfolio standard to encourage investment in renewable sources like solar, wind and biomass. Utility-administered energy efficiency programs are already in place, along with recently adopted measures for net metering.

If aging coal-fired units currently owned by PSNH are retired as a result of economic forces, consistent with the national trend driven by historically low natural gas prices, New Hampshire could better demonstrate compliance with clean energy goals while also improving air quality.

EPA’s proposed rule can be viewed online at: www.federalregister.gov/articles/2014/06/18/2014-13726/carbon-pollution-emission-guidelines-for-existing-stationary-sources-electric-utility-generating

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