Insights: Alerts

EPA Issues Clean Power Plan Final Rule: Rule Includes New Incentives For Early Renewables Projects

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On October 23, 2015, the US Environmental Protection Agency ("EPA") published in the Federal Register a highly anticipated final rule implementing its Carbon Pollution Emission Guidelines for Existing Electric Utility Generating Units, also known as the Clean Power Plan ("CPP"). *80 Fed. Reg. 64662*. A prepublication version of the final rule has been available since August 3. However, the rule's official publication starts the clock on compliance with the CPP and also opens the rule to legal challenges.

The highly controversial CPP is among the most important of the Obama administration's many regulatory measures to combat climate change. The standards dictated by the plan demand modest improvements in the greenhouse gas ("GHG") emissions performance of coal-fired electric generating units (EGUs). However, the real focus of the CPP is increased deployment of natural gas-fired and renewable generating capacity in the United States. As such, it includes several elements of interest to developers of renewable power projects.

I. Structure And Mechanics Of The Clean Power Plan

The overall goal of the CPP is to reduce GHG emissions from existing national electricity sector carbon emissions by approximately 28% below 2005 levels by 2025, and by approximately 32% below 2005 levels by 2030. EPA promulgated this rule under Section 111(d) of the Clean Air Act, a seldom-used provision under which EPA sets standards of performance for certain categories of existing air pollution sources. States then must develop plans to achieve those standards.

The CPP establishes standards of performance for CO2 emissions from existing fossil-fuel-fired power plants, based on EPA's determination as to the "best system of emission reduction" ("BSER") that is "adequately demonstrated" for two subcategories of sources: fossil fuel-fired EGUs and stationary combustion turbines. Based on these performance standards and the mix of existing generating units in each state, the CPP establishes state-specific CO2 reduction goals and requires states to submit to EPA plans for achieving these goals on an interim and final basis. State goals are expressed both in terms of reductions in CO2 emissions per megawatt of electricity generated in the state (a "rate-based" goal) and in terms of an equivalent total mass of CO2 emission reductions (a "mass-based" goal). State goals are to be phased in over the period from 2022 to 2030. Each state must submit either (i) a final plan; or (ii) an initial plan with a request for an extension, to the EPA by September 6, 2016.

The Final Rule sets out EPA's determination as to what measures constitute the BSER for EGUs. Each state's obligation to reduce GHG emissions is based on EPA's determination as to what reductions can be accomplished in the state using these measures. The three "building blocks" on which EPA based its BSER determinations are: (1) efficiency improvements at existing EGUs; (2) measures to decrease utilization of coal-fired EGUs in favor of less

carbon-intensive natural gas-fired units; and (3) measures to increase the deployment of renewable generating capacity. Because of the limited reach of Section 111(d), and a recent admonition from the Supreme Court that EPA not mine old statutes for new authority "to regulate 'a significant portion of the American economy'" (see *Utility Air Regulatory Group v. EPA*, 134 S. Ct. 2427, 2444 (2014)), the "building blocks" in the final CPP are limited to measures that more or less directly affect emissions from fossil-fuel-fired EGUs.

A. Flexibility of the CPP

Because each state's power market is unique, and because the availability and cost of different generating resources and emission reduction technologies differ widely among states, the CPP provides states great flexibility in establishing their compliance plans. A state may use any combination of EPA's "building blocks" to achieve compliance with its emission goals. However, recognizing that these measures may not be the most cost-effective means of reducing GHG emissions, the CPP allows state plans to incorporate other measure to reduce power-sector emissions, so long as the state can demonstrate to EPA's satisfaction that it will achieve compliance. States may plan their emission reductions independently, or collaborate with other states and/or tribal governments on multi-state plans. State plans also may include trading mechanisms that EGUs may use to realize additional opportunities for cost savings, while continuing to operate across the interstate system through which electricity is produced.

EPA may grant a state an extension of up to two years (until September 6, 2018) in order to submit its final plan. If a state does not submit an EPA-approvable plan, existing sources in the state will be subject to the requirements of a Federal Implementation Plan ("FIP"), discussed below. The same day EPA published the CPP Final Rule, the agency issued a proposed rule with "federal plan requirements" that will form the basis for any FIP. *80 Fed. Reg. 64966*.

The United States currently has an ample supply of natural gas. Furthermore, natural gas-fired power plants are cheap and burn cleaner than coal fired plants. However, the CPP employs a four-part approach to stem a potential rush to natural gas-fired generation. First, the CPP increases the contribution to targets from renewable energy and encourages states to use more renewable energy in the short term through the Clean Energy Incentive Program ("CEIP"). Second, the formula used to calculate state targets was changed to account for (i) renewable energy to replace coal and natural gas generation; and (ii) natural gas to replace coal-fired generation. Third, the compliance start date has been moved back from 2020 until 2022 to allow more time for resource planning and construction of transmission and infrastructure for natural gas. Furthermore, by 2022, natural gas generation is limited to a maximum 22% increase from 2012 levels in each region and then a 5% increase in each subsequent year. Fourth, the final CPP removed the language in the draft rule which would have allowed states to shut existing fossil fuel generation and replace it with new natural gas plants. The final CPP does not allow this practice to reduce targets.

B. State Goal-Setting Under the CPP

The basic formula used by the CPP in determining a state target is an emissions rate composed of (a) current CO2 emissions from fossil fuel-fired power plants in pounds, divided by (b) state electricity generation from fossil fuel-fired power plants and certain low or zero emission power sources in megawatt hours. However, instead of calculating reduction goals for EGUs on a state-by-state basis, resulting in severely differing expectations between states, EPA has elected to establish nationwide "uniform rates" for all coal and gas-fired power plants. This approach involved calculating average emissions rates for such EGUs in all three of the major power regions in the United States (the eastern and western interconnections and the ERCOT market in Texas). EPA then applied the

three building blocks to estimate how much pollution may be cut at a reasonable cost. The resulting planned emissions cuts for the eastern interconnection were the smallest and, thus, EPA applied those numbers nationwide.

The plans developed by each state must ensure that the EGUs in a given state – individually, together, or in combination with other measures – achieve the required interim performance rates, either in terms of rate or mass, during the 2022 through 2029 period as well as the final CO2 emission rate for that state in 2030. To accomplish this result, individual states may choose between the following two types of plans:

1. Emission Standards Plans: These plans include source-specific requirements to force all affected EGUs within a given state to meet their required emission performance rate, or state-specific rate-based or mass-based goals.

2. State Measures Plans: These plans include various measures not included as federally enforceable components of the plan. However, they are implemented by a particular state through renewable energy standards or programs improving residential energy efficiency. These plans also may include federally enforceable source-specific requirements. However, the state measures alone or working together with federal measures must result in achieving a specific state's mass-based goal. These plans also must include a backup composed solely of federally enforceable standards on affected EGUs which, if utilized, achieve the required emissions goal. States may use the final model rule as such a backup.

Source-specific CO2 emissions performance rates are divided into two categories (i) coal and oil-fired steam generating units; and (i) natural gas-fired combustion turbines. EPA also has proposed allowing states to convert their rate-based goal to a mass-based goal which would permit a state, or group of states, to cap their CO2 emission tonnage and create an emissions trading program. However, the current rate-based formula also allows for trading emissions credits amongst the states.

II. The Clean Energy Incentive Program

EPA estimates that, by 2030, approximately 28% of the United States' electricity will come from renewable generation. As such, the CPP rewards states which invest in renewable energy and demand-side energy efficiency in the short term – during 2020 and/or 2021 – through the CEIP. EPA, through the CEIP, will make additional allowances or emissions credits available to states in exchange for early investments in zero-emission generation and/or demand side energy efficiency projects. EPA intends for the CEIP to maintain a reserve for zero emissions (specifically wind and solar) projects and demand side energy efficiency projects in low income communities. The CEIP is a "matching fund" and, although participation is voluntary, it provides incentives for states to invest in new zero emissions generation projects and follow through on planned investments. In order to be eligible for credit under the CEIP, a proposed project must:

1. be located in or benefit a state which has submitted a final state plan including requirements establishing its participation in the CEIP;

2. commence construction (if renewable energy) or operations (if demand side energy efficiency) following the date the state submits its final state plan to EPA;

3. generate metered MWh from wind or solar resources (if renewable energy) or result in qualified and verified

electricity savings (MWh) through demand side energy efficiency measures implemented in a low-income community (if energy efficiency); and

4. generate or save MWh in 2020 and/or 2021.

There are several incentives for those planning these projects such as EPA allowance matching, which is perhaps the most important to the states. Pursuant to this incentive, EPA will match allowances or emissions credits to participating states equal to the equivalent of 300 million short tons of CO2 emissions. Wind or solar generation projects will receive one credit per MWh of generation (one-half early action credit from the state and one-half matching credit from the EPA). Finally, demand-side energy efficiency projects implemented in low-income communities will receive two credits for one MWh of avoided generation (one early action credit from the state and one matching credit from the EPA).

The CEIP is intended to bolster the flexibility of the CPP by providing states more options in determining how to meet their targets. If a state opts for rate-based compliance, it may borrow from the pool of emissions credits it will issue in the 2022-2029 performance period and award them to eligible projects which achieve reductions in 2020 and/or 2021. On the other hand, if a state chooses mass-based compliance, it may draw CO2 emissions allowances from their 2022-2029 mass-based goal and award them to eligible projects achieving reductions in 2020 and/or 2021.

Emissions credits and allowances issued under the CEIP may be used for compliance by affected generation units during compliance with their emission standards in the interim (2022-2029) and final performance (2030 and beyond) periods. They also may be banked within and between periods. Additionally, the CEIP will be available in states with a FIP. However, eligibility will be limited to projects which commence construction or operation after September 6, 2018.

III. Proposed Federal Plan Requirements

EPA issued the final CPP rule in tandem with proposed "federal plan requirements" for implementing the CPP. These requirements, which are limited to the three "building blocks" used to define BSER (heat rate improvements, fuel switching from coal to natural gas, and increased deployment of renewables), serve two purposes. First, they provide states with a set of implementation strategies that are presumptively approvable if incorporated in a state plan. Second, they provide a preview of the FIP that EPA would impose on a state that fails to submit an approvable plan for CPP compliance. Because the federal plan standards include only "building block" measures, a FIP would be more stringent and offer less flexibility than state plans that also include other reduction measures. This approach is intended to provide a strong incentive for states to submit approvable plans, so the entire burden of compliance does not fall on their affected EGUs.

As with a state submitted plan, the proposed federal plan includes three separate compliance periods (2022-2024, 2025-2027, and 2028-2029), during which EPA will assess interim compliance. The proposed federal plan includes a carbon credit marketplace which operates using either mass-based or rate-based emissions credits (EPA intends to finalize both the rate-based and mass-based model rules in summer 2016). EPA is accepting written comments on the proposed federal plan requirements for 90 days after publication in the *Federal Register*. It intends to finalize the federal plan requirements in summer of 2016, several months before the first state plans are due.

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