

## Environment Alert

June 4, 2014

### EPA Proposal Sets Ambitious Carbon Reduction Goals for Power Sector; Creates Challenges and Opportunities for Industry

On June 2, 2014, the Obama Administration unveiled an ambitious administrative proposal that would require states to regulate carbon dioxide (“CO<sub>2</sub>”) emissions from existing fossil fuel power plants, reducing emissions from the power sector by up to 30 percent nationwide by 2030 (“Power Sector Carbon Plan” or PSCP). Drafted under the auspices of section 111(d) of the Clean Air Act, the PSCP would set emission rate reduction goals for each state and provide state regulators with guidelines for designing and executing tailored state implementation plans.

The Environmental Protection Agency (EPA) has developed rate reduction goals based on two scenarios, described as Option 1 and Option 2. Under EPA’s preferred option, Option 1, EPA would establish state-specific emission rate restrictions at levels necessary to reduce power sector CO<sub>2</sub> emissions from 2005 levels by 30 percent by the year 2030, with lesser reductions required in the interim. Option 2 would establish less stringent and shorter-term state emission rate reduction requirements of 24 percent by 2025. Both options would require individual states to make significant emissions reductions over 2012 levels.

Table 1: Necessary Reduction to Power Sector CO <sub>2</sub> Emissions from 2005 Baseline (Percentage)			
Option 1		Option 2	
2020 – 2029	2030	2020 – 2025	2025
27%	30%	23%	24%

Once published in the *Federal Register*, stakeholders will have 120 days to comment on the 645-page proposed rule and the thousands of pages of supporting documentation, data and analysis released in support of the proposal.<sup>1</sup>

#### A Federal Mandate – A State Solution

Under the PSCP, EPA would calculate a unique CO<sub>2</sub> emission reduction “goal” for each state, known as the Best System of Emission Reduction (BSER) standard, using four separate and independent emission reduction strategies, or “building blocks.” For EPA’s Option 1, the building blocks would include:

- **Increased Plant Efficiency:** Improve the average heat rate of the state’s coal-fired fleet by six percent.

<sup>1</sup> As part of a separate proposal issued concurrently, EPA also proposed rules governing modification and reconstruction of existing power plants with respect to greenhouse gas (GHG) emissions. Akin Gump would be pleased to provide information on that additional proposal upon request.

- **Maximum Utilization of Natural Gas Combined Cycle (NGCC) Assets.** Achieve a 70 percent target utilization rate for its available NGCC resources, reducing reliance on carbon-intensive coal-fired assets. Currently, power markets are dispatched on the basis of economic merit; it is unclear how EPA's proposal would impact power market rules and utility practices.
- **Maximize Utilization of Low- or Zero-Carbon Generation Assets:** Complete and commission all pending nuclear projects and prevent six percent of the economically strained nuclear generation assets from retiring. Increase renewable energy generation within the state in accordance with regional portfolio standards. Efforts to prevent the premature retirement of nuclear generation would have to navigate carefully federal court decisions that prohibit states from subsidizing units that bid into wholesale energy markets. See our related blog posting [here](#).
- **Invest in Demand-Side Energy Efficiency Projects.** Reduce energy demand by 1.5 percent annually between 2020 and 2029 using demand-side energy efficiency programs. A recent federal court decision vacated the Federal Energy Regulatory Commission's controversial "demand response" rule, creating significant uncertainty with respect to the participation of demand response resources in energy markets. See our related blog posting [here](#).

The final statewide average emission rate goals (see Table 2) established through this process would constitute EPA's determination as to the BSER for the state, and serve as the quantitative CO2 reduction target guiding the state's emission reduction efforts. Average emission rates can be presented to mass-emission limits for the purposes of emission allowance trading and other management tools.

EPA has stated it will finalize its state-by-state BSER allocations and supporting guidelines by June 2015, giving states until July 2016 to develop and submit state implementation plans for approval, using the state's preferred mix of reduction strategies. State submissions must demonstrate that the state's chosen mix of reduction strategies will ensure progress toward interim goals starting in 2020, and toward the mandated final emissions reduction goal date.

**Table 2: Selected State-Level CO2 Emission Rate (lb/MWh) (BSER) Reductions Under the Proposed PSCP Rule (from 2012 Baseline)\***

	2012	Option 1			Option 2		
		2020	2030 BSER	% Reduction	2020	2025 BSER	% Reduction
California	2,184	556	537	75%	582	571	74%
Florida	2,251	794	740	67%	907	884	61%
Illinois	2,334	1,366	1,271	46%	1,501	1,457	38%
Kentucky	2,166	1,844	1,763	19%	1,951	1,918	11%
Massachusetts	2,083	655	576	72%	715	683	67%
New York	2,219	635	549	75%	736	697	69%
New Jersey	2,102	647	531	75%	722	676	68%
Ohio	2,126	1,452	1,338	37%	1,588	1,545	27%
Pennsylvania	2,108	1,179	1,052	50%	1,316	1,270	40%
Texas	2,239	853	791	65%	957	924	59%
West Virginia	2,056	1,748	1,620	21%	1,858	1,817	12%

\*The proposal would also allow states to convert the BSER average emission rate to an annual mass-based CO2 emission limit—a step necessary to participate in allowance trading and other offset programs.  
 \*\*Data available at <http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule-technical-documents-spreadsheets>.

## Challenges and Opportunities

The 645-page PSCP would constitute a significant expansion to the federal government's role in regulating energy-resource planning and generation-dispatch activities. The proposal already has prompted stakeholder debate regarding the appropriate role of the federal and state governments in combating global climate change generally, and the scope and limits of EPA's authority under the current Clean Air Act in particular.

From a business perspective, the proposal raises both threats and opportunities for U.S businesses. The proposal constitutes a particular threat to the U.S. coal industry, for example. Under the proposed rule, EPA projects that coal production for use in the power sector would fall by 35-27 percent in 2020 and 30-32 percent by 2030. The market price for coal would follow accordingly, falling by 16 to 17 percent in 2020 and 18 percent in 2030. Exports of coal from the United States could increase as domestic demand declines.

For the natural gas industry, EPA's heavy focus on increasing utilization of NGCC plants, and the strong emphasis on transitioning away from coal-fired assets, will promote increased demand and higher prices for natural gas, particularly in the short and medium term before low carbon generation and demand-side energy investments come on line. EPA estimates that the price of natural gas delivered to the electric power sector will increase by 8 to 12 percent in 2020. As demonstrated by gas and electric price spikes experienced during the winter of 2013-2014, increased reliance on gas-fired generation may require additional investments in gas deliverability infrastructure, on-site gas storage and/or dual-fuel capabilities. See our related blog posting [here](#).

Among the biggest winners under the proposal would be the nuclear and renewable energy industries. EPA's analysis assumes and encourages increased investment and support for existing nuclear resources that are currently struggling to compete in the energy market. Similarly, the rule would encourage increased investment in renewable generation and storage capacity, industries that have struggled to remain competitive in a non-carbon constrained economy.

For manufacturers, the rule offers both risks and opportunities. Chemical manufacturers are likely to see increased costs of production due to the increased cost of electricity and price for natural gas as a feedstock. Manufacturers involved with energy efficiency products, however, could see significant benefits, as states, regulated industries and consumers look for ways to reduce energy costs and balance their emissions profiles.

## Opportunity for Public Engagement

Regardless of your company's perspective, EPA's PSCP proposal is likely to have significant implications for businesses, industries and the larger economy. The public comment period for this proposal will provide stakeholders with a critical opportunity to scrutinize EPA's policy and legal approach, test the many technical and economic assumptions underlying EPA's BSER methodology and prepare the administrative record for both implementation and legal action.

- **Due Date for Public Comments:** The comment period runs from now until 120 days after EPA formally publishes the proposal in the *Federal Register*.
- **Public Hearings** (deadline to preregister for speaking time is July 25, 2014):
  - **Atlanta, GA:** July 29, 2014
  - **Denver, CO:** July 29, 2014
  - **Pittsburgh, PA:** July 31, 2014
  - **Washington, DC:** (week of July 28, date to be determined)

## Contact Information

To discuss the challenges and opportunities this action raises for your business, please contact:

**Paul E. Gutermann**

[pgutermann@akingump.com](mailto:pgutermann@akingump.com)  
202.887.4088  
Washington, D.C.

**Julia E. Sullivan**

[jsullivan@akingump.com](mailto:jsullivan@akingump.com)  
202.887.4537  
Washington, D.C.

**David H. Quigley**

[dquigley@akingump.com](mailto:dquigley@akingump.com)  
202.887.4339  
Washington, D.C.

**Charles L. Franklin**

[clfranklin@akingump.com](mailto:clfranklin@akingump.com)  
202.887.4378  
Washington, D.C.