The Clean Power Plan

On Aug. 3, 2015, the U.S. Environmental Protection Agency finalized the Clean Power Plan, which is expected to cut carbon pollution from existing power plants by 32 percent below 2005 levels by 2030. The rule sets target emissions reductions for states and states are responsible for designing their own plans to meet these emissions reductions targets. Emissions reductions targets vary by state and range from 7 to 47 percent. States must submit plans, or initial plans with a request for a two-year extension, by Sept. 6, 2016. As part of designing these plans, states will need to decide how to measure their emissions reductions, what methods they will use to comply with the emissions limits, and whether they will engage in a trading program to purchase compliance credits. Some states have indicated that they will refuse to comply with the rule, which would make those states subject to a federal plan designed by EPA. EPA expects to finalize its federal plan and model trading rules in 2016. Over half the states have sued EPA in an effort to challenge the legality of the Clean Power Plan. Other states are supporting the rule, and a few states are neither supporting or opposing the rule. Two states have stated they will refuse to submit a plan or otherwise comply with the rule. An interactive map of state reactions to the Clean Power Plan is available here and more information on the lawsuits and links to legal documents are available here.

Additional Reading:

- EPA Documents, including a summary of the rule, rule history, documents related to the final rule, fact sheets, links to previous actions, and additional resources are available here.
- E&E’s Power Plan Hub is a comprehensive resource providing a wealth of information and analysis on the Clean Power Plan, including up-to-date news.
- CSG’s recent webinar, “EPA’s Clean Power Plan and Interstate Trading Options” provides information from experts on state emissions trading options.

The Rise of U.S. Natural Gas Production

The use of hydraulic fracturing and horizontal drilling techniques to develop shale gas resources has contributed to a tremendous increase in natural gas production in the United States. States will face a variety of policy issues as natural gas production continues to increase and will look to balance the protection of the environment and public health with the economic benefits of the increased use of natural gas. The increase in natural gas production also impacts the country’s natural gas infrastructure and has and will continue to result in the increased use of natural gas in electricity generation and in fuels for vehicles.

Concerns about potential environmental issues associated with hydraulic fracturing will continue to be studied, debated, and addressed by state and local governments in 2016. States have been taking the lead on the regulation of hydraulic fracturing because oil and gas production operations, including hydraulic fracturing, are exempt from many federal environmental regulations. In addition, unlike
other extractive industries such as coal mining, there is no comprehensive federal program that regulates hydraulic fracturing.

However, some action is occurring at the federal level. The U.S. Environmental Protection Agency recently completed a draft study on the potential impacts of hydraulic fracturing on drinking water resources. A summary of EPA’s work to improve regulatory clarity on other issues related to hydraulic fracturing is available here.

At the state level, regulation tends to focus on several key areas such as the protection of water quality, leak and spill prevention, chemical disclosure requirements, regulation of waste and wastewater, and well siting restrictions. Over 400 states, cities, and other localities have banned the use of hydraulic fracturing altogether. Other states have prohibited bans on hydraulic fracturing within their states through legislative action, while local bans have been overturned by the courts in other states under the theory that only a state can ban hydraulic fracturing. The degree to which states are regulating hydraulic fracturing also varies widely. While some states have no existing laws regulating hydraulic fracturing, other states have limited regulations, while still others regulate the practice extensively. Regardless, the issue is extremely controversial and legislation, regulation, and litigation surrounding this issue can all be expected to continue. For more information on emerging state and federal legislative and regulatory trends, click here. Education, transparency, and additional research on the environmental impacts of hydraulic fracturing will be key for policymakers to make informed decisions on this issue.

In addition, states are also working to address the nation’s aging natural gas pipeline infrastructure and grapple with concerns over pipeline safety in the wake of recent accidents in Allentown, Pennsylvania and San Bruno, California. Both states and utilities will be looking at innovative solutions to replacing older pipes while continuing to expand natural gas infrastructure across the nation. CSG’s recent article on this issue can be found here.

Electricity Transmission, Ratemaking and Grid Reliability

Recent technologies have resulted in new demands being placed on the nation’s electricity grid. From rooftop solar panels to smart grids that can digitally monitor electricity flow and batteries that store energy for use at more critical times, the ways that we produce and transmit electricity are changing dramatically. These technological advances also are changing the traditional relationships between consumers and utility companies, and policymakers will be involved in resolving some of these issues.

For example, while most states have net metering policies in place, states increasingly are revisiting these policies in an effort to ensure grid reliability is maintained and the costs of maintaining and updating the grid are properly allocated. The North Carolina Clean Energy Technology Center recently reported that 16 states were considering policy actions related to net metering and 15 were considering solar valuation or net metering studies. In total, 40 states and the District of Columbia were considering 87 separate policy actions relating to net metering, rate design, and solar ownership policies. Net metering policies and related policies will continue to remain in the spotlight in 2016.

Technological innovations also are creating new issues involving cybersecurity, especially involving the security of the nation’s electric grid. The Department of Energy’s Office of Electricity Delivery and Energy Reliability notes that the electric grid is one of the most complex and critical pieces of infrastructure in the nation and stakeholders will need to address new and changing issues as the ways in which we use the electric grid expand and change.

States will also address additional policy considerations as the electric grid becomes “smarter.” As technological innovations allow the grid to provide more information to utilities and consumers to
optimize energy usage and more easily integrate renewables into the grid, policymakers will address issues such as encouraging smart grid deployment, data privacy, opt-out policies for consumers that do not want to switch to a more advanced meter, demand response programs, and policy questions relating to net metering and distributed generation programs.

**Water Quality and Quantity**

States continue to deal with a variety of water quality and quantity issues.

Aging wastewater and drinking water treatment infrastructure is an issue for many states, and many lack adequate funding to replace this critical foundation. States will need to develop creative funding solutions and replacement programs to address this critical issue.

Nutrient runoff from farms and associated algal blooms are a major environmental problem in all 50 states, according to the EPA.[14] Algal blooms can not only cause health problems for humans and animals exposed to them, but can hurt local economies by inhibiting fishing, recreation, and other industries that depend on clean water. Major algal blooms can also cause water shortages by contaminating major sources of drinking water, as happened in Ohio recently due to an algal bloom in Lake Erie. In addressing this issue, states may increasingly look to implement programs that reduce nutrient runoff into waters and conduct research to further evaluate risks to public health and the environment.

Stormwater runoff and industrial water pollution are other issues that will continue to impact access to safe drinking water and can contribute to other environmental problems.

Another key issue is the EPA's finalization of its Clean Water Rule[15], which will increase the waters subject to regulation under the Clean Water Act by 3 to 5 percent, according to EPA estimates. The rule is currently tied up in litigation and implementation of the rule has been stayed nationwide. If the rule survives litigation, it would, according to EPA, more clearly define the waters subject to regulation under the Clean Water Act and make the waters subject to regulation easier to determine. The rule does make any new types of waters subject to protection, groundwater and most ditches remain unregulated, and there are no new permitting requirements for agriculture.

In addition, several regions of the country have struggled with water shortages and policymakers will increasingly address, often on a multistate level, how water is used, allocated and discarded. For more information on water scarcity in the states, click here[16]. A recent CSG South article[17] also examines the “Tri-State Water Wars,” a twenty-five year battle over water apportionment in the South. As every state in the continental United States shares water resources with at least one of its neighbors, states will continue to deal with water allocation issues, especially as water shortages become more common.

**The Use of Science-Based Decision Making**

What is “science” and how do legislators, regulators, judges and other officials determine when the science being presented is based on sound scientific principles? As the availability of data increases at a dramatic rate and the platforms by which we can receive data continue to expand, policymakers are bombarded with information often without the time or means to determine its accuracy. The use of science-based decision making will be an essential skill as data becomes more available and immediate.

In 2014, the Council of State Governments published “A State Official’s Guide to Science-Based Decision-Making.” A complete copy of the guide is available here[18].
For more information on these topics and for additional resources on energy and environmental policy, see [www.csg.org/top5in2016](http://www.csg.org/top5in2016). [19]

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