

NOTE:

Below is a five-part blog series, produced by Advanced Energy Economy (www.aee.net), examining some of the key public comments received by the Environmental Protection Agency regarding its EPA—Clean Air Act §111(d) Rules (the “Clean Power Plan”).

-- WIRES



We Read the Comments, So You Don't Have To, Part 1: State and Federal Regulator Associations

Like it?

by [*Frank Swigonski and Caitlin Marquis*](#)

Dec 22, 2014 2:46:00 PM

After the comment period closed on December 1, the EPA received more than 1.6 million comments on the Clean Power Plan from individuals, organizations, and state regulatory bodies. By one estimate it would take [71 people working eight hours a day from now until June to read them all](#). But don't worry—our Carbon Policy Analysts identified the top comments and plowed through them. This is the first of five blog posts presenting AEE's summary of and take on comments from a few key stakeholders: federal and state regulatory organizations, states, ISO/RTOs, utilities, and industry and environmental groups. First up, State and Federal Regulator associations.

The North American Electric Reliability Corp. (NERC) [released a report](#) in early November calling for an analysis by regulators and power companies to determine whether the Clean Power Plan's initial 2020 deadline can be met without threatening reliability. NERC's report questioned whether there would be enough time to build natural gas pipelines and high voltage transmission lines for gas and renewables to replace coal generation. While NERC did not submit its own comments, the NERC report was cited by many organizations in their comments on the Clean Power Plan. AEE's [supplemental comments address](#) this issue by demonstrating the ways that advanced energy technologies can enhance grid reliability while states shift generation to comply with the Proposed Rule.

[FERC, the agency that oversees NERC, wants](#) to participate in the Clean Power Plan process; Commissioner Tony Clark has suggested that the agency could give input through a formal role at a technical conference with EPA. FERC did not submit formal comments to EPA, although FERC Commissioner Philip Moeller [sent a letter to Administrator McCarthy](#) expressing his concerns about the cost and grid reliability impacts of implementing the Clean Power Plan. Former National Association of Regulatory Utility Commissioners (NARUC) president Colette Honorable, who was confirmed by the Senate as a FERC commissioner at the end of the session, expressed some concerns in comments she submitted as Chairman of the Arkansas PSC. Honorable's comments, which were submitted in conjunction with Arkansas DEQ Interim Director J. Ryan Benefield, focused on technical changes to the Proposed Rule to "avoid unreasonable and inequitable results that may include disruptions to electric service" and did not state what role FERC should play in the Clean Power Plan process. Honorable led a stakeholder process in Arkansas in which our partner, the Arkansas Advanced Energy Association, played a key role in communicating the importance of advanced energy in compliance with the Clean Power Plan.

NARUC submitted comments, as did its sister organizations, the National Association of Clean Air Agencies (NACAA) and the National Association of State Energy Officials (NASEO). NARUC passed resolutions calling on EPA to consider each state's unique energy mix and provide flexibility in the Final Rule to accommodate those differences. The group also passed a resolution calling on EPA to allow for inclusion of new nuclear capacity in compliance plans and to remove the generic 6 percent at-risk nuclear component of Building Block 3 of its "best system of emission reduction," or BSER. NASEO focused its comments on making sure states are receiving adequate emissions reduction credit for private efficiency programs and state-facilitated efficiency programs, including efficiency retrofits, combined heat and power installations (CHP), state energy financing programs, and energy performance savings contracts. NACAA, comprised of state regulators tasked with developing Clean Power Plan compliance plans, praised EPA for including regulators in the stakeholder process and developing a rule consistent with the principles developed by the organization. NACAA also asked EPA to provide more resources for planning and implementation moving forward.



We Read the Comments, So You Don't Have To, Part 2: States

Like it?

by [Frank Swigonski and Caitlin Marquis](#)

Jan 5, 2015 3:57:00 PM

After the comment period closed on December 1, the stats were in: EPA received more than 1.6 million comments on the Clean Power Plan from individuals, organizations, and state regulatory bodies. By one estimate it would take [71 people working eight hours a day from now until June](#)

[to read them all](#). But don't worry—our Carbon Policy Analysts identified the top comments and plowed through them. This is the second of five blog posts presenting AEE's summary of and take on comments from a few key stakeholders: [federal and state regulatory organizations](#), states, ISO/RTOs, utilities, and industry and environmental groups. This post covers comments from state utility commissions (PUCs and PSCs), air regulators (DEQs and DEPs), and lawmakers.

While many states, including Washington, Minnesota, and New Hampshire, have praised the Clean Power Plan, others have raised technical and economic concerns with various aspects of the proposal, and 17 attorneys general submitted a joint comment letter outlining numerous legal objections to the Proposed Rule. AEE has not yet analyzed comments from every state. However, we have identified common themes submitted by state agencies in some key states which are watched closely by AEE. Below is a summary of comments from Arkansas, Arizona, Florida, Illinois, Michigan, Nevada, Pennsylvania, Texas and Virginia, focusing on themes found throughout comments from these and other states.

While agencies in all of these states suggested changes to the Proposed Rule, many agreed with the goals of the Clean Power Plan and applauded aspects of its methodology. In comments signed by outgoing Illinois Gov. Pat Quinn, the Illinois EPA and the Illinois Commerce Commission (ICC) voiced support of the Proposed Rule, saying “Illinois is committed to developing and implementing a state plan that achieves the required emission reductions in an economically sound and optimal manner that maintains electric system reliability.” Florida’s DEP also said it shares EPA’s goals, and Virginia’s DEQ said, “The Commonwealth of Virginia supports the promulgation of a carbon rule that achieves a meaningful reduction of CO2 emissions.” Other state agencies also commented on particular sections of the rule that they supported; for example, Michigan (joint PSC, Economic Development Corporation, and DEQ), Nevada (joint DEP, PUC, and the Governor’s Office of Energy), and Virginia DEQ all expressed a preference for the Alternate Renewable Energy Approach for calculating targets under Building Block 3, echoing [comments submitted by AEE](#).

Several states, however, questioned the legality of the Proposed Rule, especially the inclusion of “outside-the-fence” measures in the calculation of the Best System of Emission Reduction (BSER). Some states are even challenging EPA’s authority through ongoing litigation. However, even states that are openly challenging the Proposed Rule also provided substantive technical comments. For example, while Arkansas Gov.-elect Hutchinson argued in his comment letter that EPA had overstepped its legal authority, the detailed and technical comments from Arkansas DEQ/PSC did not address the question of legality. Similarly, in Michigan, where the AG was one of 17 who signed a joint letter questioning EPA’s authority, the state air and utility regulators did not raise legal objections to the overall rule in their joint comments. In Virginia, the SCC objected to the inclusion of “outside-the-fence” measures whereas DEQ did not. While some states had differing reactions from different state agencies, even state agencies that raised legal objections in their comments also included substantive technical comments on the Proposed Rule. This includes the Virginia SCC and both air and utility regulators in Arizona, Pennsylvania, Florida, Nevada, and Texas. Comments from other states such as Illinois accepted “outside-the-fence” measures in the Proposed Rule.

In terms of specific comments on the Proposed Rule, some states expressed concern that the calculated targets do not adequately reward states for leadership in reducing carbon emissions from the electricity system. Officials in Arizona felt that their state was not given credit for its zero-carbon energy, while air and utility regulators in Michigan, Virginia, Texas, Pennsylvania, and Florida each touted their state's progress as a rationale for a lower target relative to other states. However, Illinois EPA/ICC embraced the targets set for the state, expressing confidence that Illinois would continue to be a leader in clean energy. State agencies in all states also provided information on state-specific circumstances, giving detailed information about individual building blocks. For example, the Arkansas DEQ/PSC gave plant-level information about the applicability of EPA's assumptions for heat rate improvements and redispatch under Building Blocks 1 and 2.

In offering suggestions around the timing of the Proposed Rule, some officials took issue with EPA's deadlines for state implementation plans and interim compliance deadlines. For example, Nevada's DEP/PUC cited the state's biennial legislative sessions and the need for multijurisdictional planning as justification for an extension on state plan submission, while further arguing that states should set their own interim goals. Similarly, the Illinois ICC/EPA and Virginia SCC and DEQ said that tight interim targets may disincentivize development of zero-carbon sources due to development lags. Officials in Arkansas, Michigan, Florida, Arizona, and Texas also expressed concerns about interim targets under the Proposed Rule.

Some states expressed concerns that the Proposed Rule would create cost and reliability challenges. The Virginia SCC as well as utility and air regulators in Michigan, Arkansas, Pennsylvania, Florida, Nevada, and Texas all said that the Proposed Rule may create cost and reliability concerns. Illinois EPA/ICC, however, said that EPA's inclusion of renewable energy and energy efficiency will reduce the cost of compliance. Officials in Florida, Nevada, Texas, Michigan, Pennsylvania and Illinois suggested that EPA adopt a reliability safety valve (RSV), as outlined by the ISO/RTO Council, to remedy reliability issues.

Finally, states requested clarity on certain provisions of the Proposed Rule. For example, Illinois EPA/ICC echoed AEE's comments in asking for additional guidance around issues such as out-of-state crediting for renewable energy, early crediting and accounting mechanisms for energy efficiency, and types of energy efficiency projects that will be allowed. Similarly, Michigan PSC/EDC/DEQ requested credit for energy efficiency measures already taken, and argued that out-of-state REC purchases, biomass, and incremental hydropower should all count towards compliance. Arkansas DEQ/PSC also asked for additional guidance on crediting for out-of-state renewable energy, an issue addressed in AEE's supplemental comments ([click here to download](#)).



We Read the Comments, So You Don't Have To, Part 3: ISOs and RTOs

Posted January 16, 2015

by [*Frank Swigonski and Caitlin Marquis*](#)

After the comment period closed on December 1, the stats were in: EPA received more than 4 million comments on the Clean Power Plan from individuals, organizations, and state regulatory bodies. By one estimate, it would take [71 people working eight hours a day from now until June to read them all](#). But don't worry—our Carbon Policy Analysts identified the top comments and plowed through them. This is the third of five blog posts presenting AEE's summary of and take on comments from a few key stakeholders: [federal and state regulatory organizations](#), [states](#), [ISO/RTOs](#), [utilities](#), and [industry and environmental groups](#). Here, we cover the reactions of ISOs and RTOs.

The chief concern of the Independent System Operators (ISOs) and Regional Transmission Organizations (RTOs) is how the Proposed Rule will affect reliability of the grid. These concerns were summarized in comments filed by the ISO/RTO Council (IRC) and signed by all nine ISOs and RTOs in the U.S. IRC proposed that the Final Rule require reliability assessments during the planning and implementation of state plans (SIPs), and that EPA should establish criteria for evaluating how SIPs will impact reliability. IRC also proposed that the Final Rule give more time to build new transmission infrastructure, not only for natural gas as proposed in the NODA, but also for electricity. Most importantly, IRC outlined a detailed proposal for an RSV, which would allow states to exceed their emission targets if reliability were threatened by an unforeseen event such as extreme weather or energy shortage. IRC envisioned a well-defined process through which an ISO, RTO, or entity responsible for reliability would administer an RSV. The RSV process would be overseen by NERC.

Some variant of an RSV was proposed by nearly all of the ISOs/RTOs in their individual comments to EPA. In addition to an RSV, ISOs/RTOs also commented that the interim targets should be eliminated or altered in some way in order to maintain reliability. While all these comments featured reliability as the chief concern, each ISO/RTO also highlighted issues specific to its service territory.

New York ISO (NYISO) pointed out that, while it supported reducing carbon emissions, the Building Block approach was based on flawed assumptions about how NYISO's electricity market operates; in particular, the majority of capacity in New York City is dual-fueled oil and gas generation which cannot be redispatched. Having this capacity, according to NYISO, is essential for ensuring reliability during natural gas shortages. NYISO proposed specific adjustments to all four Building Blocks, as they are applied to New York, and requested a comprehensive review of the Clean Power Plan by NERC.

Other ISOs cited specific reliability constraints in addition to the general ones outlined by IRC's comments. Midcontinent Independent System Operator (MISO), which was the least critical of the Proposed Rule, said that the emission reduction targets are workable. However, it pointed out that MISO's service territory is already facing diminished reserve margins over the next few years because of coal plant closures resulting from EPA's Mercury and Air Toxics Standards (MATS) rule. MISO proposed to allow states to set their own interim targets in order to solve the

reliability issues associated with coal-plant closures. MISO has also reiterated that it is supportive of a regional approach to compliance. In an assessment released prior to its comments, MISO found that a regional compliance plan would reduce costs by \$3 million.

PJM Interconnection (PJM) also found that a regional approach would be more cost-effective in its service territory. In an analysis of the Clean Power Plan released prior to its comments, PJM found that a regional approach to compliance would be 30 percent cheaper than a state-by-state approach. However, its comments addressed certain aspects of the Proposed Rule which PJM believes inadvertently create disincentives to regional coordination. It proposed, for example, that the final rule create incentives for states to coordinate regional EM&V practices. PJM also endorsed the concept of an RSV.

Comments from the Electric Reliability Council of Texas (ERCOT) have not been posted on the federal register as of January 9. However, ERCOT's November 17 analysis of the reliability impacts of the Clean Power Plan has been cited in comments by several utilities and regulators from Texas and other states. ERCOT's primary concern is that the timing and scale of the Proposed Rule would negatively impact reliability given ERCOT's existing transmission infrastructure. According to ERCOT's assessment, the Proposed Rule would result in retirement of half of ERCOT's coal fleet and raise electricity prices for Texas consumers by 20 percent, while also requiring costly regulating services and transmission upgrades that it says are not included in EPA's Regulatory Impact Analysis.

However, a more recent assessment by ERCOT, conducted at the request of the Texas Public Utilities Commission, drew a different conclusion. The December 16 assessment, titled "[Impacts of Environmental Regulations in the ERCOT Region](#)," took a wider scope, examining the effects of the Clean Power Plan in conjunction with other new air regulations such as the Cross-state Air Pollution Rule (CSAPR) and the Mercury Air Toxics Standard (MATS). In this assessment, ERCOT concluded that after these rules take effect the incremental impact on reliability from the Clean Power Plan will be negligible. The report found that Texas would only have to cut an additional 200 MW of coal-fired generation—less than one power plant.

In October, Southwest Power Pool (SPP) filed initial comments highlighting a concern that the timeline of the Proposed Rule would negatively impact reliability. SPP proposed moving the interim target start date from 2020 to "at least 2025." It also proposed a series of technical conferences with FERC and EPA to discuss how Clean Power Plan implementation would affect reliability. In response to the NODA, SPP filed supplemental comments on December 1 claiming that the proposed "glide path" would not solve the reliability issues it outlined in its initial comments and reiterating the need for both an RSV and a delay in the interim goals to 2025.



EPA GHG REGS: We Read the Comments, So You Don't Have To, Part 4: Utilities

Posted by [Frank Swigonski and Caitlin Marquis](#)

Jan 19, 2015 11:29:03 AM

After the comment period closed on December 1, the stats were in: EPA received more than 4 million comments on the Clean Power Plan from individuals, organizations, and state regulatory bodies. It would take [71 people working eight hours a day from now until June to read them all](#). But don't worry—our Carbon Policy Analysts identified the top comments and plowed through them. This is the fourth of five blog posts presenting AEE's summary of and take on comments from a few key stakeholders: federal and state regulatory organizations, states, ISO/RTOs, utilities, and industry and environmental groups. This post covers comments from major utilities and utility groups.

Utilities reacted strongly to EPA's Proposed Rule. The Edison Electric Institute, which represents most of the country's IOUs, filed 400 pages of comments; one of EEI's key messages was that the rule fails to ensure reliable operation, which echos comments from states and ISOs/RTOs. Nearly all of the comments from individual utilities also contain some discussion of the Proposed Rule's impact on reliability.

EEI and many individual utilities suggested that EPA is going beyond its legal authority under Section 111(d) of the Clean Air Act by issuing the Clean Power Plan; despite this concern, most utilities also provided detailed comments identifying specific concerns with the Proposed Rule and suggesting improvements. Entergy went as far as correcting assumptions about individual units. Nearly all of the utilities asserted that the 2020 interim targets are unachievable.

Many utilities also submitted Building Block-specific criticisms, with the Arizona Utilities Group, Duke Energy, Vectren, and the Tennessee Valley Authority expressing concerns that a 6 percent heat rate improvement is not technically feasible. Duke argued that running the entire NGCC fleet at 70 percent capacity factor has not been adequately demonstrated, as required by the Clean Air Act. Several utilities, including MidAmerican/PacificCorp and Vectren, expressed concerns that EPA has not properly considered how the building blocks interact with one another. Vectren also argued that the heat rate improvements in Building Block 1 are undermined by the dispatch changes required in Building Block 2, while MidAmerican/PacificCorp is concerned that the high penetration of renewables would require significant amounts of natural gas generation for firming, which would in turn require greater flexibility in Building Block 2.

Utilities, especially those serving only one or two states, are displeased at the disparity of the goals among states. Entergy feels that the states in its territory are at a disadvantage because the states provide 45 percent of the MISO region's dispatch potential while only making up 24 percent of MISO's load. Xcel charges that the alternative renewables approach exacerbates the disparity even further and has recommended the RPS-based regional calculation approach EPA set forth in the Proposed Rule over the proposed alternatives. NRG suggested that EPA allow states to design their own trajectories to reach the 2030 goals as a way to help deal with the disparity between states.

Utilities are also consistently concerned about the 2012 baseline and receiving credit for efficiency or renewable investments made prior to 2012. Dominion noted that states should receive credit for unit efficiency achieved before 2012, while Southern found the 2012 baseline for heat rates in Block 1 to be "arbitrary." Arizona Public Service called for a 2005 baseline, which is echoed by other utilities. Xcel is particularly concerned that the state of Minnesota is being penalized for its early action, arguing that the state is not getting enough credit for incorporating renewable energy into its generation mix prior to 2012, and that NGCC units that

were developed to replace coal plants should be exempt from Block 2 requirements in the Clean Power Plan.

One utility stands out as an exception among these reactions: Exelon, with its diverse portfolio of nuclear, wind, solar, and natural gas, said that the Clean Power Plan is “legally and scientifically required” and suggested that EPA use the Rule to encourage the expansion of zero-carbon emission technologies. Exelon also encouraged EPA to include emission standards for all electric generating technologies, including oil-fired combustion turbines and simple cycle combustion turbines. Exelon noted that increased reliance on nuclear plants will help keep the grid reliable.

It is noteworthy that some of the utilities asked for greater specificity on which advanced energy technologies can qualify for compliance. Dominion asked EPA to clarify that supply-side efficiency measures, such as voltage optimization, can be used in state compliance plans, and Vectren asked for clarification that savings from appliance efficiency and building codes can be included in compliance plans.



Advanced Energy Perspectives

[EPA GHG REGS: We Read the Comments, So You Don't Have To, Part 5: Industry Groups and Environmental Groups](#)

Posted by [Frank Swigonski](#) and [Caitlin Marquis](#)

Jan 26, 2015 5:41:00 PM



After the comment period closed on December 1, the stats were in: EPA received more than 4 million comments on the Clean Power Plan from individuals, organizations, and state regulatory bodies. It would take [71 people working eight hours a day from now until June to read them all](#). But don't worry—our Carbon Policy Analysts identified the top comments and plowed through them. This is the fifth of five blog posts presenting AEE's summary of and take on comments from a few key stakeholders: federal and state regulatory organizations, states, ISO/RTOs, utilities, and industry and environmental groups. This final post covers comments from industry groups and environmental groups.

In its comments, [AEE emphasized the greater role advanced energy technologies could play](#) in the Final Rule, making suggestions ranging from strengthening the renewable and energy efficiency targets to providing guidance on EM&V to clarifying that a variety of advanced energy technologies will be accepted in state compliance plans. Many industry associations, NGOs and private-sector companies submitted their own sets of comments, some of which took positions that aligned closely with AEE's. While AEE presented a unique perspective in its

comments, a very diverse group of organizations and companies share its positions on many key issues.

In supporting the Clean Power Plan, AEE provided detailed and substantive legal justification for EPA's Proposed Rule and its interpretation of BSER as including "outside-the-fence-line" measures. A variety of other organizations provided support for the "outside-the-fence-line" approach. The American Wind Energy Association (AWEA) and the Solar Energy Industries Association (SEIA) both defended this interpretation. The National Resource Defense Council (NRDC) similarly cited legal precedent in defending the EPA's use of Section 111(d) and its inclusion of "outside-the-fence-line" measures. The Sierra Club explained the justification for EPA's interpretation of BSER succinctly, saying, "...the four building blocks are effectively 'at the unit' measures that reduce affected EGUs' utilization, because these measures are being and can be implemented or sponsored by owners and operators of affected sources." Many other organizations have implicitly accepted EPA's approach to BSER by taking it for granted in their comments.

AEE also argued that advanced energy technologies can provide substantially greater emission reductions than those expected by EPA, offering suggestions for strengthening Building Block 3 and 4. In terms of Building Block 3, AEE was not the only trade association arguing for stronger renewable energy targets; AWEA, SEIA and the Business Council for Sustainable Energy (BCSE) all supported changes to the Proposed Rule that would bring renewable targets into better alignment with current market trends. These trade associations were echoed by many private companies, including several AEE members, which see more potential for renewable energy expansion than is accounted for in the Proposed Rule. Environmental groups also want to see more renewable energy in the Final Rule: NRDC, the Sierra Club, and the Union of Concerned Scientists (UCS) argued for stronger renewable energy and energy efficiency goals.

Similarly, AEE provided a number of comments supporting a strong energy efficiency target under Building Block 4. One of these comments focused on EPA's choice to only acknowledge utility-based energy efficiency programs, excluding components of energy efficiency, including third-party energy service companies (ESCOs), CHP, and building codes. AEE members Johnson Controls and Ingersoll Rand submitted joint comments with other ESCOs explaining the potential role of private-sector performance contracting in delivering energy efficiency savings under the Proposed Rule. The role of ESCOs was also echoed by a diverse group of environmental NGOs, trade associations, and other private companies.

In addition to endorsing more stringent targets under BSER, AEE recommended that EPA explicitly recognize more advanced energy technologies as compliance options in the Final Rule. Several other trade associations, such as BCSE, the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and the Association of Home Appliance Manufacturers (AHAM), also advocated for specific advanced energy technologies to be given recognition as compliance options. The American Gas Association (AGA) asked EPA to affirm the role of gas technologies such as CHP and waste heat recovery.

Several organizations went further than AEE and argued that certain technologies and policies should not only be allowed for compliance, but also be included in BSER, which would ultimately result in more stringent emission reduction targets. ASHRAE and the American Council for an Energy-Efficient Economy (ACEEE) both argued for the inclusion of building codes in the BSER for purposes of setting state targets.

AEE additionally pointed to areas where EPA should provide additional guidance or clarity around issues such as crediting for out-of-state renewable energy and acceptable EM&V methodologies, a suggestion echoed by environmental groups, renewable and energy efficiency trade associations and private companies alike. Environmental groups such as Sierra Club agreed that renewable energy generation should be credited to the state that invests in or incentivizes the development of the renewable energy, rather than the state where the energy is generated. This is in line with the position taken by AEE and the renewable energy industry as represented by SEIA and AWEA. AEE members GE and RES also requested additional clarity on this issue.

Several groups also echoed AEE's comment that EPA should provide guidance around acceptable EM&V measures available to states for verifying emission savings, particularly for energy efficiency. AEE members Johnson Controls, Ingersoll Rand, Opower, and CSG provided expertise from the private sector on this issue by supplying data and suggestions on EM&V for the Final Rule. Finally, a broad spectrum of groups - including AWEA, SEIA, NRDC, BCSE, UCS, and AEE members Opower, RES, and GE - agreed that EPA should provide credit for actions taken prior to 2020, a point AEE argued in its comments.

Reliability has emerged as a major concern of states, utilities and RTOs alike. AEE weighed in on this issue in both sets of comments to EPA, explaining that the Clean Power Plan is an opportunity to modernize the electric power system and providing numerous examples of the benefits that advanced energy technologies can bring to the electric grid in addition to emission reduction. NRDC and Sierra Club reiterated these arguments, with Sierra Club adding that a reliability safety valve is not necessary to ensure continued reliability under the Proposed Rule. SEIA and AWEA also gave examples from the renewable energy industry of how advanced energy technology contributes to grid reliability. Citing a range of studies affirming the role of natural gas in enabling renewable power, the American Natural Gas Alliance commented that natural gas "provides grid operators the freedom to accept capacity from renewable energy sources without putting electric system reliability at risk."

About

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