

Clean Power Plan statement and talking points

Background

EPA released, August 3, 2015, draft final versions of:

- New source performance standards (NSPS) for CO₂ emissions from new generation sources that commence construction after (January 8, 2014);
- Existing source performance standards (ESPS) for CO₂ emissions from sources in existence as of January 8, 2014; and
- NSPS for CO₂ emissions from sources in existence as of January 8, 2014, that undergo an NSR/PSD (new source review/prevention of significant deterioration) major modification.

In addition, EPA will soon release its draft model federal implementation plan (FIP) as a guidance document for States to use in putting together their state implementation plans (SIPs). This draft guidance document will be subject to public comment before it is made final by EPA sometime next year.

Statement

The Federal Environmental Protection Agency published its Clean Power Plan in the Federal Register on Oct. 23, 2015. Basin Electric has been long-committed to the goals of environmentally sound power generation, but EPA's plan is plagued by unintended consequences, unproven assumptions, and extreme complexity. The 2000+ page rule seeks to slash greenhouse emissions by nearly a third in just 15 years, and even if achieved these reductions would not affect global temperatures enough to measure. If allowed to go into effect without review and revision, the rule would drastically increase everyone's energy bills, would sharply limit economic development in several Western states, cost thousands of jobs, and have no meaningful effect on climate change. In short, the costs are real but the benefits are senseless.

The rule would shutter modern and efficient coal plants and substitute wind power and other renewables. That means displacing an abundant, reliable, and increasingly clean fuel with an alternative that has never been attempted, tested or planned on such a massive scale. Basin Electric is a pioneer in renewable energy, and knows first-hand that what EPA proposes is not reasonable. Replacing coal generation with renewable wind and solar energy ignores the reality that the sun does not always shine and the wind does not always blow. Americans would therefore be left without a reliable and continuous source of electric power unless utilities also construct new gas fired power plants to keep energy flowing, resulting in enormous, and entirely unnecessary, investment in billions of dollars of wasted investment to replace cheap and reliable power already in place.

The federal government should not mandate this rule without regard to the energy needs of the public in states that rely on affordable coal power. Closing coal plants for no benefit on climate change, while risking reliability and affordability of the power we all need every day, is irresponsible. Carbon capture technology, battery technologies, and alternative means of generating electricity can and will be developed, but this transition should occur while our

consumer-owned coal generation facilities continue to generate cost-effective electricity over the remainder of their useful lives.

To provide more time to review and improve the rule, we are joining a number of impacted states in their effort to seek a stay of enforcement until the rule can be fully vetted by Congress, the courts, and the American people.

Talking points

Rule absurdities

- This rule will take an energy producing region and turn it into an energy rationing region.
- EPA has clearly targeted coal-producing states, with a heavy focus on the Midwest, where our natural resources are harnessed to help power this nation. We have done so responsibly and respectfully, invested billions to keep our power plants reliable and clean, been stewards of the land and have led innovative projects when no one else was willing to take the risk and invest the money. After all of these efforts, we are being punished. This is incomprehensible.
- The new standards call for the development of massive amounts of wind. The proposed “safety valve” outlined by the rule, which allows for increased coal-based emissions during times of energy need or crisis, is nonsensical in that it suggests that coal-based units can back up wind. The idea that coal power plants valued at more than \$1 billion could be idled, with staffing levels maintained, on the off chance that they might be called upon to run for short periods of time, on a few minute’s notice, is simply ludicrous. This is not possible.
- In absence of a viable peaking source, utilities will be forced to transition from coal to natural gas. However, replacing all coal-based facilities with natural gas is not realistic. Because wind is not an ample resource on the coasts, those states will invest in wind development in other states to meet their compliance requirements. This means their wind projects will be developed in the Midwest - the area hit the hardest by this rule. Furthermore, the impacted Midwest states will also be required to invest in even more wind. It is getting more and more difficult to site a wind project - where will all of these turbines go? Is this a realistic approach? Additionally, we expect to see even more siting issues due to the migratory flyway and U.S. Fish and Wildlife regulations.
- Basin Electric in particular is uniquely hit by this rule. We are one of the only utilities in the country experiencing rapid growth. As the rule is currently written, it does not allow for viable options to meet this growth. As we add more natural gas to serve the growth in the Williston Basin region, we will be forced to back down coal to keep our emissions at bay, therefore taking away needed capacity to serve our region. We are struggling to understand how a system the size of Basin Electric’s can serve a growing membership and still comply with this rule as crafted.
- Rural electric cooperatives were born in rural America to serve rural America. And while that service focus has expanded since the Rural Electrification Act of 1936, Basin Electric’s mission remains the same: to provide those people in America’s heartland cost-effective wholesale energy. The unknown bill handed down by this rule will ultimately be paid by these people at the end of the line. We believe it’s only just that

EPA performs an economic study to determine how much this federal overreach will ultimately increase energy bills in rural America.

- The bulk of our generation was built during the Fuel Use Act of 1978, when we were prohibited from building natural gas baseload facilities. So, we harnessed the lignite in our own backyard. Despite investing billions of dollars to maintain and make these units some of the cleanest in the country, now the EPA is essentially telling us to do the opposite - shut down coal and build wind, which needs to be backed up by peaking generation - gas. This seems uniquely punitive and senseless.
- The North American Electricity Reliability Corporation (NERC), has expressed significant reliability concerns with the rule as initially proposed. While NERC is still exploring the final rule, its initial concern that the Clean Power Program will accelerate the U.S. resource mix transition to natural gas and renewables and “transform grid-level reliability services, diversity, and flexibility,” remains real. Additionally, NERC acknowledged that coal-sourced generation will diminish and serve mainly seasonal peaking purposes (which is simply not feasible) significantly altering its economic viability. Lastly, much more transmission and natural gas pipeline infrastructure will be needed to support new distributed wind and gas generation needs. It only seems logical that EPA should perform a thorough grid reliability study before imposing such landscape-altering regulations.
- U.S. FERC Commissioner Tony Clark has remarked on the rule’s absurdities. In a statement released Aug. 3, he stated, “Whatever EPA believes are the environmental benefits of this regulation, it cannot be said that it will be easy or inexpensive. Such is the stuff of unicorns and leprechauns. ... EPA’s new regulation is undeniably an enormous task for the people who actually plan, finance, construct, operate and regulate this complex US power system. Though EPA officials are writing these regulations, EPA officials are not responsible for ensuring reliable, affordable power. That task falls to America’s utility regulators, engineers, and operators. I am concerned there is an assumption that these dedicated experts will get the job done simply because they always have before. They are the best in the world, but no one should think reliability and affordability are slam dunks, lest we deny the science of electrical engineering. Make no mistake, this work is extraordinarily difficult and it will be even more so should this regulation come to pass.”
- We were leaders in land reclamation, even before laws were required. In fact, Basin Electric proposed model laws to the North Dakota Legislature to protect the air, water and land. The cooperative advocated legislation requiring mined land reclamation and prohibiting dumping fly ash and other industrial wastes into the rivers.
- Through 2014, Basin Electric and subsidiaries had invested more than \$1.5 billion in emissions control technology, and more than \$175 million was spent in 2014 alone to operate and maintain those controls. The annual average in control investments is usually \$155 million.
- We’ve never shied away from being the first to step out and take a risk. As an example, Basin Electric is the first utility in the nation to issue a request for proposals from CO₂removal technology providers. As a result, Basin Electric completed a front-end engineering & design study with HTC Purenergy and Doosan Babcock, exploring the feasibility of capturing CO₂ from its Antelope Valley Station. Unfortunately, Basin Electric

was unable to put together a workable business plan that would allow the Antelope Valley Station project to move forward.

- Through our subsidiary, Dakota Gasification Company, we've been capturing carbon dioxide (CO₂) from the Great Plains Synfuels Plant near Beulah, ND, since 2000. As of Feb. 5, 2015, the plant hit a milestone of 30 million metric tons of CO₂ successfully captured and delivered to customers.
- By year-end 2015, Basin Electric will hold about nearly 900 megawatts of green and renewable generating capacity in its portfolio, including wind, recovered energy generation and distributed generation.
- We've built the nation's largest wind projects solely owned and operated by a cooperative.
- Furthermore, we're always increasing conservation and efficiency measures at our facilities such as more efficient turbines installed in the Laramie River Station's three units near Wheatland, WY, and Leland Olds Station Unit 2 near Stanton, ND. At the Leland Olds Station, variable speed drives are being installed on large motors, increasing efficiency. Additionally, several Basin Electric facilities have geothermal heat pumps.

Basin Electric History

We've always done the right thing ...

*Throughout its history, Basin Electric has forged ahead building and maintaining a secure power supply system, focusing on diversity, stability and innovation. The result: low-cost, environmentally responsible electricity for the membership. As cooperatives in the heartland of the United States, we have always done the right thing. **When the power needs of our consumers outweighed what the federal hydro system could provide, we looked toward developing large baseload power. During that time, the Fuel Use Act of 1978 prohibited the use of natural gas for power generation and encouraged the use of coal.** In need of additional generation to serve our members, we developed coal-based resources.*

A history of doing the right thing ...

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