



December 1, 2014

Environmental Protection Agency
EPA Docket Center (EPA/DC)
Mailcode 28221T
Attention Docket ID No. OAR-2013-0602
1200 Pennsylvania Avenue, NW.
Washington, DC 20460
EPA-HQ-OAR-2013-0602

SUBJECT: U.S. Environmental Protection Agency
Office of Air and Radiation
Submitted By Mail to Docket ID No. EPA-HQ-OAR-2013-0603
Carbon Pollution Emission Guidelines for Existing Stationary Sources:
Electric Utility Generating Units

Dairyland Power Cooperative (Dairyland) appreciates the opportunity to comment on the Greenhouse Gas (GHG) New Source Performance Standards for Existing Power Plants under Section 111(d) of the Clean Air Act (CAA), also known as the Clean Power Plan (CPP), and the Notice of Data Availability (NODA) regarding the CPP. Dairyland supports and agrees with the comments on the CPP and NODA submitted by the National Rural Electric Cooperative Association (NRECA) the Electric Power Research Institute (EPRI), the Class of '85 Regulatory Response Group, and the Wisconsin Utilities Association (WUA), all of which Dairyland is a member and/or signatory to. In addition to any legal arguments opposing the CPP, Dairyland submits the following comments.

Dairyland is concerned the CPP could significantly reduce or effectively end use of coal as a generation resource in the near future. Dairyland has made great strides in our use of renewable energy resources, with over 12 percent of the energy Dairyland generated last year coming from renewables. That being said, our generation system has historically relied primarily on coal to provide affordable and reliable electricity for our members for decades. Our reliance on coal was in response not only to economics and to ensure reliability, but also was in accordance with government regulatory policy, which essentially made coal plants the only viable option for us.

A Touchstone Energy® Cooperative 

Recently, Dairyland made substantial investments in our existing coal fleet to reduce air emissions. These investments were also in accordance with government regulatory policies, but now are potentially significant stranded costs going forward with the CPP. For Dairyland and our members, the CPP will mean a major and expensive transition to other generation resources, while simultaneously paying the debt associated with recently installed pollution control equipment. Dairyland supports a diverse mix of generation fuel sources and technologies which will reduce emissions and believes it is wise to avoid any policy or regulatory mandate which could result in an overdependence on any single fuel source for power generation. Finally, the CPP proposes a timeline that is not affordable, is pragmatically unobtainable and, as the Midcontinent Independent System Operator, Inc. (MISO) explains in its recent comments on the CPP (MISO, November 25, 2014), threatens reliability.

Dairyland Power Cooperative: Who We Are

Dairyland is a not-for-profit, electric generation and transmission cooperative based in La Crosse, Wisconsin, serving almost 600,000 people in Wisconsin, Minnesota, Iowa and Illinois. We serve 25 member cooperatives, each with a seat on our Board of Directors. Each board member is elected by and from the membership of his/her respective cooperative. Dairyland generates the power and transmits it to our member cooperatives, which in turn provide it to their members along their distribution systems. We also provide wholesale electricity to 17 municipalities in our service territory, which encompasses 62 counties covering almost 43,000 square miles. Dairyland employs 536 people.

For our members, affordability and reliability are paramount.

Dairyland currently has 1,236 MW of gross generation, mostly from two coal-fired power plants in western Wisconsin. In addition to the two coal-fired power plants, Dairyland co-owns a third coal plant and has a diverse mix of generation including hydro, simple cycle combustion turbines, wind, biogas, biomass and solar. Dairyland has recently closed five coal generation units and continues to pursue additional renewables. Dairyland has already surpassed Wisconsin state mandates for renewables by almost 25 percent and has more distributed generation in the Badger State than all other utilities, despite serving only 11 percent of the people. In addition, many of our member cooperatives have built community solar gardens for their members and several more are in the planning stages. Dairyland and one of its member cooperatives, Eau Claire Energy Cooperative, were featured guests at the White House Solar Summit in April 2014.

Electric cooperatives like Dairyland and our members serve rural America, where our members typically earn well below the median average income of the states in which they reside. We are concerned that the costs of complying with the new regulations will fall hardest on those who can least afford it—people like our members.

This challenge is amplified for rural electric cooperative members because cooperatives own 43 percent of the nation's power lines but serve only about 11 percent of the population. On average, cooperatives serve seven members per mile of line with per mile of line revenues of \$10,565. This compares to investor owned utilities (IOUs) which have 35 customers per mile of line and per mile of line revenues of \$62,655, and municipal utilities that have 47 customers per mile of line and per mile of line revenues of \$86,302. Rural electric cooperatives have significantly higher costs that come with our vast territories, far fewer consumers to absorb those costs, and much less revenue to cover the expense of such a system.

Financial Impacts

Member-owned cooperatives, such as Dairyland, operate and ensure the financial strength of their organizations in a significantly different manner than IOUs. A typical IOU operates with a business capital structure of 50 percent stockholder equity and 50 percent debt. In most cases, retail rates, capital rates of return and major company decisions for IOU's are governed by state regulation. Generally, an IOU operates in areas where population density is high and the infrastructure to supply customers is condensed in urban landscapes.

In contrast, as a cooperative, Dairyland is structured and operates much differently than IOUs. Dairyland is a not-for-profit, non-stock cooperative that is governed by its members. As a non-stock cooperative, Dairyland cannot access capital for investment by selling shares of stock to the public. Dairyland has no ability to allocate added costs to shareholders. Dairyland's Board of Directors must set rates at a level sufficient to recover all of its costs and to optimize its financial metrics.

Dairyland's member equity constitutes about 15-20 percent (2013: \$215 million) of the capital structure with the remaining 80-85 percent consisting of debt/liabilities (2013: \$1.208 billion). Dairyland's member equity is developed from the annual excess of revenue (mostly member revenue) less expenses and is commonly described as net margins. Increases in Dairyland's equity ratio primarily come from increases in its net margin (net income) after covering Dairyland's cost of providing service. Annually, Dairyland returns a portion of the member equity to the member cooperatives (referred to as capital credits), which member cooperatives often pass through to their members, also in the form of capital credits.

Dairyland and its 25 member cooperatives operate in areas where population density is very low, ranging from four-to-eight customers per mile of line. This requires infrastructure that must cover great distances over varied terrain, drastically increasing costs compared to IOUs. Due to Dairyland's thinly capitalized business structure, operating reserves tend to be low and significant changes (including major industry changes) will place substantial burdens on Dairyland, its member cooperatives and ultimately the end-use consumers.

Because of the rural nature of our service territory, Dairyland qualifies for construction loans from the U.S. Department of Agriculture's Rural Utilities Service (RUS). RUS is a credit agency that finances and administers loan and grant programs which assist rural electric utilities to improve the quality of life and promote economic development in rural America, made under authority granted by the Rural Electrification Act. Dairyland has relied on these low-interest, long-term loans to construct the generation and transmission facilities necessary to provide affordable and reliable power to rural consumers. At present, nearly all loans for Dairyland are made through the Federal Financing Bank and are guaranteed by RUS. They carry a loan term of up to 35 years, depending on the projects, and the remaining useful life of the facility involved.

These loans are made for specific projects. When a loan is approved for a generation project, the term of the loan generally reflects the remaining useful life of the facility. If the generating facility is prematurely retired, as could potentially happen due to the CPP, the debt on those facilities still remains and still requires payment over the remaining life of the loan. The shuttered plant will no longer generate revenue that would be used to pay that plant's debt.

In turn, if Dairyland is forced to significantly reduce or eliminate its coal generation, the cooperative will need to replace those plants with new generation resources. Federal restrictions on the RUS program have made it very difficult to obtain loans or guarantees for new fossil fuel generation, including natural gas units. Thus, in order to finance this new construction, Dairyland would likely need to approach more traditional financing markets; with its thinly capitalized structure, this could prove difficult and expensive to the cooperative, its members and consumers.

Interim Goals: BASE Jump, Not Glide Path

The CPP has final goals in 2030 and interim goals in 2020-2029. Regarding the development of the final goals, we take special exception to the design of the proposed interim goals, which are unreasonable and potentially unattainable. On a very practical level, the interim goals are largely unnecessary given the fact that all electric providers will have to make generation resource decisions during the 2020-29 period in order to meet the 2030 goals. The interim period is sometimes referred to as a glide path, but we see it as more of a BASE jump in which there is a very fast and potentially dangerous fall before things level out into a gentle descent.

Generation Transition: The Reality of Reliability

Complying with the CPP will likely involve decreasing generation from coal-fired power plants while simultaneously increasing the capacity factor for natural gas combined cycle (NGCC) plants to 70 percent or greater. If that is the case, the cost of the CPP could be significant, which makes it the focus of much of the discussion. However, the potential reliability issues of the CPP are being largely overlooked by EPA because the proposal does not consider the coordination of

transmission line and gas pipeline infrastructure needed to make the interim targets achievable. Expanding renewable generation means new transmission lines and building NGCC means new transmission lines *and* new gas lines.

It is safe to assume the CPP will result in the retirement of considerable amounts of coal generation to be replaced with an as-yet-unidentified mixture of renewable and NGCC generation. The CPP's interim goals do not allow the time required to permit and construct the necessary infrastructure for this shift.

To replace coal generation with NGCC requires natural gas pipelines coupled with appropriate transmission power lines. In the majority of instances, siting NGCC at existing coal generation sites is not possible without the development of new or the extension of existing natural gas pipelines. Currently it is potentially feasible to site the occasional new NGCC plant along existing pipelines at the intersections of, or in close proximity to, transmission power lines. As more NGCC comes online to comply with the CPP, these new NGCC facilities will quickly diminish existing pipeline and/or transmission capacity.

Expanding the gas pipelines and/or transmission power line infrastructure to accommodate new renewables and NGCC to replace coal requires extensive amounts of time to study, permit and construct. It often takes providers in our region up to a decade to plan, permit and construct major extra high voltage (EHV) transmission projects, obviously not aligning with the interim time period and barely complying with the final goal.

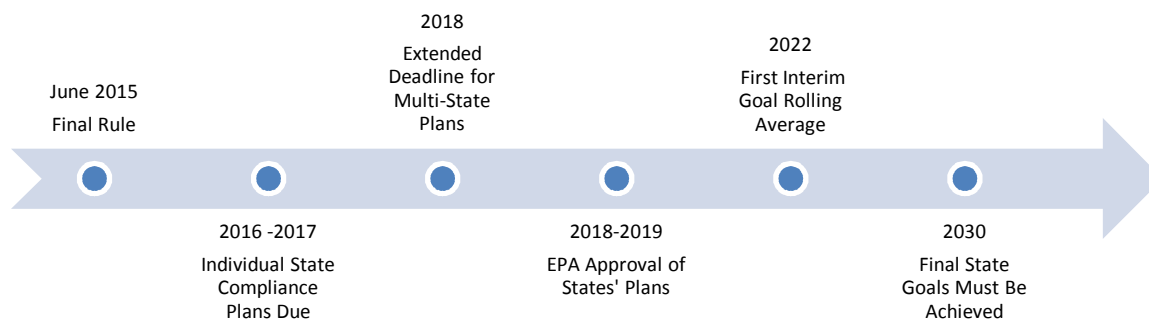
Another reliability concern is that natural gas plants cannot stockpile their fuel—so if pipeline deliveries of natural gas are disrupted, the plants almost instantly stop generating power. In contrast, coal-fired power plants have the capability to stockpile fuel on site—providing reserve fuel supplies in the event of delivery problems. Not only will the increased reliance on natural gas require new pipeline infrastructure, or provision of fuel oil backup, but it may require redundancy in the pipeline infrastructure in order to minimize the risk of natural gas supply disruptions, further driving up costs.

RECOMMENDATION: Reforming and streamlining the permitting process for utility facilities could improve the possibility of at least reaching the final 2030 goal.

Limitations of Renewables

Even though renewable generation has a more flexible siting process than NGCC, the 10-year timeline needed to put transmission in service under present rules does not mesh with the interim target. The predominant renewable generation resources (wind and solar) in Dairyland's service area have their own set of issues, namely, their generation is limited by weather conditions and time of day. Renewable generation is fine at producing energy when available, but it falls short as a reliable capacity resource since energy storage is not commercially viable at scale. The dispatch issue requires us to rely on fossil fuel generation to keep the lights on, in a sense creating duplicative generation schemes. A megawatt (MW) of dispatchable fossil fuel generation has different attributes than a MW of renewable generation for the purpose of reliability, a fact which should receive more consideration by EPA.

The best way to avoid this log jam that could threaten reliability is to eliminate the interim target period. Given that states will submit plans in 2016 or 2017, and the EPA needs an additional year to approve the states' plans, it will likely be 2018-2019 before utilities like Dairyland will even know what they will need to do to comply—leaving a very short amount of time to plan, permit, and construct necessary infrastructure prior to the interim period commencing in 2020. This defies the empirical evidence of 10 years to commission just an EHV transmission line and likely just as long to traverse the same process for a new NGCC power plant with expansion of natural gas infrastructure. Most other utilities will also be engaging in the same process simultaneously, competing for the time and resources of the already overtaxed state and federal agencies that handle these processes, as well as the consultants and contractors who assist on such projects.



To properly plan for and complete the compliance effort required for a rule touching all sectors of the electric grid (i.e., electricity generation, transmission and consumption), Dairyland needs longer than the two-to-four years illustrated above to properly respond to an EPA-approved CPP state plan.

RECOMMENDATION: Eliminate the interim goals and allow states and utilities to focus on meeting the still challenging final goal.

Interstate Renewable Energy

Dairyland is a true leader in renewables. Over 12 percent of the power we provided to consumers last year came from a diverse mix of renewable resources. We have access to hydro, biomass, solar, biogas and wind resources. We are concerned the proposed CPP does not guarantee our considerable efforts to develop renewable resources will be given proper credit. To diversify our generation portfolio and protect our member interests, we utilize renewable resources in all the states we serve. Yet even though we serve members in these states, the current rules do not ensure we will receive credit for these resources simply because our coal plants are all located in Wisconsin.

RECOMMENDATION: The rules should give utilities credit for all their available renewable resources, regardless of the state in which the resource sites are physically located.

Energy Efficiency

Like renewables, Dairyland is a leader in energy efficiency. About half of our Wisconsin cooperatives take part in the state's successful Focus on Energy (FOE) program and Dairyland supports all of our cooperatives in administering efficiency programs, including initiatives not offered by FOE. We have an extensive load management program that provides consumers financial incentives to allow Dairyland to remotely power down major energy using equipment (water heaters, air conditioners, manufacturing equipment, thermal energy units, etc.) to reduce consumption during times of high energy use, like the hottest summer days.

But energy efficiency goals as defined in block four are especially complicated for Dairyland. Some have argued this is “outside the fence,” but for Dairyland, it is actually outside two fences. As described above, Dairyland sells power to our member cooperatives, which are completely separate entities and which then sell it to their members—the actual consumers. Dairyland, as a provider of electric services at wholesale to its member cooperatives, does not interact directly with our consumers in the same way other utilities interact directly with their customers.

There are also logistical challenges, which again are due to our very unique service territory and consumer base. Electric cooperatives' consumers on average are 90 percent or more residential. We have few commercial and industrial customers, which are the prime candidates for making strides in energy efficiency. An IOU could make significant gains in energy efficiency working with a handful of warehouses and factories. But Dairyland and our cooperatives would have to work with hundreds of home owners, farmers and small business owners in our sparsely populated service territory to achieve the same results.

RECOMMENDATION: Energy efficiency goals should account for the unique circumstances of electric generation and transmission cooperatives, which provide electricity to higher percentages of residential consumers.

Carbon Offsets

The original CPP does not allow any offsets to carbon emissions such as foresting or green space accounting. Again, cooperatives like Dairyland cover vast amounts of territory and the ability to engage in offsets would give us a very viable option to reduce our carbon footprint.

RECOMMENDATION: If “outside the fence” alternatives are mandated, let states incorporate carbon offset options in their CPP compliance plans.

Co-ops Are Different: AEPCO's Proposal

On September 29, 2014, Arizona Electric Power Cooperative, Inc. (AEPCO) filed comments on the CPP with EPA. In those comments, AEPCO requested EPA consider creating a separate category for “small public and cooperative electric generating units” within the framework of the larger rule. AEPCO, like Dairyland, is a generation and transmission (G&T) cooperative serving distribution cooperatives.

Dairyland agrees with AEPCO that a small or not-for-profit utility exemption or a provision for less stringent standards or longer compliance schedules should be available to address the unique difficulties such utilities will have complying with the proposed rule, many of which we have highlighted in this document. As noted in the NRECA comments on this proposed rule, Section 111(d) of the CAA instructs EPA to allow states to “take into consideration, among other factors, the remaining useful life of the existing source to which the standard applies.” (42 U.S.C. Section 7411(d)(1)). Furthermore, NRECA noted that EPA regulations (40 C.F.R. 60.24(f)) state that:

States may provide for the application of *less stringent emissions standards or longer compliance schedules* than those otherwise required [under the paragraph setting emissions standards for designated pollutants the Administrator determines may cause or contribute to endangerment of public health], provided that the State demonstrates with respect to such facility (or class of facilities): (1) *Unreasonable cost of control* resulting from plant age, location, or basic process design; (2) *Physical impossibility* of installing necessary control equipment, or (3) *Other factors* specific to the facility (or class of facilities) that make application of a less stringent standard or final compliance time significantly more reasonable.

Electric cooperative consumers, such as the rural electric members served by the member cooperatives of Dairyland, cannot afford the high cost of electricity and capital required if Dairyland must replace its existing coal-fired generation before its remaining useful life and build new transmission and gas pipeline infrastructure to support that new generation. Our unique non-stock, not-for-profit structure does not lend itself to the sort of flexibility the CPP requires.

Small, not-for-profit utilities, in practice, have fewer resources and therefore fewer options to comply with the CPP. A large utility with many power plants will likely have numerous avenues to adapt to and address the CPP rules resulting in a smaller impact on affordability and reliability for their customers. We own two coal plants and a portion of a third plant; we have two natural gas combustion simple-cycle turbines, with operating time restrictions. Therefore, our options for response to the rule are extremely limited.

RECOMMENDATION: EPA should exempt small and/or not-for-profit utilities from the CPP or offer modified compliance pathways taking special regard for the unique challenges of such utilities.

Conclusion

Once again, Dairyland appreciates the opportunity to provide these comments. We are proud of being a progressive utility which has met or exceeded our obligations in the areas of energy efficiency, renewable energy resources and environmental regulation. We feel the EPA made numerous oversights to the realities of our industry and especially to cooperatives' unique role in the industry. We also have an obligation to protect our members' interests by ensuring their power is as affordable and reliable as possible and that they are not unduly harmed by government actions.

In summary, our recommendations, as noted above, are:

- Eliminate the interim goals and allow states and utilities to focus on meeting the still challenging final goal.
- The rules should give utilities credit for all their available renewable resources, regardless of the state in which the resource sites are physically located.
- Energy efficiency goals should account for the unique circumstances of electric generation and transmission cooperatives, which provide electricity to higher percentages of residential consumers.
- Let states incorporate carbon offset options in the CPP compliance plans.
- EPA should exempt small and/or not-for-profit utilities from the CPP or offer modified compliance pathways taking special regard for the unique challenges of such utilities.