

**Federal Plan Requirements for Greenhouse Gas Emissions From Electric Utility
Generating Units Constructed on or Before January 8, 2014; Model Trading Rules;
Amendments to Framework Regulations**

Proposed Rule

80 Fed. Reg. 64,966 (Oct. 23, 2015)

EPA-HQ-OAR-2015-0199

**COMMENTS OF ELECTRICITY CONSUMERS RESOURCE COUNCIL (“ELCON”),
AMERICAN CHEMISTRY COUNCIL (“ACC”), AND
COUNCIL OF INDUSTRIAL BOILER OWNERS (“CIBO”)**

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INTRODUCTION

The Electricity Consumers Resource Council (“ELCON”), the American Chemistry Council (“ACC”), and the Council of Industrial Boiler Owners (“CIBO”) appreciate the opportunity to submit the following comments on the Environmental Protection Agency’s (“EPA’s”) proposed Federal Plan Requirements for Greenhouse Gas Emissions From Electric Utility Generating Units Constructed on or Before January 8, 2014; Model Trading Rules; Amendments to Framework Regulations Docket ID No. EPA–HQ–OAR–2015–0199, 80 Fed. Reg. 64,966 (Oct. 23, 2015) (“Proposed FIP”).

ELCON is the national association representing large industrial consumers of electricity. ELCON member companies produce a wide range of products from virtually every segment of the manufacturing community. ELCON members operate hundreds of major facilities and are consumers of electricity in the footprints of all organized markets and other regions throughout the United States. Reliable and reasonably priced electricity supply is essential to our members’ operations.

ACC represents the leading companies engaged in the business of chemistry. ACC members apply the science of chemistry to make innovative products and services that make people’s lives better, healthier and safer. ACC is committed to improved environmental, health and safety performance through Responsible Care® common sense advocacy designed to address major public policy issues, and health and environmental research product testing. The business of chemistry is a \$812 billion enterprise and a key element of the nation’s economy.

CIBO is a trade association of industrial boiler owners, architect-engineers, related equipment manufacturers, and University affiliates representing 20 major industrial sectors. CIBO members have facilities in every region of the country and a representative distribution of almost every type of boiler and fuel combination currently in operation. CIBO was formed in 1978 to promote the exchange of information about issues affecting industrial boilers, including energy and environmental equipment, technology, operations, policies, laws and regulations.

ELCON, ACC and CIBO are signatories to and fully support the comments of the coalition of Trade Associations led by the National Association of Manufacturer and the U.S. Chamber (the “Associations”) and incorporates those comments herein. In particular:

- EPA does not have the legal authority to mandate beyond the source compliance options;
- EPA must allow for broadly inclusive FIP and model trading rules that incorporate all CO₂ emission reducing technologies and all sources of energy that can contribute to the achievement of EPA’s emission reduction requirements in order to maximize flexibility options for states and ensure that states and affected EGUs can meet EPA’s emissions reduction goals in the most efficient and cost-effective manner;
- EPA should defer any final implementation decisions until after a legal obligation arises due to the failure of a State to submit a satisfactory implementation plan

and, even at that point, must not apply a one-size fits all approach that may disadvantage one state relative to another;

- EPA must include a reliability safety valve;
- EPA must ensure that trade-exposed industries are not unduly impacted by a federal implementation plan (“FIP”);
- EPA must provide sufficient lead time for regulated entities to implement the necessary programs to meet EPA’s emission reduction goals consistent with the state plans; and
- EPA must revise the scope of the Clean Energy Incentive Program (“CEIP”) by providing additional flexibility in complying with the Clean Power Plan’s emission reduction goals.

In these comments, ELCON, ACC and CIBO expand upon two points of particular importance to their members. First, in order to recognize all CO₂ emission reducing technologies and all sources of energy that can contribute to the achievement of EPA’s emission reduction requirements, thereby maximizing flexibility, efficiency and cost-effectiveness, the allowance allocations in the FIP and model trading rules must give equal recognition to voluntary and independently implemented Industrial Energy Efficiency (“IEE”), Combined Heat and Power (“CHP”), and Waste Heat and Power (“WHP:). Second, the implementation plans must recognize that international leakage is an issue of critical importance and that it will not be resolved by the recently adopted Paris Agreement under the United Nations Framework Convention on Climate Change (the “Paris Agreement”).

I. EPA Must Revise the Proposed FIP and Model Trading Rules to Give Full Recognition to Industrial Energy Efficiency, Combined Heat and Power, and Waste Heat and Power

It is essential that EPA maximize flexibility options for states and ensure that states and affected EGUs can meet EPA’s emissions reduction goals in the most efficient and cost-effective manner. Thus, EPA must allow for a broadly inclusive FIP and model trading rules that incorporate all CO₂ emission reducing technologies and all sources of energy that can contribute to the achievement of EPA’s emission reduction requirements.

In the final Clean Power Plan, EPA recognized the benefits of certain technologies and emission sources that it inexplicably then proposes to exclude as compliance options in the proposed FIP. In particular, EPA emphasizes that there are a number of CO₂ reducing technologies and sources of energy that were not included in EPA’s BSER analysis, but could still be used to achieve EPA’s emission reduction goals. 80 Fed. Reg. at 64,756-58 (discussing demand-side energy efficiency, new or uprated nuclear energy, offshore wind, distributed solar, fuel cells, biomass energy, combined heat and power, and reductions in transmission and distribution line losses). In the Proposed FIP, however, EPA arbitrarily limits the types of CO₂

reducing technologies that could be used for achieving EPA's emission reduction goals. For example under the rate-based plan, EPA proposes to limit ERC-eligible renewable energy sources to wind, solar, geothermal power, and hydropower as well as new and uprated nuclear power. 80 Fed. Reg. at 64,994. Likewise, in the mass-based plan, EPA proposes to limit eligibility for renewable energy set-asides to on-shore utility scale wind, solar, geothermal power, or utility scale hydropower. *Id.* at 65,068. EPA offers no explanation to justify these limitations. To avoid confusion and promote the full suite of potential compliance options, EPA must issue guidance in the interim expressing its intent to expand the final FIP and model trading rule to broadly include, at a minimum, all CO₂ emission reduction technologies and energy sources included in the final Clean Power Plan.

Three important CO₂ emission reduction technologies are given short shrift in either the model trading rules and/or proposed FIP: Industrial Energy Efficiency ("IEE") measures that are implemented independent of utility involvement; Combined Heat and Power ("CHP"); and Waste Heat and Power ("WHP"). EPA has amply recognized the benefits of CHP and WHP in the final Clean Power Plan.¹ While EPA is proposing with respect to the model rate-based trading rule that CHP and WHP are eligible to generate ERCs, the agency seeks comment on whether CHP and WHP should be identified as an eligible measure under a FIP.² EPA also seeks comment on the proposed requirements for the issuance of ERCs to CHP.³

If EPA wants to maximize the value of all cost effective emission reduction technologies and eliminate any uncertainty that might discourage state adoption, it should expressly include CHP and WHP as presumptively approvable in the model rate-based trading rule and in any FIP it develops. EPA should also provide states with acceptable options for allowance distribution to promote IEE, CHP and WHP under the model mass-based trading rule and any FIP.

For example, in regard to the rate-based method in the final Clean Power Plan, EPA appropriately recognized that non-affected CHP units can generate ERCs.⁴ EPA also acknowledges the need to provide training to help states include CHP in their plans,⁵ and the final Clean Power Plan rule seeks to provide some of this initial guidance. The proposed model rate-based trading rule also includes an accounting method for determining the ERCs from non-affected CHP units that could be a presumptively approvable accounting approach. However, ELCON, ACC and CIBO believe that the approach in the proposed FIP significantly undervalues CHP's emission benefits.

As EPA recognizes in the final Clean Power Plan, the accounting approach must both

¹ 80 Fed. Reg. at 64902-03.

² 80 Fed. Reg. at 64994, 64996. WHP units that meet the eligibility criteria under Section VIII.K.1 of the preamble to the Clean Power Plan may be used to adjust the CO₂ emission rate of an affected EGU.

³ *Id.*

⁴ 80 Fed. Reg. at 64950.

⁵ 80 Fed. Reg. at 64705.

“take into account the fact that a non-affected CHP unit is a fossil fuel-fired emission source, as well as the fact that the incremental CO₂ emissions related to electrical generation from a non-affected CHP unit are typically very low.”⁶ We concur with EPA that it is appropriate to net out the incremental emissions associated with CHP units before ascribing ERCs to the output. This approach to calculating CHP benefits is an example of the avoided emissions approach.

The methodology set out in the proposed FIP, however, is flawed. It is not based on actual emissions data but rather assumes that CHP output always displaces natural gas generation. It also compares the CHP output to future emission target rates, rather than real-time emissions rates.

It is not appropriate to base the netting of the electrical output from a biomass or natural gas CHP system on the compliance goals for stationary combustion turbines. Instead, EPA should compare the emissions from the non-affected EGUs to actual emissions data from actual affected EGUs from the previous calendar year. Three alternative approaches are available to EPA to consider and each would establish a reference rate that more accurately accounts for the actual emission reductions from CHP and increase the value of ERCs for CHP over the proposed rule’s approach. EPA could give states the option of using one of the first two approaches below, or suggest that all states use the third approach:⁷

1. Use the average affected EGU emission rate for EPA’s Emissions & Generation Resource Integrated Database (eGRID) subregion in which the CHP project is located;
2. Use the average affected EGU emission rate for each state; or
3. Use a uniform national reference emission rate.

There are three benefits to using either of these three options. First, using any of these reference rates would allow the calculated ERCs to reflect the actual emissions-free power generated by a CHP unit, either on a sub-regional, state or national basis. Second, the EGU emission rates would also be consistent with the approach recommended by the EPA CHP Partnership for calculating avoided CO₂ emissions from CHP.⁸ Finally, these reference rates provide CHP projects with incentives commensurate with actual emissions benefits.

In addition to the changes to the method for estimating the emissions benefits of CHP, ELCON, ACC and CIBO strongly recommend that EPA clarify how avoided line losses are included in the calculation of ERCs for all non-affected CHP. The proposed model trading rules state that only CHP units smaller than 1 MW can include T&D losses in the calculation of

⁶ 80 Fed. Reg. at 64902.

⁷ See Comments filed in this docket by the Alliance for Industrial Efficiency for greater details on this proposal.

⁸ Combined Heat and Power Partnership, Fuel and Carbon Dioxide Emissions Savings Calculation Methodology for Combined Heat and Power Systems, February 2015.

ERCs.⁹ Most industrial CHP applications greatly exceed the 1 MW threshold and invariably displace a significant portion of the load otherwise served by a local utility, ISO or RTO, and delivered by the local transmission provider. The fact that this results in significant avoided line losses at transmission voltages should be obvious and therefore given full recognition in the calculation of ERCs.

In regard to the model mass-based trading rule and the application of the mass-based method in any FIP, EPA is seeking comment on the distribution of allowances to demand-side energy efficiency (which presumably includes IEE) and CHP.¹⁰ ELCON, ACC and CIBO recommend that EPA provide a menu of options for allowance distribution in the model trading rules and any mass-based FIP to encourage states to adopt IEE, CHP, and WHP projects. While we recognize that allowance distribution decisions are appropriately left to the states, EPA guidance and encouragement will give states additional confidence of the efficacy of these measures. Three allowance distribution options should be allowed:¹¹

1. *Allowance Auctions*: Establish an allowance auction mechanism in the model rule and recommendations for how to reinvest auction revenues in demand-side energy efficiency including IEE. Provide guidance on how states can implement an auction to maximize incentives for IEE, CHP and WHP.
2. *Direct Allocation*: Establish output-based direct allocation mechanisms to support new, eligible IEE, CHP and WHP projects (*i.e.*, those installed after 2012). This option is especially important for promoting a broader range of compliance options and independent investments that are not associated with utility-sponsored programs.¹² Utility-sponsored programs rarely provide effective incentives to CHP or WHP projects.
3. *Set-Asides*: Establish multiple options for allowance set-asides in the model trading rules. This would include separate set-asides of allowances for IEE, CHP and WHP, and include these technologies as eligible measures for allowance set-asides used to address leakage from new sources. Under a mass-based approach, IEE automatically is credited towards compliance and states can use an unlimited amount to achieve the state's goals. The set-aside should be sized in proportion to the potential for IEE, CHP and WHP in the state. The set-asides for IEE, CHP and WHP should be separate and distinct from the set-aside for renewables.

⁹ 80 Fed. Reg. at 65072.

¹⁰ 80 Fed. Reg. at 65022.

¹¹ See Comments filed in this docket by the Alliance for Industrial Efficiency for further details on each option.

¹² Independent investments in energy efficiency are typically more cost-effective for U.S. manufacturers because manufacturers have lower capital costs than “borrowing” money from utilities because utilities are often “made whole” with lost revenue recovery or decoupling mechanisms that increase costs to utility ratepayers. See Financing Clean Power Investments of Large Industrial Customers: What is the Role of Utilities? A Policy Brief of the ELCON, ACC and CIBO Resource Council, November 2010.

EPA should provide guidance to states on how to calculate the emission reduction benefits of CHP and WHP in the model mass-based trading rule or any FIP that is consistent with the guidance it provides for calculating ERCs for CHP under a rate-based approach as corrected by our recommendation above. This guidance might also include allowing states the option of awarding allowances to IEE, CHP and WHP projects from the proposed renewable energy set-aside to address leakages to new sources. For this purpose, EPA should consider enlarging the set-asides for each of IEE, CHP and WHP from 5% to 10%, and as noted above they should be separate and distinct the set-aside for renewables.

II. EPA Must Ensure that Trade-Exposed Industries Are Not Unduly Impacted by a FIP

As discussed in the Associations' comments, the Clean Power Plan will have a significant impact on energy intensive industries that face stiff overseas competition. EPA's emission reduction goals would be thwarted if production (and therefore its associated emissions) were simply shifted to overseas competitors or if entire U.S. businesses were driven overseas. Any FIP that produces such a shift in production would not produce a net reduction in emissions due to international leakage.

Thus, EPA and the States must ensure that any adverse effects on trade exposed domestic industrial sectors are manageable or are mitigated. As part of this analysis, it must be recognized that the recently adopted Paris Agreement does not by its terms adequately address the potential for international leakage. Under the Paris Agreement, each country would implement its own "nationally determined contribution," the terms of which will vary considerably from country to country. *E.g.*, Paris Agreement Art. 2 Sec. 2, Art. 4 Sec. 3 (recognition of "different national circumstances"). The Paris Agreement also specifically recognizes that developing countries have additional flexibility respecting emissions. *E.g.*, Paris Agreement Art. 4 Sec. 1 (recognizing that emissions may peak later in developing countries; Art. 4 Sec. 4 (developed countries are to "take the lead" whereas developing countries "are encouraged to move over time"). To maintain the competitiveness of U.S. manufacturers and to mitigate international leakage, EPA should provide allowance value and ERCs to certain industrial consumers to offset the cost of higher electricity rates.

CONCLUSION

For the reasons described above, EPA should revisit and revise the proposed model trading rules and FIP to allow States and regulated entities the maximum flexibility to achieve emissions reductions in an efficient and cost effective manner.

Respectfully submitted,

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