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EPA Hearing on Carbon Pollution Standards for Existing Power Plants
Washington, DC, July 30, 2014

Thank you for the opportunity to testify today. I am speaking on behalf of the Alliance for Industrial Efficiency, a diverse coalition with representatives from the business, environmental, labor and contractor communities. We are committed to enhancing manufacturing competitiveness, reducing emissions, and creating jobs through the use of combined heat and power (CHP) and waste heat to power.

My comments today make two key points:

- 1. The Alliance commends EPA for proposing a flexible rule that allows power plants to take advantage of the cheapest ways to reduce emissions; and
- 2. EPA needs to strengthen the rule to ensure CHP and WHP are adequately treated.
- I. <u>The Alliance Commends EPA for Allowing Power Plants to Take Advantage of Low-Cost GHG Reductions from CHP</u>

The proposed rule allows for affected power plants to look outside the four walls of the facility to find the lowest cost source of emission reductions. We commend EPA for allowing this flexibility. Without it, CHP and WHP would not be considered as compliance tools by most power plants. While few CHP systems will be directly covered by the rule, CHP systems at hospitals, universities and factories offer a proven, cost-effective way to reduce emissions and should be encouraged.

EPA is right to allow states to adopt plans that advance CHP and WHP because they offer many benefits:

 Environmental. CHP and WHP allow their host facilities to produce more useful heat and electricity with less fuel. And because these facilities combust less fuel, they produce fewer emissions. According to EPA, CHP systems produce roughly half the GHG emissions of the separate generation of heat and power.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> U.S. Environmental Protection Agency, Combined Heat and Power Partnership, "Environmental Benefits" (<a href="http://www.epa.gov/chp/basic/environmental.html">http://www.epa.gov/chp/basic/environmental.html</a>) (visited July 14, 2014).

- Economic. Because host facilities are more efficient, they have to purchase less fuel and electricity. This makes them more competitive. Under one scenario, DOE projects that full-scale deployment of CHP could support 1-million new jobs.<sup>2</sup>
- Reliability. CHP systems can operate independent of the grid. This relieves the burden on our transmission and distribution system and means that systems are up and running during a power outage. After Superstorm Sandy, more than eightmillion people along the eastern seaboard lost power. But hospitals, universities and manufacturing facilities with CHP kept the lights on.<sup>3</sup>

Moreover, the potential deployment of CHP and WHP is large – so these benefits will be realized at scale. Recent analysis by the American Council for an Energy-Efficient Economy<sup>4</sup> and Center for Clean Air Policy<sup>5</sup> found that the rule could support 10 to 20 gigawatts of new CHP – the equivalent of 20 to 40 conventional power plants. As part of an overall strategy on energy efficiency, ACEEE's analysis finds that CHP helps create more than 600,000 new jobs and save consumers more than \$48 million. ACEEE further finds that these investments will yield a return of as much as 400 percent, making this an unbeatable investment. Much of the growth associated with CHP deployment would occur in manufacturing states in the Midwest.

II. EPA should strengthen the rule in 5 key ways:

To take full advantage of these benefits, EPA should strengthen the rule in five key ways.

- 1. Send a Clear Signal about CHP. The Proposed Rule acknowledges some of CHP's benefits, but needs to clarify that in qualifies as an efficiency resource. It is not clear that references to energy efficiency include CHP and WHP. CHP is mentioned once as an example of "demand-side energy efficiency" and WHP is not mentioned at all. Explicit recognition of CHP and WHP will send a signal to states that they should include these technologies in their compliance plans. Energy efficiency is the cheapest, cleanest and most readily available energy resource. The more states rely on energy efficiency, the less they will need to undertake more burdensome compliance measures (like fuel switching).
- 2. EPA should provide a full (100 percent) thermal credit. One of the key benefits of CHP is that it produces heat and electricity from a single fuel source. While most CHP systems are not directly covered by the rule (because they produce less than 25 MW

centrally generated power and thus relieve[s] pressure on the grid.")

<sup>4</sup> Sarah Hayes et al., ACEEE, April 29, 2014, "Change Is in the Air: How States Can Harness Energy

Efficiency to Strengthen the Economy and Reduce Pollution"

(http://aceee.org/research-report/e1401).

<sup>&</sup>lt;sup>2</sup> U.S. Dep't of Energy, Oak Ridge National Laboratory, 2008, "Combined Heat and Power: Effective Energy Solutions for a Sustainable Future," (http://info.ornl.gov/sites/publications/files/Pub13655.pdf). See, e.g., U.S. EPA, June 18, 2014, 79 Fed. Reg, 34830, 34899, "Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units" (noting that CHP "reduce[s] demand for

<sup>&</sup>lt;sup>5</sup> Stacey Davis and Tom Simchak, Center for Clean Air Policy, May 2014, "Expanding the Solution Set: How Combined Heat and Power Can Support Compliance with 111(d) Standards for Existing Power Plants" (http://ccap.org/resource/expanding-the-solution-set-how-combined-heat-and-power-can-supportcompliance-with-111d-standards-for-existing-power-plants/).

and sell less than 25 MW and less than one-third of their power to the grid), where units are covered, the proposed rule does not count all of the thermal energy they produce. If EPA wants to encourage CHP deployment, it should recognize all of the thermal output from a CHP system. States are likely to adopt the approach that EPA applies in the rule when they incorporate CHP into their compliance plans.

- **3. Full Line-Loss Credit.** Another benefit of CHP is that it reduces losses associated with delivering electricity from a central power plant. The proposed rule provides a five-percent line-loss credit for covered CHP systems. In fact, avoided losses are much higher. The rule needs to fully credit these savings. This, too, sends an important signal to states.
- 4. Provide Assurances. By installing CHP systems, manufacturers, hospitals and universities can help reduce emissions throughout the airshed. But because these facilities will now be producing electricity, emissions at these places will modestly increase. EPA needs to assure potential CHP hosts that they will not be penalized in the future for taking early action.
- 5. EPA-State Templates. The proposed rule sets initial targets, but gives states flexibility to develop their own compliance plans. States will need templates to help them figure out how to include CHP in their plans. If EPA fails to provide these resources, then the jobs and enhanced competitiveness of CHP will be lost.

In sum, CHP and WHP cut emissions, create jobs, and save money. EPA should clarify that the rule encourages their use and provide tools to the states to ensure that these technologies are advanced in state plans.

We look forward to working with you throughout the rulemaking process.