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**BY EMAIL**

U.S. Environmental Protection Agency  
EPA Docket Center (EPA/DC)  
EPA WJC West Building, Room 3334  
1301 Constitution Ave., NW  
Washington, DC

**Re: Advanced Energy Management Alliance (“AEMA”) Comments in  
Advanced Notice of Proposed Rulemaking (“ANPRM”), Docket ID No. EPA-HQ-  
OAR-2017-0545**

Dear Administrator Pruitt:

The Advanced Energy Management Alliance (“AEMA”)<sup>1</sup> appreciates the opportunity to submit comments to the United States Environmental Protection Agency (“EPA”) regarding EPA’s Advanced Notice of Proposed Rulemaking (“ANPRM”), Docket ID No. EPA-HQ-OAR-2017-0545, State Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units.

AEMA is a trade association under Section 501(c)(6) of the Federal tax code whose members include national distributed energy resource companies and advanced energy management service and technology providers, including demand response (“DR”) providers, as well as some of the nation’s largest demand response and

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<sup>1</sup> See AEMA website for additional information: <http://aem-alliance.org>

distributed energy consumers. AEMA members support the incorporation of distributed energy resources (“DER” or “DERs”), including advanced energy management solutions, to achieve electricity cost savings for consumers, contribute to reliability and resilience, and provide sustainable solutions for a modern electric grid. This filing represents the collective consensus of AEMA as an organization, although it does not necessarily represent the individual positions of the full diversity of AEMA member companies.

On November 26, 2014, AEMA filed comments in the Proposed Rule of Carbon Pollution Emission Guidelines for Existing Station Sources: Electric Utility Generating Units. We resubmitted those comments on January 8, 2018 in response to Docket ID No. EPA-HQ-OAR-2017-0355. Our focus was on the significant carbon reduction benefits from demand response applications.<sup>2</sup> Our analysis showed that these carbon reductions from demand response would be quantifiable, verifiable, and permanent. We recommended that demand response be included as an option for every state’s greenhouse gas (“GHG”) reduction strategy. As a result of our comments, the Final Rule included demand response within its building block structure as a key component for states to reduce GHG emissions while increasing reliability.

In this filing, AEMA will reassert that DR and DER are critical tools to give state regulators and utilities the flexibility to manage power generation from existing electric utility generating units. AEMA believes in competitive markets to deploy cost-effective, lower emissions solutions, but also recognizes the need for federal and state policies that create goals for desired outcomes, which can have public health and safety benefits. We

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<sup>2</sup> At that time, our organization was singularly focused on demand response; in 2016 AEMA’s mission expanded to encompass distributed energy resources more holistically.

will thus address each of the categories outlined by EPA in the ANPRM.

## **I. Roles and Responsibilities of States and EPA in Regulating Existing EGUs for GHGs**

*AEMA believes that states and regions should have the flexibility to identify solutions that work within their resource mix and to determine the best portfolio approach and integrated plan to reduce GHG emissions.* States should give consideration to the opportunities for heat rate improvement in the existing fleet, combined with investments in DR, DER, and advanced energy management. With guidance from EPA, states should be able to perform assessments and develop plans to reduce greenhouse emissions based upon unit capabilities that are aggregated to regional improvement plans. As one example, California undertook an analysis of demand response potential in an effort to quantify how demand response could serve as a GHG mitigation tool.<sup>3</sup> In fact, California identified DR as one of the key tools to achieving its state GHG reduction goal<sup>4</sup>; California's Action Plan for Distributed Energy Resources stresses the importance of DER to reaching the state's GHG emission reduction goals.<sup>5</sup> As another example, a study by Rutgers University identified policies for DR and DER that would enable New

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<sup>3</sup> *2025 California Demand Response Potential Study – Charting California's Demand Response Future: Final Report on Phase 2 Results*, March 2017. <https://eta.lbl.gov/publications/2025-california-demand-response>

<sup>4</sup> *Achieving California's 2030 Renewable Portfolio Standard and Electricity Sector Greenhouse Gas Emission Reduction Target*, March 2017. <https://www.ioes.ucla.edu/wp-content/uploads/Energy-Paper-Web-Version.pdf>

<sup>5</sup> *California's Distributed Energy Resources Action Plan: Aligning Vision and Action*, May 3, 2017. [http://www.cpuc.ca.gov/uploadedfiles/cpuc\\_public\\_website/content/about\\_us/organization/commissioners/michael\\_j\\_picker/der%20action%20plan%20\(5-3-17\)%20clean.pdf](http://www.cpuc.ca.gov/uploadedfiles/cpuc_public_website/content/about_us/organization/commissioners/michael_j_picker/der%20action%20plan%20(5-3-17)%20clean.pdf)

Jersey to achieve GHG reductions.<sup>6</sup> In fact, dozens of states developed Climate Action Plans that could be put into action, using DR and DER to mitigate GHG in their states.<sup>7</sup> We are convinced that, if EPA can provide technical assistance and overarching guidance, states can readily develop and/or complete development (only seven states have no action plan to address climate change<sup>8</sup>) of their plans to reduce GHG emissions using DER and DR as tools.

## II. Application of CAA on Source-Specific Level

Power plants do not exist in isolation from the rest of the grid; from generation to transmission and distribution to load, the grid is a system to which consumers and resources alike can contribute. While the ANPRM is explicit in looking at technologies and applications “inside the fence”, *AEMA believes that the electricity system must be seen as such—a system--and that considering solutions outside the fence line can be of significant benefit to existing power plants.* An NREL study concluded that “the enhanced operational flexibility options tend to increase cycling at California gas generators; storage and demand response can help reduce emissions and curtailment while reducing cycling.”<sup>9</sup> AEMA, thus, asserts that it should be within scope to consider “outside the fence” applications that contribute to “inside the fence” plant efficiency.

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<sup>6</sup> *An Examination of Policy Options for Achieving Greenhouse Gas Emission Reductions in New Jersey*, September 2017. <http://climatechange.rutgers.edu/docman-list/special-reports/589-njghg-final-9-21/file>

<sup>7</sup> <https://www.c2es.org/document/climate-action-plans/>

<sup>8</sup> [http://www.climatestrategies.us/policy\\_tracker/state](http://www.climatestrategies.us/policy_tracker/state)

<sup>9</sup> *Low Carbon Grid Study: Analysis of a 50% Emission Reduction in California*, January 2016, page vii. <https://www.nrel.gov/docs/fy16osti/64884.pdf>

### III. Defining BSER and Developing GHG Emission Guidelines

AEMA believes that regional planning can improve the economics and provide achievable solutions for generating units and that limited solutions to technology-based approaches can be counterproductive. Rather, *the rule should look at attributes and characteristics of the desired system to value those services from DER and develop an appropriate plan.* DER and DR can offset emissions of power plants beyond what simply add-on equipment can accomplish.

DR contributes to a cleaner electric grid, which is increasingly a goal of state policy. By meeting a system's peak capacity needs, DR avoids the need for markets to procure and operate fossil fuel fired generation. Navigant Consulting modeled the effect of peak load reductions from DR on the carbon emissions of PJM, MISO, and ERCOT and found that it could directly reduce emissions by more than 1% in PJM by providing peak load reductions and ancillary services. As DR increasingly plays a real-time role in helping to balance and integrate renewable resources, Navigant found that it could further reduce emissions by 10% or more by reducing renewable curtailments and quickening the resource mix transition from fossil fuels to renewable power.<sup>10</sup> With DR leading to the expansion of DER deployment—including, but not limited to, rooftop solar, combined heat and power (“CHP”), energy storage, and energy efficiency--AEMA believes that tapping into these consumer-based resources will compound GHG reductions in the system.

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<sup>10</sup> [http://www.ieca-us.com/wp-content/uploads/Carbon-Dioxide-Reductions-from-Demand-Response\\_Navigant\\_11.25.14.pdf](http://www.ieca-us.com/wp-content/uploads/Carbon-Dioxide-Reductions-from-Demand-Response_Navigant_11.25.14.pdf)

#### **IV. Potential Interactions of Rule with Other Regulation**

AEMA's large consumer members, including industrial loads, that have power plants on site believe that, as additional energy efficiency and industrial CHP technologies are implemented, *consideration should be given to those DER applications as complying across regulatory regimes*. These technologies are designed to reduce GHG by increasing efficiency of operations; provided that these projects demonstrably lower GHG, they should allow consumers to be found compliant in other consistent regulatory processes.

#### **V. Additional Comments**

AEMA represents both providers and consumers of DER; our policy advocacy, thus, keeps consumer impact and benefits top of mind. One of the concerns about the original CPP was the potential impact to consumers of all sectors on electric reliability and energy costs. *Consumers directly benefit from DR and DER—through increased reliability from flexible demand resources, from reduced generating costs from needing to meet higher peak demand, and from reduced GHG emissions that impact human and environmental health*. Creating strong DR and DER building blocks would allow a more efficient glide path to improvements in individual power plant as well as overall energy emissions on a state and local level, regionally, and, ultimately, nation-wide.

#### **VI. Conclusion**

AEMA, in summary, recommends that EPA:

*1) Give states and regions the flexibility to identify solutions that work within their*

*resource mix and to determine the best portfolio approach and integrated plan to reduce GHG emissions;*

*2) Consider the grid as a system and allow for consideration of solutions such as DR and DER outside the fence line;*

*3) Contemplate attributes and characteristics of the desired system to value those services and develop a plan that integrates DER and DR;*

*4) Give consumers consistent regulatory treatment when those consumers implement DER applications; and*

*5) Credit DR and DER with improving reliability, lowering costs, and mitigating GHG emissions for consumers.*

We appreciate the EPA's consideration of these comments; AEMA remains ready to serve as a resource to the EPA as consideration continues on GHG emission reduction.

Respectfully submitted,



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