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SUBMITTED VIA ELECTRONIC MAIL TO
CLEANFUTURE@MAIL.HOUSE.GOV

**Re: Questions from the House Committee on Energy and Commerce Regarding
Climate Change Policy**

Advanced Energy Management Alliance (“AEMA”) is pleased to provide comments to the House Committee on Energy and Commerce regarding policy solutions to the climate crisis. AEMA is a North American trade association whose members include distributed energy resources, demand response (“DR”), and advanced energy management service and technology providers, as well as some of the nation’s largest consumers. We advocate for policies that empower and compensate customers appropriately--to contribute energy or energy-related services or to manage their energy usage--in a manner that contributes to a more efficient, cost-effective, resilient, reliable, and environmentally sustainable grid. These comments represent the views of the organization as a whole rather than those of any one company.

1. What are the key policy, regulatory, and market considerations that should inform the development of comprehensive climate legislation? Please provide specifics.

AEMA, founded in 2014 to defend customer demand response in the wholesale market, has consistently served as the voice for consumer-sited distributed energy resources. We have participated in state, regional, and federal market processes to ensure that these technologies and services are valued and given the ability to compete and be compensated in all markets. AEMA has focused less on incentives and carve-outs and more on transparency and leveling the playing field for all resources. In that context, we have engaged consistently with the Federal Energy Regulatory Commission (“FERC”), a crucial venue for implementing changes that allow new technologies and services to participate in wholesale markets. Congressional oversight of that agency and its foundational statute, the Federal Power Act, is crucial to ensuring that public policies under FERC’s jurisdiction considered of national importance—including climate change--are effectively carried out. On state policy, the federal role is one of support—

technical and otherwise—that can assist those jurisdictions on implementing their own climate policies. The Department of Energy can play a significant role in that assistance.

2. Please describe any innovative concepts for climate policy design, including both sector-specific and economy-wide measures that you believe the Committee should consider.

A. Modeling Tools.

Modeling assumptions can determine utility long-term investment in generation resources—that may not be necessary and often increase emissions—and that are typically paid for through customer rate increases. While planning models have been improving, most are still sorely lacking in considering demand side resources in the planning process. More complete modeling of these distribution resources would allow for more holistic planning for utilities and system operators, resulting in a more flexible, cost-effective and cleaner grid. Department of Energy ("DOE") assistance on modeling tools could be instrumental to helping utilities more accurately determine their resource needs, while meeting their greenhouse gas reduction goals. In addition, AEMA recommends that DOE provide analyses of the potential Virtual Power Plants ("VPP"),¹ modeling local benefits on the distribution system, and developing business models that include customer participation. Non-Wires Alternatives ("NWA") to traditional generation, transmission and distribution resources can be installed to defer capital outlay of new lines and substations, saving utility investment and reducing cost to customers.² One example is the Brooklyn-Queens Demand Management project, where the utility, ConEdison avoided a \$1.2 B substation upgrade by deploying demand response, energy efficiency, and distributed resources.³ Additional applications of NWA could be piloted through DOE, allowing for experimentation of customer engagement, including through demand response, smart thermostats, blockchain, and other transactive energy solutions.

B. Technology Demonstration Sandboxes.

Technology demonstrations are key to proof of concept, lowering risk, and gathering data for innovative solutions. A concept that has been used in other sectors (and to some degree in the utility sector) is a "sandbox," an area set aside that is completely free of regulation and where multiple systems, technologies, and approaches can be experimented with, removed from penalty and risk to the utility. These sandboxes have been tested in the U.K. and several other countries

¹ See DOE article on Virtual Power Plants:

² A collection of case studies of Non-Wires Alternatives projects can be found here: https://e4thefuture.org/wp-content/uploads/2018/11/2018-Non-Wires-Alternatives-Report_FINAL.pdf

³ Article about BQDM program can be found here: <https://www.utilitydive.com/news/despite-failures-coned-targets-more-energy-savings-from-non-wires-pioneer/547725/>

and to a limited degree in Illinois.⁴ Providing grants to states for additional experimentation could lead to more creative solutions to operating the grid while reducing greenhouse gas emissions.

C. Federal Clean Energy Standard.

AEMA recommends a federal clean energy standard that allows flexible resources, such as energy storage and demand response, to participate and receive credit for integrating renewables, allowing for full implementation of renewables, thereby lowering greenhouse gas emissions, creating economic benefits and enabling participation by customers of all types.

D. Leading by Example.

Ensuring that the government's own facilities are deploying distribution energy resources can decrease emissions from the public sector while leading by example. The Federal Energy Management Program at DOE serves an important role in developing best practices for federal buildings and partnering with agencies, utilities, and the private sector to deploy clean energy projects. The Department of Defense has several initiatives, including the Strategic Environmental Research and Development Program (SERDP) and Environmental Security Technology Certification Program (ESTCP),⁵ that test technologies that will allow their permanent bases as well as those in the field to become more efficient, secure, and clean. All of these programs should be supported to increase distributed clean energy penetration while reducing emissions at sites.

E. FERC Rulemaking.

Congress should continue to encourage the FERC issue a final rule on the Distributed Energy Resource rulemaking to give customer-cited resources access to competitive markets. Over the past decade, Orders on demand response (Order 745) and energy storage (Orders 755, 784 and 841) have allowed resources that provide specific services to the grid to be paid for those services. In the case of demand response, states like Pennsylvania and Maryland have been able to aggregate consumer load, offsetting the cost of peak power while allowing consumers to directly benefit from lower prices. These state-based programs do not have to conflict with federal policy; in many cases distributed energy resources can provide services to both the utility on a local level, while also delivering other or similar services to the wholesale market. All of those flexible services should receive appropriate compensation, no matter what part of the grid they serve. By allowing these distributed energy resources to fully participate, we can bring the full suite of clean, zero emission resources to our electric grid, all while benefiting customers.

⁴ See article on sandboxes here: <https://www.utilitydive.com/news/experiment-without-penalty-can-regulatory-sandboxes-foster-utility-innov/550950/>

⁵ For more on these programs, see: <https://www.serdp-estcp.org>

3. **If you work in, advise, or are familiar with sectors that are particularly challenging to decarbonize, have you identified any effective (and scalable) solutions that should be included in comprehensive climate legislation?**

Customers have seen tremendous economic benefits from flexible demand-side resources. On the PJM grid in the mid-Atlantic, customers collectively saved \$11.8 billion in one year alone through demand response.⁶ In another example, in its Distributed Energy Resource Roadmap, the New York Independent System Operator stated it “believes that providing resources with the flexibility to meet wholesale and distribution system needs will deliver the maximum benefit to New York electricity consumers.”⁷ Baltimore Gas and Electric’s SmartEnergy Rewards program, in which Maryland customers lowered their energy usage in response to signals from the utility, is estimated to have avoided \$93 million in transmission capital expenditures and \$72 million in distribution capital expenditures—savings that are then passed along to the customers.⁸ AEMA believes that by allowing consumer resources to fully participate in state and federal policy solutions, we will see deployment of lower emission solutions, such as electric vehicles and heat pumps that address often hard-to-abate sectors and provide clean outcomes.

4. **If your organization has adopted carbon pollution reduction goals, how have those goals – or your plans to meet those goals – evolved over the last decade?**

During the Obama Administration, the Environmental Protection Agency (“EPA”) solicited feedback during the development of the Clean Power Plan (“CPP”). During that process, AEMA provided analysis of several wholesale markets that, through implementing additional demand response, would lead to significantly decreased emissions.⁹ As a result of that white paper, EPA’s final rule included demand response as both a greenhouse gas mitigation tool as well as a reliability measure.¹⁰ Those opportunities only increase when a broader set of distribution energy solutions—rooftop solar, energy efficiency, smart inverters, batteries, thermal storage (from hot water heaters, for example), fuel cells, combined heat and power, microgrids, electric vehicles, and geothermal heat pumps—are combined with demand response and advanced energy management.

⁶ Link to PJM Market Monitor report can be found here: <https://aem-alliance.org/aema-reacts-strongly-market-monitor-report/>

⁷ “DER Energy Market Design: Dual Participation”. New York Independent System Operator, Feb 2018, 2019. <https://www.nyiso.com/documents/20142/5256593/DER%20Energy%20Market%20Design%20Dual%20Participation%20022819.pdf/cfaf3647-4b77-a706-b86d-24129d460ecf>.

⁸ Report on this program can be found here: <https://www.utilitydive.com/news/behavioral-demand-response-gives-baltimore-gas-and-electric-a-business-reas/546895/>

⁹ <https://aem-alliance.org/study-finds-significant-greenhouse-gas-savings-demand-response-group-urges-epa-incorporate-clean-power-plan/>

¹⁰ <https://aem-alliance.org/advanced-energy-management-alliance-touts-demand-response-as-tool-in-clean-power-plan/>

AEMA commented more recently on the EPA repeal of the CPP, urging the agency to consider distributed energy resources in any replacement rule.¹¹ AEMA stands by the need for customer-sited resources to be part of any greenhouse gas mitigation plan.

5. If applicable, what actions has your organization already taken, or do you plan to take, to reduce carbon pollution?

AEMA's mission encompasses not only reducing emissions, but also driving economic benefits, consumer choice, and increased resilience. AEMA has engaged in advocacy throughout North America, including in state regulatory and legislative proceedings, system operator ("ISO") stakeholder processes, federal venues at FERC and in Congress, and will continue to do so.

6. What have been the challenges or barriers to making meaningful carbon pollution reductions, and how have you responded to those challenges or barriers?

AEMA has provided written and in-person legislative and regulatory testimony for the record throughout North America, including in states, provinces, ISO venues, and federal venues. We remain committed to engagement on all fronts to further the ability for consumers to save money while reducing greenhouse gas emissions.

7. How can the Federal Government assist you in reducing carbon pollution?

AEMA believes that, if the recommendations in response to question #2 are taken up by Congress, our sector and members will be in better position to deploy our solutions and reduce carbon pollution.

8. Are there any additional comments or feedback you would like to add?

Please consider AEMA a resource as the Committee develops legislation to combat climate change. We believe that consumer-sited resources should not only be considered, but are critical to the success of any climate crisis policy. Our members stand ready to assist the Committee on thinking through those solutions.

If you have any questions or require further information on the comments above, please feel free to contact me at Katherine@aem-alliance.org or 202-524-8832. Thank you for the consideration of our comments and for the broader discussion of important solutions to the climate crisis.

Best regards,



¹¹ <https://aem-alliance.org/aema-file-comments-epa-greenhouse-gas-proceeding/>

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