



CONCORD, MA - WASHINGTON, DC

47 Junction Square Drive

Concord, MA 01742

978-369-5533

www.mjbradley.com

November 22, 2019

Select Committee on the Climate Crisis
H2-359 Ford Building
Washington, DC 20515
Submitted via email: ClimateCrisisRFI@mail.house.gov

Re: Response to Select Committee on the Climate Crisis Request for Information

Dear Members of the Select Committee on the Climate Crisis,

On behalf of the Energy Strategy Coalition,¹ we appreciate the opportunity to respond to the request for information that the House Select Committee on the Climate Crisis (Select Committee) released on September 5, 2019.² Our member companies have long supported an economy-wide federal approach to reducing greenhouse gas (GHG) emissions that promotes investments in clean and renewable energy while at the same time mitigating the risks to our customers and energy infrastructure due to the changing climate, including extreme weather events, sea level rise, more frequent and intense wildfires, and reduced snow pack. We welcome the opportunity to engage with the Select Committee as it develops policy recommendations to support a plan to achieve net-zero GHG emissions by 2050. A net-zero GHG emissions target by midcentury is critical to addressing the climate change impacts we and our customers are already experiencing.

Please find our responses to the questions noted below.

Sector-Specific Policies: What policies should Congress adopt to decarbonize the following sectors consistent with meeting or exceeding net-zero emissions by mid-century?

A well-designed federal GHG reduction program should be market-based and economy-wide such that it encourages the adoption of cost-effective emission reductions across the economy and provides a strong, certain, and technology-neutral market signal for clean technology innovation and investment. The Energy Strategy Coalition supports an economy-wide carbon price, which will not only reduce emissions in the electric power sector but other sectors as well. While there are a range of policies that may be developed, and possibly combined, to create an effective economy-wide approach, below we focus on the electric sector and the role of electrification for the transportation and building sectors.

Electric Sector

For the electric sector, effective market-based options include a carbon fee, cap-and-trade, clean energy standard, or a hybrid of these approaches. The electric sector has invested, and will continue to invest, in clean and renewable energy in response to customer and investor demands, state and local policy, and market dynamics. A policy or

¹ This letter is submitted on behalf of the following electric power companies and electric utilities: Austin Energy, Con Edison, Exelon Corporation, Los Angeles Department of Water and Power, National Grid, New York Power Authority, Pacific Gas & Electric Corporation, PSEG, and Sacramento Municipal Utility District, and Seattle City Light.

² House Select Committee on the Climate Crisis, Request for Information, available at: <https://climatecrisis.house.gov/inforequest>.

suite of policies that establishes a clear emission reduction trajectory is critical to providing regulatory certainty for long-term investments in clean energy. Such certainty will allow companies to pursue cost-effective emission reduction opportunities, invest in the necessary energy infrastructure, and ensure our industry continues to provide affordable, reliable, and resilient electric service to our customers.

Maintaining the affordability, reliability, and resilience of the electric grid is crucially important to our member companies. Failing to address climate change through an emission reduction program will challenge all of these objectives. Therefore, actions to reduce emissions now will be more cost-effective than delaying action or only managing the impacts of a changing climate after they occur. We thus urge the Select Committee to consider recommending programs that can be implemented promptly. It will also be important that any GHG emission reduction program include measures to mitigate economic impacts, including, for example, electric bill rebates for households, investments in clean energy technologies and infrastructure, and job training programs.

As the Select Committee considers policy recommendations, it will also be important to consider how energy markets will affect how the electric sector complies with any emission reduction requirements or clean energy requirement, including the impact of those compliance mechanisms on customers. In fully regulated states, utilities are typically vertically integrated, which means they own and operate generation as well as the distribution system to serve their customers. Customers in these states typically have one choice of electricity provider, and the same company provides the service and the supply. In competitive markets, electric distribution companies (i.e., the utilities that own and operate the electric distribution systems) are often restricted from owning power plants. In these states, customers may also have retail choice, with the option to buy electricity from a number of different retail providers. Thus, evaluating how any electric sector climate policy will affect clean energy investment decisions by generators in different markets, local transmission and distribution companies, retail providers, and customers is critical as it varies in different regions of the country.

Additionally, states have continued to implement policies that are already significantly reducing electric sector emissions. For example, 29 states and D.C. have a renewable portfolio standard (RPS), five states have a clean energy standard (CES), and ten states have cap-and-trade programs for the electric sector (with three additional states in process or considering implementing one). Any federal climate policy recommendations should consider how to leverage existing state programs while also ensuring states can continue to drive clean energy investments.

If you recommend a Clean Energy Standard, how should it be designed?

If Congress elects to develop a Clean Energy Standard (CES), it is important that such a program be designed to: minimize program complexity; allow for and recognize existing progress that companies and states have made in investing in clean and renewable energy; provide compliance flexibility through the use of a national trading market and a transparent alternative compliance payment schedule; facilitate the interaction with existing state clean energy and renewable portfolio standards and state and regional carbon trading programs, and be sensitive to potential market implications, as discussed above. It will also be essential to consider additional measures to address other sectors of the economy to ensure there is a federal economy-wide approach even if the electric sector's emissions are subject to an electric sector clean energy standard.

Additionally, given that states and many companies have already made investment decisions and reduced emissions, the reduction trajectory for any GHG emission reduction requirement will be an important consideration. While some states and companies have already made significant investments in emission reductions, we recognize that there are also states and companies that will need time to start the transition to investing in clean energy solutions. However, early actors should have an incentive to continue to act and should not be indirectly penalized, for

reducing carbon emissions. The emission trajectory for the electric sector combined with compliance flexibilities are important design features that a federal climate program can utilize to balance those considerations.

Transportation

The transportation sector is now the highest emitting sector in the country and is likely to increase in the coming years, while the electric power sector's emissions are likely to continue to decrease. Therefore, any meaningful effort to reduce economy-wide emissions in line with a midcentury net-zero goal must include efforts to decarbonize and electrify the transportation sector. In addition to the electrification options discussed below, one option that the Committee should evaluate is a federal policy to drive the reduction of the carbon intensity of transportation fuels similar to the California Low Carbon Fuel Standard Regulation or including a renewable fuel standard.

Integration of electric vehicles (EVs) into the electricity grid also has useful economic and environmental benefits to vehicle owners, electric power companies, and electric utility customers. The electric industry, including our companies, is working to build the charging infrastructure needed to support increased consumer adoption of EVs, medium and heavy-duty electric transportation options, port electrification, and other electrified mobility solutions. We are also establishing rate structures and programs to maximize the benefits of electric transportation to the grid and minimize charging load integration costs.

To support ongoing transportation electrification, we recommend that the Select Committee consider policy recommendations that expand or extend the federal EV tax credit consistent with the Driving America Forward Act (H.R. 2256/S. 1094). Automakers are quickly reaching the current 200,000 vehicle cap per manufacturer for the \$7,500 tax credit for electric vehicles. Thus, legislation should either: (1) expand the EV tax credit beyond 200,000 vehicles per manufacturer or (2) eliminate the cap and put in place a future timed phase-out of the EV tax credit, thus increasing EV access and adoption. In addition, implementing the EV tax credit as a point-of-sale rebate, rather than a tax credit, would help to make EVs more affordable for consumers.

The Select Committee should also consider recommending that Congress extend Section 30C tax credits, the alternative fuel vehicle refueling property credit. The alternative fuel vehicle refueling property credit for electricity expired on December 31, 2017. Under the expired credit, any charging equipment was eligible for a tax credit up to 30 percent of the cost of the unit and installation, up to \$30,000 for those properties subject to an allowance for depreciation, and \$1,000 for all other properties.

Removing barriers to EV charging infrastructure investment is also a crucial step toward developing a nation-wide charging network. Currently, the Federal Highway Act of 1956 prohibits almost all commercial activity at public rest-areas along interstate highways. We suggest that the Select Committee recommend amending these provisions to exempt EV charging from this prohibition, as allowing EV charging and fast-charging stations can reduce consumers' range-anxiety and increase EV charging on highways and enable increased EV adoption.

Transitioning our nation's bus fleets to low-and-zero emissions vehicles is a critical opportunity to improve urban and regional air quality. We urge the Select Committee to recommend that Congress expand the Federal Transit Administration's existing Low or No-Emission Bus Grant program and include funding for public school systems to transition away from diesel buses. Funding could also be used to offset deployment and charging infrastructure costs. Currently, under the Fixing America's Surface Transportation (FAST) Act, only \$55 million per year through 2020 is made available for the Low-or No-Emissions Bus Grant program. In addition, school districts are not eligible applicants. Increasing the size of the funding available and allowing public school districts to apply would increase electric bus and charging investments, which would have air quality and greenhouse gas emission reduction benefits.

Carbon Pricing: What role should carbon pricing play in any national climate action plan to meet or exceed net-zero by mid-century, while also minimizing impacts to low- and middle-income families, creating family-sustaining jobs, and advancing environmental justice?

An economy-wide carbon price is the most effective approach to address climate change, and we urge the Select Committee to evaluate how it could be designed to help ensure that the United States meets the goal of achieving net-zero emissions by 2050. In order to effectively address climate change, reductions by all sectors of our economy will be necessary. Thus, we urge the Select Committee to consider legislative approaches that support a well-designed economy-wide carbon pricing approach as a central element of any federal climate change emission policy strategy.

While many of our member companies have adopted GHG reduction goals, a national market-based program can significantly support those reduction targets and ensure that cost-effective reduction opportunities are realized, while significantly expanding the set of organizations and companies working to reduce GHG emissions.

It will also be important that any GHG emission reduction program include measures to mitigate economic impacts, including, for example, electric bill rebates for households, investments in clean energy technologies and infrastructure, and job training programs. Existing carbon pricing programs in the United States have been designed to mitigate some of the related economic impacts of increased energy costs. The Regional Greenhouse Gas Initiative (RGGI), for example, has, since program outset, allocated billions of dollars in allowance revenue to state programs for energy bill assistance, job training programs, and energy efficiency investments. In 2017 alone, the RGGI states allocated \$49 million in direct bill assistance to mitigate potential economic impacts of increased energy costs. In California, as result of the state's cap-and-trade program, more than \$3 billion in allowance revenue was allocated to a number of diverse programs in 2018 alone. This includes funding for low-income weatherization programs, training and workforce development, low income bill assistance, and funding for public transportation, among a number of other programs. In addition, a majority of the value of allowances allocated to electric utilities under this program is returned to customers in bi-annual "Climate Dividends" to offset cost increases.

Carbon Pricing: How could sectoral-specific policies, outlined in questions 1-3, complement a carbon pricing program?

Sector-by-sector approaches to reduce emissions have worked in the past and may also be appropriate provided the combination of programs promotes cost-effective emission reduction strategies throughout our economy. For example, California has an economy-wide cap-and-trade program that establishes a consistent carbon price while pairing that program with complementary, sector-specific policies to help develop emission reduction technologies, improve energy efficiency, and achieve other policy goals. The state-wide Scoping Plan outlines how each program helps to reduce emissions to meet the state's overall goals. Additionally, as discussed above, the revenues from the carbon pricing program are used to support cost reductions and investments in these complementary programs.

RGGI provides another example of a carbon pricing program that complements sectoral-specific policies at the state and regional levels. Though electric sector specific, RGGI has reduced emissions from the electric power sector since the program's inception in 2009. Those states have also implemented state-wide renewable portfolio standards and other policy efforts to reduce emissions from non-covered sectors through the allocation of allowance auction revenue from RGGI for efforts such as energy efficiency and transportation electrification. Additionally, there are now policy discussions to develop a regional low carbon transportation policy proposal for states in the Northeast and Mid-Atlantic region through the Transportation and Climate Initiative (TCI).

Additionally, it may be appropriate to start regulating some sectors through existing Clean Air Act authority while other sectors would benefit from a federal legislative approach. For example, significant emission reductions could

be achieved if: Congress implemented a market-based carbon program for certain sectors, including the electric sector; EPA used its existing authority under the Clean Air Act to continue to drive emission reductions from the transportation sector consistent with the California GHG and zero-emission vehicle standards; EPA used its existing authority to regulate methane from oil and natural gas operations; Congress extended federal incentives for electric vehicles and infrastructure; and Congress continued to pursue legislation to drive investment in energy efficiency and industrial and agricultural process improvements through incentives and grants and clean energy research and development including support for carbon capture and sequestration.

Innovation: Where should Congress focus an innovation agenda for climate solutions?

In addition to the GHG mitigation programs noted above, there are several additional complementary measures that we urge the Select Committee to consider in any recommendation for federal grants and incentives. These include energy efficiency investments, building electrification, industrial process and thermal electrification, clean transportation vehicles and the associated charging infrastructure, emerging technologies (including storage and carbon capture, utilization, and sequestration), grid modernization, programs supporting low-income consumers, investments in climate change solutions and climate resilience, and clean and renewable energy and advanced technology research and development.

For example, the Select Committee should consider recommending increased attention and focus on research and development for hard-to-electrify sectors such as industrial processes and heat. Reducing emissions from industrial sectors such as concrete, steel, aluminum, and paper while maintaining American competitiveness will require increased technological innovation focused on electrification. Electrifying a greater number of industrial processes will help reduce emissions overall as the electric sector continues to decarbonize. Congress can help facilitate increased efforts to electrify industrial sectors by investing in research and development and by providing technical assistance and grants. Additionally, the Select Committee should consider recommending legislation that would support the implementation of lower carbon fuels, such as biomass and renewable natural gas (RNG), which could leverage the existing gas network to support a lower carbon energy system.

Finally, the Select Committee should consider recommendations that would direct resources to advancing energy storage technologies including, for example, batteries, pumped hydroelectric storage, RNG, hydrogen, and power-to-gas. Long-term energy storage will be necessary in order to decarbonize the electric power sector and enhance grid reliability. Any effort to decarbonize the grid in line with 2050 emission reduction goals will require long-term energy storage options and support in the form of federal research and development funding, and assistance to support their advancement.

Innovation: How can Congress incentivize more public-private partnerships and encourage more private investment in clean energy innovation?

As noted above, increased federal research and development will be critical to developing and accelerating commercialization of the technologies needed to help further decarbonize the electric sector and improve its resilience to the increased impacts climate change will pose. Despite the need to advance these technologies, utilities have limited ability to invest in research and development, due principally to state regulatory regimes. As such, we encourage the Select Committee to recognize the cost and risk barriers the electric sector faces in terms of advancing research and development and identify solutions that help overcome these barriers while ensuring the electric sector remains engaged in the innovation that will greatly impact the sector and its customers.

Non-Greenhouse Gases: What policies should Congress adopt to reduce emissions of non-CO₂ greenhouse gases, including methane, nitrous oxide, and fluorinated gases?

As we have noted, addressing climate change will require reductions from a wide variety of sources across a range of sectors. As companies that deliver natural gas to customers and use natural gas as a fuel source in electric power generation, we note that federal methane regulations serve as the foundation for industry efforts to measure and mitigate methane emissions. The Energy Strategy Coalition urges the Select Committee to recommend policies that will continue to encourage methane emission monitoring and leakage reduction.

Carbon Removal: How can Congress accelerate development and deployment of carbon removal technology to help achieve negative emissions?

The Energy Strategy Coalition supports Congress's continued financial support for the deployment of carbon removal technologies, particularly carbon capture, utilization, and storage (CCUS) to help reach net-zero emissions by 2050. We urge the Select Committee to recommend Congress continue to support the expansion of CCUS. CCUS will require continued support from the federal government in order to reduce costs and ensure this crucial technology is deployed at scale. The extension and expansion of the 45Q tax credit in 2018 was an important recognition by Congress of the role that CCUS will play in order to reduce national emissions, and it will be important for continued federal support of technologies such as CCUS through extended tax credits, federal research and development, and regulatory support through federal permitting of transport pipeline and storage capacity.

Resilience and Adaptation: What policies should Congress adopt to help communities become more resilient in response to climate change?

Climate change will require communities to adapt in many respects, and many climate change impacts will affect the electric sector. As the climate warms, areas will experience both increased heating degree days and cooling degree days, which will impact electric grid requirements. The grid will also face the impact of climate change directly in the form of flooding, ice storms, fire, and sea level rise, though the specific impacts will vary based on region. Each of these impacts can increase stresses on electric grid operations and infrastructure and will require potential system adaptations to maintain reliability and safety.

Electric utilities are facing increased demands for resilience to the changing climate, in addition to enhanced reliability to ensure that an increasingly electrified country can withstand more severe storms and weather conditions. In order to prepare for climate change, electric utilities must incorporate resilience planning into their long-term planning processes. Utilities, power producers, and others across the energy industry are, therefore, already in the midst of significant investment and activity to improve the resilience of their electric systems in light of climate change. Mid- and long-term resilience planning must address the threats to energy infrastructure resilience that are associated with the changing climate, including both potential chronic changes to the climate, such as sea level rise, and acute climate-related events, including more frequent and severe weather events.

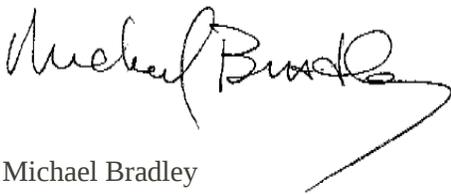
Congress can assist utility companies and grid managers by ensuring that these parties are able to invest in and operate a resilient grid. Looking forward, investments in resilience should reduce vulnerability to extreme events while also preparing for changing conditions. If an extreme event occurs, federal and state disaster support, response, and allocation of risk should ensure the ongoing financial resilience of the electric sector to ensure it can appropriately recover from and mitigate future risks. Congressional programs can support these investments and help provide ongoing additional information and planning resources. Programs to encourage smart development practices, improve insurance options and recovery from disasters, and provide training and support for local parties can also help strengthen our communities, reduce risk, and encourage preparation and rapid response.

Climate Information Support: What policies should Congress adopt to maintain and expand these efforts in order to support solutions to the climate crisis and provide decisionmakers – and the American people – with the information they need? Where possible, recommend the scale of investment needed to achieve results.

The federal government plays a critical role in collecting the best available science and data used to monitor and project the risks of climate change and how those risks may affect the electric grid. The National Climate Assessment and related tools and resources provides a strong foundation of science and data that our companies, cities, and states utilize regularly for our resilience planning and operational decisions. The federal government has also created, and is continuing to develop, tools that help use these data. For example, the Energy Information Administration has created the Flood Vulnerability Assessment Map, a tool to help state, county, city, and private sector planners assess which key energy infrastructure assets are vulnerable to rising sea levels, storm surges, and flash flooding. The National Oceanic and Atmospheric Administration has developed the Energy Infrastructure with Real-Time Storm Information, which allows a user to view weather watches, warnings, and advisories to monitor events that could impact U.S. energy infrastructure. These tools, as well as others that are available to grid planners and utility companies, are key components of planning for a resilient grid and are critical to continue and enhance. We urge the Select Committee to recommend polices that ensure these tools have the federal support to continue and continue to remain scientifically rigorous.

We appreciate the opportunity to submit these responses to the Select Committee. If you have any questions, please do not hesitate to contact me or Carrie Jenks at cjenks@mjbradley.com.

Sincerely,



Michael Bradley
President
M.J. Bradley & Associates LLC