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U.S. House of Representatives Select Committee on the Climate Crisis

Hearing: "Solving the Climate Crisis: Key Accomplishments, Additional Opportunities, and the

Need for Continued Action"

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Good afternoon, Chair Castor, Ranking Member Graves, and distinguished members of the Select Committee. Thank you for the opportunity to provide testimony at this important hearing and for your dedication and leadership in charting a path forward on climate change and promoting America's renewable energy future. My name is Greg Wetstone, and I am President and Chief Executive Officer of the American Council on Renewable Energy (ACORE).

Before I proceed further, I want to take a moment to convey my sympathies on the untimely loss of Congressman Donald McEachin. His inspiring commitment to the cause of Environmental Justice as a member of the Select Committee and throughout his time in public service is a special legacy and one we are committed to carrying forward at ACORE. I speak on behalf of the entire ACORE organization in extending our deepest condolences to his family, friends, staff, and colleagues.

ACORE is the nation's first pan-renewable nonprofit organization. With member companies that include the nation's leading renewable energy developers, manufacturers, investors, electric utilities, and corporate off-takers, our mission is to unite finance, policy, and technology to accelerate the transition to a renewable energy economy. ACORE member companies hold more than \$25 trillion in assets, and last year more than 90 percent of the booming growth in utility-scale U.S. renewable power was financed, developed, owned or contracted by ACORE members. As we celebrate our 20th anniversary this year, we are proud of the extraordinary clean energy growth we have witnessed over that time. Today, America's renewable energy sector is a national economic driver, with more than \$50 billion in new investment annually.

Key Achievements in Addressing the Climate Crisis

On behalf of ACORE, I want to extend our heartfelt appreciation to the Committee for the critical role it has played in redefining the nation's climate agenda. In particular, the Select Committee's Majority Staff Report, *Solving the Climate Crisis*, has provided an influential roadmap for legislative efforts in this Congress. Since the report's publication in June 2020, an astonishing 305 of its recommendations have been enacted into law, a testament to the sagacity and lasting impact of the Select Committee's work.

Thanks in no small part to the influence of this Committee, the recently enacted Infrastructure Investment and Jobs Act (IIJA) and Inflation Reduction Act (IRA) will enable historic progress toward the achievement of crucially important climate objectives.

The bipartisan Infrastructure and Investment Jobs Act promotes vital upgrades to the nation's antiquated electric transmission network, an essential step if we are to achieve the reliability, cost savings, and lower pollution benefits of a 21st century grid that more efficiently taps the nation's immense renewable energy resources. The law provides substantial funding to plan for and develop new large-scale transmission assets alongside measures to improve the performance of existing capacity through advanced reconductoring, dynamic line rating, and other innovative grid enhancements. The law also clarifies FERC's important backstop siting authority, which can be used to construct key interstate transmission lines.

But the biggest gains by far were in the IRA enacted last August, which finally positioned the country to achieve its climate targets. Thanks to the IRA, clean energy businesses will benefit from stable, long-term tax incentives like those enjoyed by the fossil fuel sector for more than a century. Tax credits for renewable generation are complemented by new incentives for energy storage, clean hydrogen and domestic clean energy manufacturing.

Consistent with the Committee's recommendations to upgrade our transmission infrastructure, there are also multiple important programs established under the IRA and the IIJA to promote an upgrade of our grid, including a multi-faceted initiative under the DOE's new Grid Deployment Office (GDO), which has substantial new funding to support critical transmission development through loans, capacity contracts, and public-private partnerships. This includes \$2.5 billion for a Transmission Facilitation Program (TRP) established by IIJA to help transmission developers overcome financial hurdles for projects with far-reaching benefits for American energy consumers. Three other GDO grant programs, totaling \$10.5 billion, focus on grid modernization and resilience. Known collectively as "GRIP," these federal financing tools are a critical step to further upgrade the transmission and distribution system to improve the resilience and reliability of the grid. The IIJA also funds important transmission planning studies and assists states with necessary planning and wholesale market expansion. Notably, the IRA provides \$2 billion to cover the direct costs of loans for construction and modification of transmission deemed in the national interest, \$760 million in grants for permitting and siting and for economic development in communities with transmission builds, and \$100 million for modeling and analysis. ACORE was pleased to see the IRA also expand DOE's loan authority, including through the new Section 1706 Energy Infrastructure Reinvestment Financing program, as well as other programs.

Promoting A Just Transition

At ACORE, we are committed to doing all we can to help bring the benefits of the clean energy transition to disadvantaged communities. In that regard, we are pleased to note that the IRA promotes a Just Transition with provisions that grant bonus incentives to renewable projects undertaken in low-income and tribal communities or as part of a recognized affordable housing

program. We believe these provisions provide meaningful economic benefits while helping to reduce energy cost burdens on low- and moderate-income Americans. In these areas, energy costs are often more than three times the national average. The IRA will also help to stimulate community-led renewable energy projects with nearly \$3 billion in block grants and \$27 billion in funds via the new Greenhouse Gas Reduction Fund, with \$15 billion earmarked for low-income and disadvantaged communities.

Another crucial element of a just energy transition involves assisting communities dependent on fossil fuels for jobs and revenue. Reflecting a recommendation from the Select Committee's Majority Staff Report, the IRA provides bonus credits for renewable projects located in such "energy communities" in an effort to help avoid an economic downturn following the closure of coal facilities while also giving local workers the chance to shift to the clean energy sector where worker demand is high.

We look forward to working with Congress and the Biden administration to ensure that these important programs are fully funded and faithfully implemented. In that regard, ACORE urges that the federal government prioritize meaningful upfront engagement with affected stakeholders while ensuring that at least 40% of the overall benefits from its investments flow to disadvantaged communities, as called for in the Justice 40 Initiative.

Greenhouse Gas Emission Impacts

Analysts predict that taken together, the IRA's programs will reduce greenhouse gas emissions in the U.S. by roughly 40 percent below 2005 levels by 2030.² We are incredibly fortunate the economics of renewable energy technologies have improved so dramatically over the past decade that the clean energy tax incentives in the IRA can alone yield so much progress toward a sustainable climate. We project that investments in renewable generation and enabling technologies will accelerate from the current \$50-\$60 billion annually to \$90-\$100 billion annually, which is more in line with our national climate goals.

Congress, and this Committee in particular, has provided a welcome moment of hope in the face of a climate crisis that is accelerating faster than predicted. For that, we cannot thank you enough.

Critical Next Steps

But how can we ensure these projections come to fruition? And how do we build on this progress to ensure a more climate-friendly future? As described below, ACORE has identified five key areas for continued congressional oversight and action.

¹ Drehobl, A., Ross, L., & Ayala, R. <u>"How High Are Household Energy Burdens? An Assessment of National and Metropolitan Energy Burden across the United States."</u> ACEEE. (September 2020)

² King, B., Larsen J., & Kolus, H. <u>A Congressional Climate Breakthrough</u>. Rhodium Group. (July 2022). *Also see* Mahajan, M. et al. <u>Modeling the Inflation Reduction Act Using the Energy Policy Simulator</u>. Energy Innovation. (August 2022).

1. IRA Implementation:

The most important climate law in history must be quickly and effectively implemented. A critical first step is the prompt completion of guidance from the Treasury Department fleshing out crucial program details that will inform how investors and developers' structure renewable energy transactions. ACORE is pleased to see Treasury soliciting input from a diverse group of stakeholders and encouraged by the guidance issued to date. We urge agencies across the federal government to take a similar approach as they work to get the most out of key IRA programs.

2. <u>Catalyzing American Renewable Energy Manufacturing and Maintaining the Global Supply Chain:</u>

Building out the Domestic Supply Chain. Renewable energy manufacturing presents a once-in-a-century opportunity to recruit and train the next generation American workforce. The IRA establishes a suite of clean energy tax credits to incentivize the production of numerous renewable technologies, with additional incentives for projects using domestically sourced materials. Importantly, full-value credits are reserved for employers who meet prevailing wage and apprenticeship requirements, ensuring that jobs in the clean energy workforce are good-paying and available to all.

One of those credits is devoted to the manufacture of advanced energy technologies, such as solar photovoltaic wafers, cells, and modules; inverters; wind energy components; and battery cells and modules, which today are largely produced overseas. Another provision provides a tax credit for building or refurbishing the requisite factories and production facilities for clean energy and energy efficiency technologies. ACORE also supports the use of the Defense Production Act (DPA) for a number of clean energy technologies and grid components, as announced by President Biden in June, and urges Congress to appropriate sufficient funds for DOE's use of the DPA. As renewable energy demand is driven to extraordinary heights, onshoring the lifecycle supply chain is crucial to lowering costs and maximizing American competitiveness.

We look forward to the development of an enhanced domestic renewable energy manufacturing base. But that will not happen overnight. Like most sectors of the American economy, the renewable industry has a global supply chain and a business model that relies on stable policies and predictable pricing.

Rational Trade Policies that Protect the Global Supply Chain. Trade policies that constrain the availability of key renewable energy products, like the Commerce Department's preliminary determination on the circumvention of existing solar tariffs that was announced last week,³ threaten to undermine Biden administration efforts to address climate change

³ U.S. Department of Commerce Office of Public Affairs. Department of Commerce Issues Preliminary Determination of Circumvention Inquiries of Solar Cells and Modules Produced in China. (December 2022).

and accelerate the clean energy transition. A new certification process was created as part of Commerce's recent action, and there is serious concern that it creates new red tape and bureaucracy that will continue to slow solar development, even during the moratorium on new tariffs announced by the President in June of this year. ACORE respectfully urges that Congress call for a negative final determination by the Commerce Department. Its destructive anti-circumvention solar inquiry has already resulted in significant delays, cancellations, and layoffs in the U.S. solar industry.⁴ Prior to the initiation of this inquiry, solar deployment was previously forecasted to reach record levels in 2022 but has instead shown signs of steady decline.⁵

It is no small matter that we have seen a dramatic shift from "free trade" policies to protectionism from both parties over the past few years. The renewable energy sector and the effort to protect our climate have, unfortunately, been caught in the middle.

3. Building A 21st Century Grid:

There is a dire need to expand and upgrade the nation's outdated and balkanized transmission infrastructure to realize the IRA's potential and address serious concerns about the reliability of our electricity supply, especially given the challenges posed by increasingly frequent extreme weather events. The existing electric transmission system in America took more than a century to build, and evidence of its old age is glaring. We need a "Macro Grid" with new high-voltage transmission lines that better connect America's rich renewable resource areas to the population centers with the greatest electricity demand. According to studies from Princeton, MIT, and the National Renewable Energy Laboratory, meeting U.S. climate goals will require more than doubling the current U.S. transmission capacity. Further, a recent Princeton study found that we need to more than double the pace of historical transmission build to realize the full emission reduction benefits of the IRA.

A Tax Credit for High-Voltage Transmission. Left out of the IRA was an investment tax credit (ITC) for high-voltage transmission, which is needed to spur critical investment in interstate lines. A transmission ITC would provide developers with the long-term investment certainty they need while bringing down utility bills for ratepayers and lowering the upfront costs of construction that are too often undervalued relative to the reliability and economic benefits. Further, a transmission ITC would provide immediate financial benefits to 22 "shovel-ready" transmission projects that are anticipated to be built in the

⁴ Davis, M., et al. U.S. Solar Market Insight Q3 2022. <u>US Solar Market Insight Q3 2022</u>. Wood Mackenzie Power & Renewables and Solar Energy Industries Association (SEIA). (September 2022). ⁵ *Id.*

⁶ https://netzeroamerica.princeton.edu/the-report

⁷ https://www.sciencedirect.com/science/article/pii/S2542435120305572

⁸ https://www.nrel.gov/news/program/2022/exploring-the-big-challenge-ahead-insights-on-the-path-to-a-net-zero-power-sector-by-2035.html

⁹ https://repeatproject.org/docs/REPEAT_IRA_Transmission_2022-09-22.pdf

coming years.¹⁰ A 2021 analysis of the policy by ACORE and Grid Strategies found a 30 percent transmission ITC would create over 650,000 good-paying jobs, add 30,000 megawatts of renewable energy capacity to the grid, deploy more than \$15 billion in private capital investment, and provide \$2.3 billion in energy cost savings for the lower 80% of income brackets.¹¹

Congressional Support and Direction to the Federal Energy Regulatory Commission. Other key issues are in the purview of the Federal Energy Regulatory Commission (FERC), which has embarked on important efforts to improve how we plan and pay for regional transmission lines and streamline the process for interconnection of new renewable generation. As described below, ACORE respectfully urges Congress to support these reforms and provide direction in the following areas:

• Interconnection Queue Reform. Among the chief issues requiring a final FERC rulemaking is the needlessly lengthy interconnection process for new renewable generation resources. As I speak to you today, more than 1,300 gigawatts (GW) of wind, solar, and energy storage projects are stuck in regional queues due to costly, slow, and unpredictable policies that govern the interconnection processes. The 900 GW of wind and solar power in those queues could power more than 200 million American homes, while the 400 GW of trapped battery storage would enhance grid reliability and help us grapple with the threat of electricity blackouts in certain regions.

The recent approval of reforms proposed by the PJM Interconnection is a promising start, but we would benefit from a larger-scale congressional effort to expedite FERC's proposed rulemaking and streamline the interconnection process nationwide. Such a step could further our clean energy goals simply by tapping projects that are already waiting for a chance to deliver clean and affordable electricity. A joint report by the Macro Grid Initiative (MGI) and Americans for a Clean Energy Grid found that today's unworkable interconnection process results in higher costs for consumers, delayed rural economic development, and diminished job creation.¹²

Participant Funding Reform. Closely related to the need for interconnection
process improvements is the challenge of participant funding. Currently,
renewable developers looking to access the grid are saddled with
disproportionate expenses for costly transmission upgrades that have
widespread regional benefits. To overcome this hurdle, Congress should waste
no time in enacting Chair Castor's "Efficient Grid Interconnection Act," which

¹⁰ https://acore.org/transmission-projects-ready-to-go-report/

¹¹ https://acore.org/investment-tax-credit-for-regionally-significant-transmission-lines/

¹² Caspary, J., Goggin, M., Gramlich., R., & Schneider, J. *Disconnected: The Need for a New Generator Interconnection Policy*. <u>Americans for a Clean Energy Grid and Macro Grid Initiative</u>. (January 2021).

directs FERC to reasonably divide the cost of network upgrades among the beneficiaries of associated projects. The current, unworkable approach is analogous to requiring the next car entering a crowded highway to pay the entire bill for a needed lane expansion.¹³

- Cost Allocation for New Interregional Lines. There is broad consensus on the need for new high-voltage, interregional lines, but the question of who pays for these new lines has been a key barrier to their construction. As a recent report explains, long-range transmission planning processes used by regional planners often grossly undercount the benefits of interregional lines. A much better model is provided by the stakeholder-informed process used by the Midcontinent Independent System Operator (MISO) in their Long Range Transmission Plan (LRTP) process, which considers benefits more broadly and is expected to result in a cleaner, lower-cost electric grid. ACORE, therefore, urges Congress to enact Chair Castor's recently introduced Enhancing Electric Grid Resilience Act, which assigns the costs of nationally significant transmission lines according to a rough outline of their widespread benefits, consistent with the "beneficiary pays" principle. We also encourage the Commission to finalize its rulemaking on regional planning and cost allocation as soon as possible.
- A Minimum Interregional Transfer Requirement. ACORE is supportive of efforts to direct FERC to issue a rulemaking to establish a minimum interregional transfer requirement. Such a directive would secure a more cost-effective power supply through a grid better able to move power between regions as needed to keep the lights on. Representative Casten's "Reinforcing the Grid Against Extreme Weather Act" requires FERC to establish minimum transfer capability requirements between regions, which would reduce outages and lower energy costs for homes and businesses.¹⁵ A minimum transfer requirement could also be lifesaving. In fact, an ACORE and Grid Strategies report last year found that an additional GW of interregional capacity between the ERCOT region and the western United States could have avoided the worst impacts of Winter Storm Uri, which claimed hundreds of lives in Texas.¹⁶
- Promoting Stability in FERC Leadership. We are disheartened by recent reports suggesting that we may not see the reconfirmation of FERC Chairman Richard

¹³ Sankaran, V., Parmar, H., & Collison, K. Just & Reasonable? <u>Transmission Upgrades Charged to Interconnecting Generators Are Delivering System-Wide Benefits.</u> ICF Resources, LLC and American Council on Renewable Energy. (September 2021).

¹⁴ Gramlich, R. Enabling Low-Cost Clean Energy and Reliable Service Through Better Transmission Benefits Analysis. A Case Study of MISO's Long Range Transmission Planning. American Council on Renewable Energy, Macro Grid Initiative, and Grid Strategies, LLC. (August 2022).

¹⁵ https://www.nrdc.org/sites/default/files/ge-nrdc-interregional-transmission-study-report-20221017.pdf

¹⁶ Goggin, M. <u>Transmission Makes the Power System Resilient to Extreme Weather. Grid Strategies and American Council on Renewable Energy</u>. (July 2021).

Glick before his term ends at the conclusion of this year. Chairman Glick's track record of bipartisan leadership and proven competence is a major asset to FERC as it addresses the array of pressing major grid challenges that we face as a nation. Failure to reinstate Chairman Glick before his term expires on December 31 creates the risk of an impasse on key decisions and the possibility of a split panel on important topics. ACORE respectfully urges this Committee, the Biden administration and the U.S. Senate to take every reasonable step to avoid this outcome.

• Siting and Permitting Reform. ACORE encourages Congress to swiftly pass bipartisan siting and permitting reform with a prominent transmission component. Currently, the average transmission project takes well over a decade from announcement to completion, a staggering length of time that is nowhere close to the speed at which transmission must be built if we have any hope of meeting our climate targets. It is not an accident that virtually no interregional transmission lines have been built in the last decade, despite their critical importance to grid reliability in the face of such disasters as Winter Storm Uri.

As part of this effort, ACORE supports enhanced FERC authority over the siting and permitting of nationally significant interregional transmission lines that exceed a certain megawatt threshold, which would preserve state jurisdiction over the vast majority of transmission projects. ¹⁷ As mentioned above, Congress should also adopt language to allocate the costs of these lines according to their benefits, as contemplated by Senator Manchin's permitting reform legislation. Prompt enactment of permitting reform would rapidly accelerate nationwide transmission deployment.

4. SEC Climate Disclosure Requirements:

We are looking to the private sector to finance the clean energy transition at the heart of our climate response, and in that regard, I want to note that ACORE supports the SEC's objectives to help investors access consistent, transparent, and forward-looking climate-related information so they have appropriate knowledge of climate risks, greenhouse gas emissions, and climate solutions. Through information on how companies are using, investing or generating renewable energy, climate disclosures requirements can reflect the important role the private sector plays in advancing the energy transition. We urge support for the proposed SEC action that would require companies to disclose climate-related financial information. In particular, ACORE urges the SEC to include direct investments in renewable energy projects in its definition of climate opportunities – calling attention to the importance of renewable energy finance in companies' climate plans.

¹⁷ Reed, L. & Eberhard, K. What to keep and what to fix in Manchin's permitting proposal. Niskanen Center. (October 2022).

5. A Regulatory Pathway:

Studies show that achieving the long-term emission reduction targets necessary to meet the climate challenge will require additional steps beyond the pivotal gains we will see from IRA programs and incentives. ¹⁸ Historically, the U.S. has addressed environmental concerns by deploying varying regulatory approaches. For example, we effectively responded to the acid rain problem with a cap on emissions coupled with market-based trading. Urban air quality has improved dramatically as a result of both health-based air quality standards and technology-based standards for motor vehicles and stationary sources. We directly addressed stratospheric ozone depletion with a mandatory phase-out of chlorofluorocarbons and other ozone-damaging compounds, demonstrating our ability to act with other nations to solve global threats.

Eventually, we will need to look to the Clean Air Act, which provided authority for these programs and many others, and deploy some version of these regimes, or perhaps a carbon emission fee, to ensure the reductions necessary to complete the transition to a climate-safe economy. It is my strong belief that the Clean Air Act provides ample authority for such regulatory action in a manner fully consistent with the Supreme Court's decision in West Virginia v EPA,¹⁹ and ACORE looks forward to working with the Biden administration toward such an initiative.

Conclusion

Thank you again, Chair Castor and members of the Committee, for the opportunity to testify today and for your leadership and commitment toward an effective response to the climate crisis. We face daunting challenges, but prospects for a successful and just clean energy transition have dramatically improved as a result of your important work. You have given us hope, and for that we are immensely grateful. I look forward to your questions.

¹⁸ Jenkins, J.D., Farbes, J., Jones, R., Patankar, N., Schivley, G., "Electricity Transmission is Key to Unlock the Full Potential of the Inflation Reduction Act," REPEAT Project, Princeton, NJ, September 2022. DOI: 10.5281/zenodo.7106176

¹⁹ West Virginia v. Environmental Protection Agency, 597 U.S. _ (2022).