The Honorable Kathy Castor
Chair
U.S. House Select Committee on the Climate Crisis
H2-359 Ford House Office Building
Washington D.C. 20515

The Honorable Garret Graves
Ranking Member
U.S. House Select Committee on the Climate Crisis
H2-359 Ford House Office Building
Washington D.C. 20515

Dear Chair Castor, Ranking Member Graves and Members of the Committee:

The American Council on Renewable Energy (ACORE) appreciates the opportunity to submit a letter for the record to the House Select Committee on the Climate Crisis's May 20, 2021 hearing entitled, "Powering Up Clean Energy: Investments to Modernize and Expand the Electric Grid." ACORE works across renewable technologies and represents the nation's leading renewable energy developers, manufacturers and investors, along with corporate electricity consumers, electric utilities, manufacturers of energy storage and smart grid technologies, and the many other diverse industries that comprise the country's thriving renewable energy economy. Renewable energy and enabling grid technologies attracted over $68 billion in private sector investment in 2019, and our members are proud of renewable energy's contribution to American economic growth, job creation and greenhouse gas (GHG) emissions reductions.

Initiatives to expand transmission lines and related enabling infrastructure (including energy storage) play a critical role as part of comprehensive climate recommendations and are an indispensable feature of any plan to address the climate crisis by reducing GHG emissions. The 15 states between the Rockies and the Mississippi River account for 88% of the country's wind technical potential and 56% of the country's utility-scale solar technical potential but account for only 30% of projected electricity demand by 2050. These resources cannot be developed without a plan for building interregional transmission that can deliver power to high-density population centers. A nationwide, high-voltage direct current (HVDC) network, optimized for the nation's best wind and solar resources, could reduce carbon dioxide emissions from the U.S. electricity sector by up to 80% relative to 1990 levels without an increase in the levelized cost of electricity. Such a network would enable the U.S. to generate 60% of its electricity using wind and solar resources alone.

Grid expansion will also drive economic recovery and job creation. A recent report from Americans for a Clean Energy Grid identified 22 shovel-ready, high-voltage transmission projects across the country that would create approximately 1,240,000 family-sustaining jobs

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and enable 60,000 megawatts (MW) of new renewable energy capacity, increasing America's wind and solar generation by nearly 50 percent.

A recent ACORE report detailed the growing consensus that transmission provides large net benefits to electricity consumers. Transmission provides consumers access to lower-cost forms of electricity generation, including high-quality renewable energy resources. This report joins dozens of studies from grid operators, national laboratories, and others that have found transmission investment provides consumers with benefits several times greater than its cost. The Southwest Power Pool (SPP) has already realized significant benefits from recent transmission investments, with benefits expected to exceed costs by a factor of 3.5 over the new lines' first 40 years. The Midcontinent Independent System Operator (MISO) has also found that its Multi-Value Projects offer a benefit-to-cost ratio of between 2.2 and 3.4. Similarly, the National Renewable Energy Laboratory Interconnections (NREL) Seam study found benefit-to-cost ratios of between 1.8 to 2.9 for various transmission configurations.

The tragic power outages in Texas and other parts of the Central U.S. in February of this year also underscore the importance of transmission to electric reliability and resilience. The ERCOT grid has limited ties to neighboring regions, so it was not able to import as much electricity as other regions when hit with natural gas supply interruptions, generator outages, and high demand in the face of extreme weather. In contrast, stronger transmission ties between the regions of SPP and MISO allowed those regions to weather the storm with less severe power outages, as they were able to import more than 15 times as much power as ERCOT.

We respectfully submit the following policy recommendations for upgrading and expanding the nation's electric grid to create jobs and enhance reliability while deploying higher levels of renewable energy and protecting public health: 1) Establishing an Investment Tax Credit (ITC) for regionally significant transmission projects; 2) Improving transmission planning and cost allocation processes; 3) Resolving interconnection backlogs by assigning costs of network upgrades more equitably; 4) Providing funding and technical assistance to states, tribes, and localities to site transmission lines; and 5) Establishing a national policy on transmission.

I. Establish an Investment Tax Credit for Regionally Significant Transmission Projects

Increased investment in transmission infrastructure expands access to, and delivery of, renewable energy resources. Recent studies from Princeton, MIT, and others have found that significant transmission expansion is needed to deliver the lowest-cost renewable energy to market in a time frame compatible with U.S. clean energy goals. Despite this, necessary investments in transmission infrastructure do not receive the same policy support as generation resources.

Congress should enhance the financial viability of regionally significant transmission projects through enactment of an investment tax credit. Enactment of a transmission investment tax credit (TxTC), as contemplated on page 56 of the Committee's June 2020 *Solving the Climate Crisis* Majority Staff Report, would provide developers with the investment

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certainty they need through a predictable, multi-year investment structure, all while saving ratepayers money and lowering the upfront construction costs of transmission too often undervalued relative to its economic development, job creation, reliability and environmental benefits.

In March 2021, President Biden called for the creation of a TxTC in the American Jobs Plan, urging "the creation of a targeted investment tax credit that incentivizes the buildout of at least 20 gigawatts of high-voltage capacity power lines." In April 2021, Rep. Steven Horsford, Rep. Susie Lee and Sen. Martin Heinrich followed suit by reintroducing the Electric Power Infrastructure Improvement Act (H.R. 2406/S.1016). This legislation would promote construction of regionally significant projects by providing a 30% tax credit for investment in qualifying electric transmission, defined as any overhead, submarine, or underground transmission facility with a voltage of at least 275 kV and a transmission capacity of at least 500 MW. The tax credit would apply to properties placed in service before December 31, 2031. Later that month, Sen. Ron Wyden reintroduced the Clean Energy for America Act (S.1298), which includes a 30% TxTC for high-capacity transmission lines with a minimum voltage of 275 kV. Importantly, the Wyden proposal also would provide a direct pay option for the TxTC to ensure access by the broadest universe of stakeholders.

II. Improve Transmission Planning and Cost Allocation to Build More Regionally Significant and Interregional Projects

FERC Order No. 1000 governs the regional and interregional transmission planning process for cost-allocated projects. In the ten years since FERC promulgated Order No. 1000, not one interregional transmission line has been built using the process it established. With more regionally significant and interregional transmission, we can connect centers of high renewable resources with centers of high electric demand, enhancing grid reliability and dramatically reducing carbon emissions.

Implementation efforts too often do not incorporate projections of the cleaner resource mix we need to build or allow for the use of advanced technologies and grid optimization methods that could benefit the build-out of clean energy resources by increasing capacity at lower cost. These efforts also employ procedures that disincentivize transmission interconnection and ignore benefits such as lowered delivered energy costs through new renewable integration. Additionally, FERC Order No. 1000 requires interregional projects to be separately selected in the planning process for each RTO plus a joint RTO planning process. Projects which do not have clear benefits within a single RTO may not be selected in that RTO's planning process despite benefiting the nation as a whole. This is known as the "triple hurdle" problem of interregional transmission planning.

Congress should direct FERC to revise Order No. 1000 to produce a more robust and efficient transmission system. This can be accomplished by requiring planning processes to consider the full range of benefits, plan for future needs, utilize more standard and broad cost

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allocation in light of regional benefits, harmonize cross-region planning processes and incorporate advanced technologies and grid optimization.

Commonsense transmission planning reform was contemplated on page 55 of the Committee's June 2020 *Solving the Climate Crisis* Majority Staff Report.

In March 2021, Rep. Frank Pallone, Rep. Paul Tonko, and Rep. Bobby Rush introduced the Climate Leadership and Environmental Action for our Nation's (CLEAN) Future Act (H.R.1512). Section 217 of the legislation directs FERC to convene a technical conference to explore, among other things, how transmission providers can plan for interregional transmission projects, how interregional transmission planning can facilitate the integration of renewable energy resources, and how to develop appropriate cost allocation methodologies for interregional transmission projects. The legislation also directs FERC to promulgate a rule addressing the issues identified in the technical conference.

In April 2021, Rep. Sean Casten and Sen. Martin Heinrich introduced the Interregional Transmission Planning Improvement Act of 2021 (H.R.2678/S.1015) to help bolster the Federal Energy Regulatory Commission's interregional transmission planning process. The legislation would direct FERC to consider in its rulemaking the effectiveness of the existing interregional planning process, specific improvement to the process that would meet the stated goals of Order 1000, and cost allocation methodologies that reflect the multiple benefits provided by interregional solutions. The bill would also direct FERC to initiate the rulemaking within six months of enactment and complete a final rule within 18 months of enactment.

III. Resolve Interconnection Backlogs to Deploy More Clean Energy

When a new clean energy generator wants to connect to a congested grid, they are often required to pay the full – or nearly the full – cost of the upgrades necessary to do so, even though many existing customers on the grid benefit from the upgrade. This process is analogous to the next car entering a crowded highway paying for the full cost of a lane expansion. At the end of 2019, as a result of broken interconnection policy, 734 gigawatts of proposed generation — 90 percent of which are new wind, solar, and storage projects — were waiting in interconnection queues nationwide. These disproportionately high interconnection costs are forcing developers to shelve otherwise economic solar and wind projects. To deploy this clean energy, **Congress should direct FERC to assign these costs to the beneficiaries of the upgrades.**

Page 54 of the Committee's June 2020 *Solving the Climate Crisis* Majority Staff Report recommends that Congress direct FERC to end its policy of assigning costs of the regional network to individual interconnecting generators and instead incorporate such needs into the regional transmission planning and cost allocation processes.

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IV. Provide Funding and Technical Assistance to Help State, Local and Tribal Authorities Site Interstate Electric Transmission Lines

In many instances, state, local and tribal governments do not have the resources to conduct the economic and environmental analysis required to site and permit interstate transmission lines that pass through their jurisdictions, often leading to lengthy delays. Siting transmission in a just and environmentally responsible manner is vital to building a 21st century grid. **Congress can help ensure that critically important state, local and tribal voices are represented in the discussion by providing targeted assistance in the siting process.**

Page 52 of the Committee's *Solving the Climate Crisis* Majority Staff Report recommends that Congress create a new program at DOE to provide federal funding and technical assistance for state, local, and tribal authorities to conduct transmission planning and review applications to site proposed interstate transmission projects. It also recommends that Congress should authorize DOE to provide incentives for economic development to these state, local, and tribal jurisdictions.

Section 218 of the CLEAN Future Act (H.R.1512) would require DOE to establish a program to provide assistance to state, local, and tribal governments for the evaluation, permitting, and siting of interstate transmission lines. The legislation authorizes $75 million per fiscal year from 2022-2031.

V. Establish a National Policy on Transmission to Guide a 21st Century Grid

Congress should establish a National Policy on Transmission to integrate carbon-free resources in a timely and cost-effective manner. Our national transmission system is the largest single machine in America, if not the largest in history. Nevertheless, there is no federal direction on how to make this machine work more efficiently on behalf of the nation. This task that has taken on all the more importance as we work to decarbonize the grid in a cost-effective manner.

Page 53 of the Committee's *Solving the Climate Crisis* Majority Staff Report recommends that Congress should establish a "National Transmission Policy" to provide guidance to state and local officials and reviewing courts to clarify that it is in the public interest to expand transmission to facilitate a decarbonized electricity supply and enable greenhouse gas emissions reductions. It recommends that the policy statement should also encourage broad allocation of costs.

Section 211 of the CLEAN Future Act (H.R.1512) would establish that it is the policy of the United States that a modern transmission system should facilitate a decarbonized electricity supply to enable GHG emissions reductions, and that the public interest is served by reducing barriers to transmission investments that enable clean energy resources deployment.

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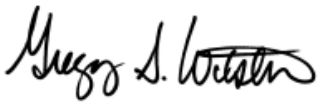
Conclusion

Through this suite of commonsense policy solutions, all previously endorsed in the Committee's June 2020 *Solving the Climate Crisis* Majority Staff Report, we will be well prepared to modernize and expand our nation's electric grid to drive continued economic growth for decades to come while maintaining solid electric reliability and meeting our climate challenge. We stand ready to discuss any and all of these issues in greater detail at any time. Please let us know if we can provide any additional information by contacting Bill Parsons, Chief Operating Officer, at (202) 777-7596 or parsons@acore.org.

Sincerely,



Gregory Wetstone
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