

September 28, 2021

Honorable Chuck Schumer
Senate Majority Leader

Honorable Nancy Pelosi
Speaker of the House

Honorable Joe Manchin, Chair
Honorable John Barrasso, Ranking Member
Senate Committee on Energy and Natural Resources

Honorable Frank Pallone, Chair
Honorable Cathy McMorris Rodgers, Ranking Member
House Energy and Commerce Committee

Dear Leader Schumer, Speaker Pelosi, Chairman Manchin, Senator Barrasso, Chairman Pallone, and Representative McMorris Rodgers:

We are writing to express our confidence that our nation’s power system reliability can be preserved and enhanced with the Clean Electricity Performance Program (CEPP) in the legislative package now under consideration in Congress. As experts in the electricity industry, we believe that this sector must continue to lead the country in achieving both climate mitigation objectives and a reliable, resilient, secure, and affordable energy system. Climate change is already hurting our citizens and our economy, and will become far more damaging if we do not take bold steps to reduce our carbon emissions. The power system decarbonization measures advocated in the CEPP are essential steps on America’s and the world’s path to slowing climate change.

We believe that maintaining the high reliability of our power supply is of paramount importance for our health, safety, and prosperity. Both experience and research show that power systems can achieve 80% carbon-free energy with full reliability; in fact, this is already being achieved in a number of grids around the world. The legislative packages under consideration and other state and federal policies will unlock an unprecedented array of investments, including grid and storage enhancements and CCS that will support the electric sector’s transition to carbon-free power. The United States has a robust framework for safeguarding the reliability of the power system, which will anticipate and counteract many future threats to reliability. In addition, several features of the CEPP’s design inherently ease reliability concerns.

Engineering simulations of future utility systems in the United States find that the CEPP target is achievable with full reliability by U.S. utilities with proper planning. A recent [detailed study](#) of the New York power system—one of the nation’s most challenging to operate—found that a 90% clean system (a level beyond CEPP targets) was achievable by 2040 with full reliability. The same conclusion was reached in a [study by the United Kingdom](#)—another difficult system because it is an island—with an above-CEPP target of 65% renewables by 2030. A review by [Energy Innovation](#) of 11 studies of U.S. systems targeting 70 to 90% clean energy by 2030,

conducted by U.S. national labs, universities, and independent researchers, concluded that, “All studies collectively suggest a 70 to 90 percent clean electricity system would be dependable, including five studies that provide rigorous reliability checks of the grid under stressful weather and demand conditions.” The U.S. Department of Energy’s [Solar Futures Study](#) carefully examined reliability issues related to 80% clean systems and noted that, “Grid operators and planners have already started to address the need to maintain operational reliability under increased IBR [i.e., solar] deployment.”

Moreover, the CEPP’s clean energy targets build on progress the electric sector is already making. The CEPP targets a national average of 80% carbon-free electricity by 2030, though it does not require that every individual system or utility meet the target. The electric sector has already reduced its carbon emissions from its peak by more than one-third. Growing experience with highly decarbonized power systems around the world confirms that a wide variety of power systems can achieve this target with full reliability. The power systems of France, Ontario, Canada, and two Scandinavian countries already run on 80% or higher levels of clean power with reliability as good as ours. [Four U.S. states and many dozens of U.S. utilities](#) providing service in other states have already set targets of net zero electric sector emissions by 2040, which is consistent with the CEPP 2030 goal. Many more states and utilities have committed to net zero emissions by 2045 or 2050. Los Angeles Department of Water and Power, for example, is already planning for 100% clean electricity by 2035, while the Great River Energy Cooperative’s [latest resource plan](#) reduces carbon emissions 95% by 2030. Illinois is about to enact [legislation](#) that will achieve a combined share of nuclear and renewable power of over 90% by 2030 for the entire state.

We understand that the rate of new clean power resource additions needed to achieve CEPP targets is ambitious, and will necessitate supporting investments in transmission, storage, carbon capture and sequestration resources, the maintenance of our carbon-free nuclear fleet, hydrogen, and distributed energy resources. Both the [Infrastructure Investment and Jobs \(IIJ\) Act](#) and the [Build Back Better \(BBB\) Act](#) contain very significant measures that will facilitate adding these reliability-enhancing resources. The IIJ Act will strengthen the ability of the Department of Energy and the Federal Energy Regulatory Commission to site new national interstate transmission lines and authorizes up to \$2.5 billion in loans to support transmission investment. The BBB Act creates an investment tax credit for regionally significant power lines and energy storage as well as \$8 billion in grants for new large-scale lines. It also funds and strengthens transmission planning and siting programs, promotes clean distributed resources, expands federal funding for low-carbon projects, and increases energy efficiency.

The IIJ Act also contains very significant federal programs that will aid the industry’s compliance with the CEPP. This legislation includes increased R&D, regulatory support, and financing opportunities for carbon capture, utilization, and sequestration projects; loan facilities, added borrowing authority, and grants for electric transmission additions; added funding for energy storage and clean hydrogen production; increased support for hydroelectric and pumped storage hydro projects; a civil nuclear credit program; and funding specifically directed at reliability and resiliency enhancements. The provisions in these bills together represent one of

the largest packages of federal actions ever proposed to expand and strengthen the power system. Many states have already adopted policies that will supplement these federal actions and help the CEPP succeed.

The third factor supporting reliability under the CEPP is the strong reliability protection framework maintained by the industry and overseen by the Federal Energy Regulatory Commission. Under federal law, the North American Electric Reliability Council and the six regional reliability councils form an Electric Reliability Organization Enterprise (EROE) whose mission is to assure the effective and efficient reduction of risks to the reliability and security of the grid. This enterprise regularly surveys the entire utility system across North America over a ten-year horizon and issues [Long-Term Reliability Assessments](#) that identify emerging reliability issues well in advance. In addition, the EROE has established the [Reliability Issues Steering Committee](#) (RISC) to perform in-depth studies of long-term reliability risks. The RISC is keenly aware of the reliability challenges that accompany changes in the grid's resource mix and has already identified and is acting on [four key actions](#) that will reduce risks in this area.

Finally, several features of the CEPP itself will contribute to on-going grid reliability. The Program is entirely incentive-based and therefore imposes no physical requirements on any entity. It also allows for smoothing in the compliance obligation over three years and bases all increases on each supplier's own starting point.

For all these reasons, we believe the electric power industry and the regulatory frameworks in which they operate are well-prepared to implement the CEPP while maintaining the high levels of reliability that are critical for our human, societal and economic well-being. America's electric utilities and their diverse partners have provided the country with reliable service throughout past periods of great technological and policy change. We are confident that this vibrant, mission-oriented, and evolving industry will rise again to the challenge of implementing the CEPP to create a clean, safe, affordable, and reliable power system.

Sincerely,

Dallas Burtraw, PhD

Michael Caramanis, PhD
Professor, Boston University*

Christopher Clack, PhD
Chief Executive Officer,
Vibrant Clean Energy LLC*

David Danner
Chair, Washington Utilities and
Transportation Commission*

Jeanne Fox

Former New Jersey Board of Public Utilities
President*
Former Environmental Protection Agency
Region II Administrator*

Marissa P. Gillett
Chairman, Connecticut Public Utilities
Regulatory Authority*

Michael Goggin
Vice President, Grid Strategies*

Rob Gramlich
President, Grid Strategies LLC*

Dian Grueneich
Commissioner Emeritus, California Public
Utilities Commission*
Precourt Energy Scholar, Precourt Institute
for Energy, Stanford University*

Karl Hausker, PhD
World Resources Institute*

James Hoecker
Energy Attorney, Husch Blackwell LLP*
Principal, Hoecker Energy Law & Policy*
Former Chairman, Federal Energy
Regulatory Commission *

Jesse Jenkins, PhD
Assistant Professor, Department of
Mechanical and Aerospace Engineering and
the Andlinger Center for Energy and the
Environment, Princeton University*

Nicholas Miller
Principal, HickoryLedge LLC*

Ric O'Connell
CEO, Gridlab*

Andrew Ott
CEO, GridFocus Energy*
Former CEO, PJM*

Karen Palmer, PhD
Member, National Academies of Sciences,
Engineering and Medicine's Committee on
the Future of Electric Power in the U.S*

Johannes Pfeifenberger
Principal, The Brattle Group*

Dan Scripps
Chair, Michigan Public Service
Commission*

Alison Silverstein
Independent Consultant,
Alison Silverstein Consulting*

Rich Tabors, PhD
President, Tabors Caramanis Rudkevich*
Member, National Academy of Engineering*

Sue Tierney, PhD
Member, National Academies of Sciences,
Engineering and Medicine's Committee on
the Future of Electric Power in the U.S*

*Organizations are listed for affiliation purposes only.