August 17, 2022

Office of Energy Policy and Innovation  
Federal Energy Regulatory Commission  
Attn: David Borden  
888 First Street NE  
Washington, DC 20426

RE: Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection, Docket RM 21-17-000

Submitted via https://www.ferc.gov

Dear Mr. Borden:

The National Electrical Manufacturers Association (NEMA) is the leading U.S. trade group representing nearly 325 electrical equipment and medical imaging manufacturers that are at the forefront of helping the nation successfully transition to an electrified, connected, and cleaner economy. A robust collection of our member companies domestically manufacture almost all hardware products, advanced technologies, and integrated systems and controls used in transmission construction and upgrade projects; this makes the electroindustry a critical part in any transmission planning process. Due to this important role, NEMA is pleased to submit comments to the Federal Energy Regulatory Commission’s (FERC) notice of proposed rulemaking (NOPR) on Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection.

NEMA actively participates in transmission-related advocacy as coalition members in the Rail Electrification Council, the American Council for Renewable Energy, and the Americans for a Clean Energy Grid, to name a few. These comments complement comments and communications submitted by these groups in relation to this NOPR.

Generally, NEMA supports any effort that improves transmission planning processes, including national-level rulemakings that result in strong and practical pathways that yield benefits quickly and responsibly. Given the accelerating electrification of the nation’s economy and infrastructure, even incremental procedural changes by FERC can provide positive signals to electrical manufacturers and other grid suppliers to adequately scale production of needed equipment. We applaud FERC for seeking to address procedural hurdles which have slowed or significantly delayed needed investment in our nation’s electrical grid.

Below are NEMA’s comments on various reforms proposed by FERC through this NOPR:

**Long-Term Regional Transmission Planning**

The NOPR proposes reforms regarding long-term regional transmission planning to be conducted on “a sufficiently forward-looking basis to meet transmission needs driven by changes in the resource mix and demand.” This planning would include consideration of “low-frequency, high-impact events,” and a
needs horizon of at least 20 years. Furthermore, it proposes that providers more fully consider grid enhancing technologies (GET), namely dynamic line rating systems and power flow routing devices.

- **Sufficiently forward-looking basis to meet transmission needs driven by changes in the resource mix and demand.**

**NEMA is pleased to see FERC embracing its role as an agent of change and instituting a proactive philosophy which looks at what the grid can become and planning towards the future.**

Adopting such an approach emphasizes innovation, creative thinking, and encourages all parties involved in long-term planning to consider what is possible. It also is a recognition of technology’s critical role in transmission policy and the supporting variables that will also need to be considered in ensuring such equipment can be effectively applied, maintained, and secured.

Planning on a forward-looking basis also recognizes that the risks and threats to the grid are now different and will continue to evolve. The harmful impacts, whether man-made, intentional, unintentional, or naturally occurring events will be drastically more devastating, particularly as the grid becomes more interconnected and the nation further embraces electrification. New-age strategies and technologies to improve resiliency, cybersecurity, and reliability need to be evolved, as well as the human capital and expertise to support them.

A proactive approach to transmission planning will also support cost-effective infrastructure investment. Continual capital and resource investment to prop up legacy equipment and systems simply reinforces a reactive status quo and consequently strengthens dated transmission management and development practices and ethics. To NEMA’s liking, FERC appears ready to take a “probabilistic,” forward-looking approach which could lead to certainty and confidence for all parties. This, in turn, will attract investment, increases quality, and reduces projects’ costs overall. It also leans in on the value of data-driven forecasting and decision making, smart tools which further identify risks and opportunities for planning purposes.

- **Grid enhancing technologies**

The NOPR requires that “public utility transmission providers more fully consider dynamic line ratings and advanced power flow control devices in regional transmission planning process.” As noted above, continual investment to sustain legacy equipment, systems, and management practices throughout the grid hinders the nation’s ability to fully appreciate the benefits of electrification. However, NEMA, like FERC, realizes that immediate and wholesale replacement of these grid elements is impractical. The growth of GET since FERC’s Order No. 881 has served as a productive bridge between legacy technologies designed for longevity and new policy goals seeking to increase efficiency and resiliency.

**NEMA generally supports FERC’s proposed requirement for public utility transmission providers to implement GET products, but they should be used in conjunction with other modern, forward-looking technologies, systems, and strategies.** GET should be used to derive the most utility out of existing products which are not functionally obsolete or deficient. However, long-term transmission planning should not be limited to consideration of only these technologies. Rather, transmission providers should be required and encouraged to implement all products and technologies designed with longevity, efficiency, high capacity, cybersecurity, and other modern advances in mind.
Additional Considerations

- **Brownfield Rights of Way**

  In its Final Rule, NEMA urges FERC to adopt procedural changes which will incentivize the use of existing brownfield rights-of-way (ROW) for transmission lines or consider use of such ROWs as part of its forward-looking approach. The merit of a brownfield project is that it takes into account sites with existing uses or ground disturbances; there is less of an impact to the environment through which a transmission line would travel. The usage of ROWs and other existing utility corridors could greatly reduce multiple barriers that generally hinder transmission investment and progress, particularly politically sensitive eminent domain and property-rights issues, and environmental reviews required by National Environmental Policy Act. By no means the only solution to interregional and long-term transmission planning, the use of brownfield ROWs can also achieve FERC’s goal of equitable cost allocation.

NEMA thanks FERC for the opportunity to provide comments to this NOPR and look forward to being continued partners in the long-term transmission planning development process. Should you have any questions, please contact me.

Sincerely,

Spencer Pederson
Vice President, Public Affairs

Endnotes

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i Founded in 2020, the Rail Electrification Council is a diverse coalition of electrical manufacturers, technology companies, transportation companies, renewable energy providers, and other stakeholders that seek to enhance the strength and efficiency of critical infrastructure networks. The Council is an affiliate of NEMA; additional information about the Council can be found here: [https://www.nema.org/directory/nema-councils/rail-electrification-council](https://www.nema.org/directory/nema-councils/rail-electrification-council)


iii FERC NOPR, PP 3

iv [https://www.canarymedia.com/articles/transmission/how-to-move-more-power-with-the-transmission-lines-we-already-have](https://www.canarymedia.com/articles/transmission/how-to-move-more-power-with-the-transmission-lines-we-already-have)