



The Railroad Electrification Council (“REC’ or “Council”) was established to promote technology and policy coordination between two major North American infrastructure networks – railways (both freight and passenger) and the electric power system. REC is an affiliate of the National Electrical Manufacturers Association (“NEMA”). Its members include manufacturers, electric utilities, merchant transmission developers, renewable energy developers, and service companies. All business and organizations interested in the REC mission and vision are eligible to become members. The Council --

- (1) promotes new electrical applications and public policies in the transportation and power industries, in the belief that the existing railway ecosystem will come to rely less heavily on fossil fuels and increasingly on cleaner forms of energy, including wind and solar resources and energy storage, which are having a great impact on the electrical generation resource mix, the evolution of highway vehicles (“EVs”), and the overall economy;
- (2) urges exploration of electricity as the principal motive power of North American railroads and the use of railroad rights-of-way as an important enabler of electric power grid integration and innovation; and
- (3) highlights opportunities for companies to achieve greater economic and operational efficiency while lowering emissions and operating costs in these two industries.¹

Most important to this case, the REC believes that utilization of longitudinal railroad real estate assets, known as rights-of-way, to co-locate energy facilities including high voltage transmission and renewable resources will be key to lowering the cost of electricity to businesses and consumers and to the expansion, integration, and modernization of the electric transmission grid. The Council can be found at www.nema.org/directory/nema-councils/rail-electrification-council.

B. THE SOO GREEN COMPLAINT

¹ See the Council’s *The Value of Rail Electrification* (2020), available at www.nema.org/standards/view/the-value-of-rail-electrification



On June 21, 2021, SOO Green² filed a complaint against the PJM Interconnection (“PJM”), the regional transmission organization to which its proposed transmission project would terminate at a converter station in Illinois. SOO Green asserts that PJM’s tariff and operating agreement requires SOO Green (as a merchant transmission provider) to complete PJM’s generation interconnection process before being considered for inclusion in the regional transmission planning process, or “RTEP”. Conversion of SOO Green’s HVDC energy to AC for delivery into PJM’s system will appear to PJM’s planners much like a new generation resource, electrically. As a result, SOO Green indicates that its Project will incur substantial delay in the highly congested generation interconnection process before being allowed to be included in the PJM regional planning process for transmission projects. SOO Green argues that this tariff requirement is unjust and unreasonable, costly, and inefficient and asks the Commission to order PJM to allow the project to move directly to the RTEP or to require completion of the relevant interconnection studies by a date certain in the interest of predictability. SOO Green does not request generic alteration of the PJM process as it affects merchant transmission providers or HVDC projects generally.³

III. MOTION TO INTERVENE

REC respectfully requests to be granted party status in this proceeding under Rule 214 because its participation is in the public interest. The SOO Green is an innovative project that utilizes railroad rights-of-way to site most of its facilities, thereby enabling it to deliver renewable energy from the west side of the Mid-Continent Independent System Operator (“MISO”) to PJM and the East without the delay and expense of trying to utilize private lands, seek multiple state approvals, and without the environmental consequences that can accompany construction and operation of transmission facilities along greenfield locations. Transmission projects like SOO Green that leverage existing railroad rights-of-way represent a major opportunity for economic growth, local jobs and

² We note that Direct Connect, the parent of SOO Green, is a member of REC. However, the REC represents a diverse array of business interests.

³ PJM is currently conducting a stakeholder reassessment of its interconnection policies, some of which are relevant here.



investment along its route, and access to location-constrained renewable energy resources along the ubiquitous rail networks of the U.S. and Canada. We should take advantage of such opportunities.

The need to promote the potential synergies between transportation networks and the grid that is central to REC's mission and vision. REC's mission and activities are directly affected by this proceeding and no other organization can represent its interest. Finally, this Motion is timely.

IV. COMMENT OF REC ON THIS PROCEEDING

The REC supports efforts to leverage existing railroad rights-of-way to co-locate new electric infrastructure. Utilizing railroad rights-of-way to site new transmission facilities has multiple administrative and environmental advantages that will be particularly helpful for multi-state or inter-market projects. In arguing for incentives for transmission projects that utilize "brownfields" for co-location of transmission facilities, the REC stated:

Proposed transmission projects are vulnerable to jurisdictional disputes, policy disagreements and divergent practices among states and between regional transmission organizations, and divergent siting requirements. Even successful new transmission projects, which promise to contribute significantly to grid integration, reliability, liquid wholesale power markets, and a clean energy future face regulatory processes and public opposition that will typically delay implementation for a decade or longer. These inefficiencies will prove costly for consumers and the general economy. Siting a transmission line may be foiled for a variety of reasons, good and bad. Facilities siting is the single most intractable barrier to transmission project development. Congress has struggled to address the problem, with little success, through "backstop siting," regional compacts, and use of the federal eminent domain authority of power marketing agencies. However, we point out that transmission can be greatly facilitated where it is proposed to be constructed on private property and across brownfields – i.e., land already developed for another industrial or ground-disturbing purpose.⁴

⁴ *Initial Comments of the Rail Electrification Council* (Docket No. RM20-10-000), at p. 4-5. https://elibrary.ferc.gov/eLibrary/filelist?document_id=14874260&accessionnumber=20200701-5485. Large transmission expansions would redress the current limitations on the grid's ability to delivery large amounts of remotely located wind and solar resources to load or to respond effectively to regional emergencies. In that connection, the aptly named "Macro-Grid Initiative" reflects a growing interest in inter-regional, multi-state, or inter-market projects or a "macro" HVAC or HVDC overlay that would tie all regional power markets or interconnections together as a critical component of a clean energy future. See <https://cleanenergygrid.org/macro-grid-initiative-launches-expand-upgrade-americas-transmission-network/>. However, the difficulties of siting such project facilities on continuous longitudinal expanses of private real estate, subject to landowner opposition and individual (and inconsistent) state regulatory regimes, remain a barrier to development to which there are few alternatives. One alternative is to site large projects along existing transmission rights-of-way utilizing technology



In sum, the opportunity to site transmission within existing brownfields rights-of-way will prove an important ingredient in the clean energy transformation and in integrating the North American grid.⁵ We could not agree more with Chairman Glick’s recent statement that, as electric generation shifts toward resources located far from load centers, “a piecemeal approach to expanding the transmission system is not likely to get the job done.” REC welcomes the Commission’s announcement that it will undertake a generic reassessment of its transmission planning and interconnection mechanisms,⁶

The instant case is an example of why pursuit of the “grid of the future” by the Commission should include consideration of the synergies between the transportation and electric power networks.

To date, the electric power and railroad industries have operated and been regulated in separate “silos”. We contend that the prospect of transportation electrification is likely to change that in the years to come but industry and policy makers have just begun to explore the potential mutual benefits of greater coordination.⁷ Now is the time to look for opportunities to foster business and regulatory certainty across the Nation’s

upgrades or reconductoring. Moreover, there are promising but largely unexploited opportunities for co-location of new facilities along longitudinal rights-of-way controlled by one or a few network “landlords” such as railroads or highways. These are generally less subject to state-by-state regulation and disturb less land, thereby reducing landowner opposition and the potential exercise of eminent domain. REC encourages collaborative efforts to plan infrastructure in coordination with affected communities or landowners in an effort to reach agreement on siting. Yet, interstate and interregional transmission projects, which will prove instrumental to interconnecting large volumes of new renewable resources, usually entail greater investments of time (over 10 years) and financial and human resources to plan and satisfy the divergent affected interests.

⁵ REC has urged the Secretary of Transportation and the railroad regulators within the USDOT – the Federal Railroad Administration, and the Surface Transportation Board – to explore co-location of electric transmission within railroad rights-of-way. Letter to Secretary Pete Buttigieg, July 26, 2021; see [REC US DOT Letter](#). In connection with his directive to the Federal Highway Administration and state DOTs regarding co-locating transmission along highways to accelerate development, Secretary Buttigieg stated that “[t]oday’s actions can provide a model for our private partners, like railroads, to do the same.” Quoted in “Gridlocked: These policies might put Biden’s transmission infrastructure plans on hold,” *Grist*, May 4, 2021, available at www.grist.org/energy/gridlocked-these-policies-might-put-bidens-transmission-infrastructure-plans-on-hold/

⁶ FERC, *Advance Notice of Proposed Rulemaking* (Docket No. RM21-17-000), July 15, 2021, available at www.ferc.gov/news-events/news/advance-notice-proposed-rulemaking-building-future-through-electric-regional

⁷ For example, Federal Railroad Administration, U.S. Department of Transportation, *Report To Congress: Shared-Use of Railroad Rights-of-Way* (July 2019), <https://railroads.dot.gov/elibrary/shared-use-railroad-rights-way>; and Federal Energy Regulatory Commission Staff, *Report on Barriers and Opportunities for High Voltage Transmission: A Report to the Committees on Appropriations of Both Houses of Congress Pursuant to the 2020 Further Consolidated Appropriations Act*, at 17 (June 2020). <https://www.congress.gov/116/meeting/house/111020/documents/HHRG-116-II06-20200922-SD003.pdf>



infrastructure industries and to leverage their respective assets to produce consumer benefits that are only now becoming realizable.⁸ To this end, REC supports the existing interconnection queue reform efforts⁹ underway at PJM as well as FERC's more global reassessment of its transmission planning and interconnection requirements, which could help address the interconnection delays that SOO Green and many other interconnection customers have experienced. That said, REC urges a more expeditious resolution by the Commission of the issues raised by SOO Green in this docket.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Steve Griffith", is written over a horizontal line.

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⁸ National Renewable Energy Laboratory, U.S. Department of Energy, North American Renewable Integration Study, *Opportunities for A Coordinated, Continental Low Carbon Grid* <https://www.nrel.gov/news/program/2021/north-american-renewable-integration-study-highlights-opportunities-for-a-coordinated-continental-low-carbon-grid.html>]; See Trabish, H.K., *Transmission Troubles? A solution could be lying along rail lines and next generation highways*, Utility Dive, <https://www.utilitydive.com/news/transmission-troubles-a-solution-could-be-lying-along-rail-lines-and-next/587703/>

⁹ See, <https://www.pjm.com/committees-and-groups/task-forces/iprtf>