**UNITED STATES OF AMERICA**
**BEFORE THE**
**FEDERAL ENERGY REGULATORY COMMISSION**

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| **Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generation Interconnection** | **)** **)** **)** | **Docket No. RM21-17-000** |

# REPLY COMMENTS OF GRID UNITED LLC

## I. Introduction

The most cursory review of the nation's interconnection queues, integrated resource plans, and portfolio standards quickly reveals that the debate concerning the future energy mix of the United States in the coming decades, is over. The market has spoken. The great challenge this country's market regulators and energy market participants will contend with over the next two decades is that of low-cost variable resources. The social desire for a more sustainable energy mix and the market reality of levelized costs of energy favoring more variable generation to traditional thermal, has produced a North American energy market beckoning for new rules. New incentives. New pillars of market formation. In an energy generation market defined by low-cost variable resources, the accompanying transmission market must be defined by interregional grid connections.

Our nation's eastern and western transmission grids are interconnected by only seven, direct current transmission lines totaling 1,320 MW of transfer capability for 700 GW of generating capacity in the east, and 250 GW of generating capacity in the west. The last new DC interconnection between the eastern and western grids was constructed in 1982. By any measure, our interregional and inter-grid transmission expansion efforts are stagnant—at precisely the time

when extreme weather and the clean energy transition are underscoring the need for a stronger, more interconnected grid. [1]

Across the Atlantic, Great Britain has developed policies to solve the trifecta of more efficient markets, improved renewables integration and enhanced grid reliability. Great Britain has incentivized a dramatic expansion of grid-to-grid facilities through an innovative regulatory regime whereby transmission owners bear more of the risk, and potentially improve the economics, of HVDC connections between Great Britain, the European continent, and Ireland. In 2014, Great Britain approved its first "Cap and Floor" cost recovery framework for inter-grid facilities. In just seven years, the Cap and Floor system has supported the construction of 3.4 GW of new inter-grid facilities with an additional 7.5 GW of transmission capacity projected to be on-line by 2025.

| Project name | Developers | Connecting country | Capacity | Delivery date / estimated delivery date |
|---|---|---|---|---|
| **Nemo Link** | NGIH and Elia | Belgium | 1000MW | 2019 |
| **IFA2** | NGIH and RTE | France | 1000MW | 2021 |
| **NSL** | NGIH and Statnett | Norway | 1400MW | 2021 |

[1] Many of the ANOPR comments highlighted the need to promote new transmission. *See e.g.,* Initial Comments of National Grid PLC, RM 21-17 at 23-29 (Oct. 12, 2021) (Supporting incentives for regional and local transmission facilities, urging the Commission to allow use of existing and alternative processes to meet public policy goals, and supporting improvements in interregional planning); Comments of WIRES, RM 21-17 at 12-13 and 16-19 (Supporting continuation of incentive rate adders and deference to regional cost allocation determinations under existing rules, while noting that a broader definition of benefits may be appropriate for projects that include unquantifiable benefits, since not all benefits are quantifiable and benefits also evolve over time, which require consideration); Comments of Public Interest Organizations, RM 21-17 at 30-56; 81-87 and 99-104 (Raising concerns with respect to the existing regional and interregional transmission planning processes, supporting prioritization of multi-value projects, empowering independent interregional transmission planning authorities and "planning regions adopt unified cost-allocation processes for projects at their respective seams and requiring the adoption of a unified cost-allocation process for interregional seams that rely on a quantified assessment of benefits and costs); and Comments of LS Power Grid LLC in Response to the Commission's Advance Notice of Proposed Rulemaking at 32-36, 63-65 (Seeking independent, regional and interregional planning with broader assessment criteria and scope of facilities reviewed and incorporation of the consideration of minimum transfer capabilities between interconnections for interregional transmission planning). In our initial comments within this proceeding, Grid United focused upon the barriers to development of interregional facilities caused by current Through and Out-Service charge regimes. *See* Comments of Grid United LLC, RM21-17 (Oct. 12, 2021).

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| **Viking Link** | NGIH and Energinet | Denmark | 1400MW | 2023 |
| **Greenlink** | Element Power & Partners Group | Ireland | 500MW | 2023 |
| **GridLink** | iCON Infrastructure Partners III, L.P. | France | 1400MW | 2024 |
| **NeuConnect** | Meridiam, Allianz and Kansai Electric Power | Germany | 1400MW | 2024 |
| **NorthConnect** | Agder Energi, Lyse, E-CO and Vattenfall | Norway | 1400MW | 2025 |
| **FAB Link** | Transmission Investment and RTE | France | 1400MW | 2025 |

This success in Great Britain can be a model for innovation in interregional and inter-grid transmission development in the United States.

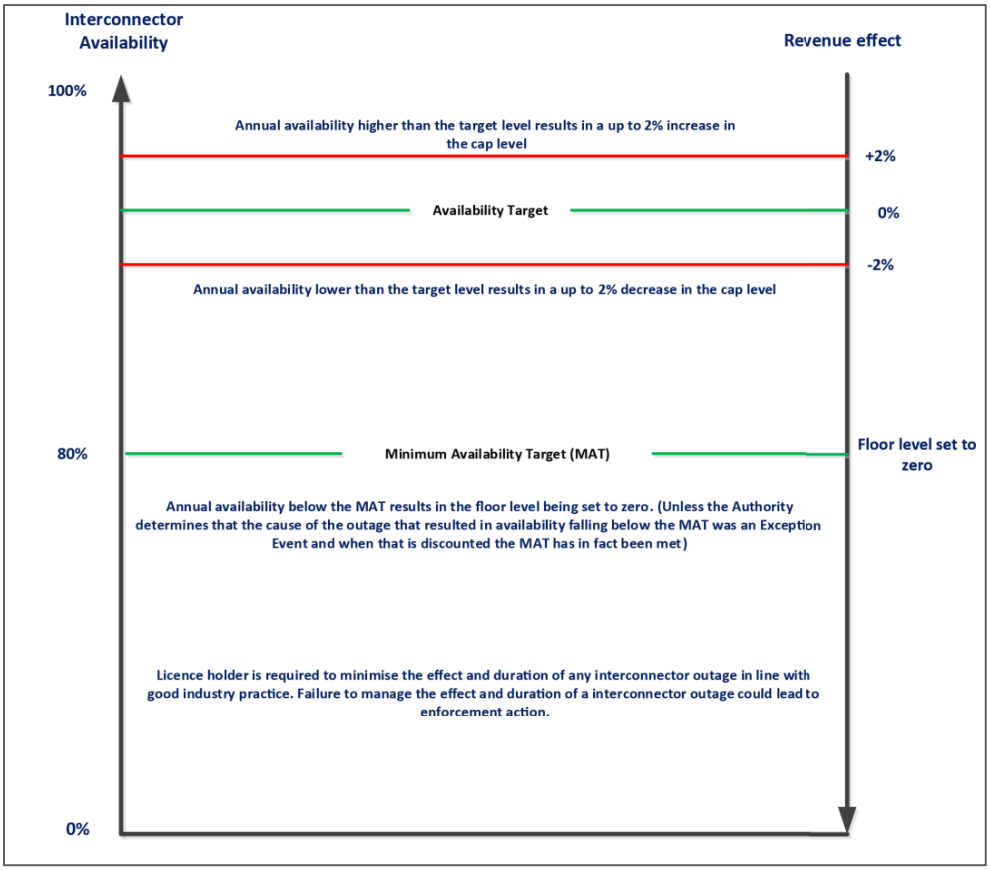
## II. The Door Should be Open to New Cost Recovery Frameworks

We strongly urge the Commission to take steps that encourage new cost recovery approaches[2]—particularly the Cap and Floor regime for interregional facilities,[3] which promotes a partnership between transmission owners and load through cost-certainty and shared realization of benefits. As of 2020, the UK regulatory agency, Office of Gas and Electricity Markets ("Ofgem"), has authorized ten projects to use the Cap and Floor regime—representing a nearly 300% increase in interregional connections over the life of the program. The Cap and Floor regime is based on an exchange of cost certainty (for load and transmission owner) and a shared realization of benefits. The framework has a simple structure that works from a regulatory review by Ofgem

[2] In its ANOPR, the Commission has largely focused on the potential for improvements to interregional planning. We support these efforts, particularly with respect to ensuring coordination on the study and assessment of inter-grid proposals. Such projects may arise through a formal interregional planning program, but also may be independently developed through a merchant transmission or participant funded project. In all instances, we expect that the development of such projects will be open access facilities that are planned to meet reliability standards and interregional coordination protocols.

[3] *See Cap and Floor Regime Handbook*, U.K. Office of Gas and Electricity Markets (Sep. 21, 2021) available at https://www.ofgem.gov.uk/publications/cap-and-floor-regime-handbook.

of the project's cost structure and the establishment of a rate recovery structure that has a maximum (Cap) and minimum (Floor) level of revenue received by the transmission owner.




Under the Ofgem approach, owners of transmission projects accept a lower guaranteed rate of return in exchange for the opportunity to receive an additional return that has a stronger market-driven component. Inter-grid projects participate in the market, moving power back and forth between grids. Transmission revenues received above the Cap are passed back to load. The structure also incorporates availability requirements and other metrics that can result in adjustments to the Floor or Cap. The Floor is set on a notional financing structure that recovers costs and a low rate of return equal to the cost of debt index. The Cap is set by Ofgem based on equity return forecasts for projects with a similar risk profile. Revenues up to the Cap flow to the

transmission owner. Load receives transmission revenues from higher utilization of the line or greater arbitrage value through either an annual payment or crediting mechanism.

A Cap and Floor regime provides a risk/reward opportunity for the transmission developer. If the developer accurately predicts which nodes are best connected with nodes in other grids, and correctly predicts the evolution of the generation fleets that will ultimately determine LMPs between newly connected grids, the transmission developer will realize a higher utilization factor that generates a greater return, up to the Cap. If the developer is wrong, load realizes the reliability and other benefits of new grid ties but does not bear all the risk of inaccurate bets on generation evolution.

Since its implementation, the additional constructed and projected 11+ GW of transmission capability strongly reflects a confidence that attracts investment capital. To this point, a June 2021 report on the effectiveness of the Ofgem framework noted that:

> *Overall, the majority of stakeholders concluded that the cap and floor regime has been successful in delivering its objectives. It has created a clear and stable regulatory framework which incentives for timely investment and competition in the sector. It also provides the level of revenue certainty required to develop large-scale interconnector projects, striking a fair balance between risk and rewards for both developers and consumers.*[4]

Viewing this potential mechanism in application to the U.S. rate recovery mechanisms, there are multiple benefits to such a structure. First, both the transmission owner (Floor) and load (Cap) provide cost certainty for the project. Second, load has the opportunity to realize a broader share of benefits—particularly through revenues from higher utilization factors. Third, risks are carried, in good measure, by transmission developers – parties who are presumably well equipped to size up opportunities. For a transmission owner, this means that its cost recovery is linked to the

[4] *See* Ofgem, *Interconnector Policy Review Working Paper 1, Review of Cap and Floor Regime,* p. 22 (June 2021) available at: https://www.ofgem.gov.uk/sites/default/files/2021-06/interconnector_policy_review_-_ws1_working_paper.pdf.

realization of broader values from design and the operation of the interconnecting link. Cap and Floor regimes can be designed on other market-based or performance metrics than those chosen by Ofgem. For load, factors such as realized energy cost differentials, market efficiency metrics, availability and other reliability performance can be incorporated as adjusting signals within the Cap and Floor levels.

## III. Timely Action to Encourage Innovations in Rate Recovery Frameworks In Concert with Infrastructure Development Efforts

The recent enactment of the Infrastructure Bill reflects renewed interest in transmission investments. Congress also may enact an investment tax credit for transmission and appropriate funds to enhance grid to grid ties. Both of these mechanisms would provide an important revenue stream that would reduce overall project costs to load. A Cap and Floor regime can effectively accommodate the ITC and other Federal support through adjustment and scaling of the Cap and Floor regime. Cap and Floor regime can be adjusted to reflect the multiple revenue streams through which a project is financed and cost-recovered, including revenue adjustments through an ITC, long-term sale of a portion of the transmission capacity to customers under negotiated rate authority and revenue associated with as-available transmission service. In such structures, the overall cost basis for rates to load and project cap would be reduced, producing lower rates and an increased opportunity for above-cap revenue flowing back to load. Structured properly, the cost support profile of an ITC-eligible inter-grid project could be as attractive as 1/3 (ITC revenue offset), 1/3 (developer at-risk) and 1/3 (revenue floor). In addition to operational benefits (strengthened reliability, access to clean energy and increased transfer capabilities), load derives the benefit of cost reductions through ITC revenue offsets and the increased market risk recovery by the developer—and has a transmission owner/partner incentivized to realize high utilization factors with economically attractive interconnection points.

## IV. Recommendation

A Cap and Floor regime can change the transmission owner/load dynamic by creating the opportunity for shared realization of benefits and mutual interest in realizing value to transmission and load from the inter-grid facility. Under Part II of the Federal Power Act, the Commission is empowered to review, approve and oversee the implementation of just and reasonable rates for wholesale transmission service.[5] A utility's rate design is not prescribed by the FPA. Indeed, the Commission has accommodated and encouraged changes in transmission rate design through approval of formula rates,[6] authorization of open seasons and negotiated rates for merchant transmission facilities,[7] approval of *ex ante* cost allocation frameworks[8] and other key transmission rate reforms.[9] Further, the Commission has maintained support for participant funding arrangements, particularly in the context of interregional facilities.

Certainly, in the future, a public utility would be within its rights under FPA, Section 205 to file with, and seek Commission approval for, a rate design framework along the lines of a Cap and Floor regime described above. However, rather than simply awaiting such a proposal, the

[5] 16 U.S.C. §§824-824w.
[6] *See Public Util. Comm'n of the State of Cal. v.. FERC*, 254 F.3d, 250, 254-55 (D.C. Cir. 2001) (Discussion of FERC review and approval for formula rates); and FERC, *Staff's Guidance on Formula Rate Updates, July 17, 2014*, https://www.ferc.gov/industries/electric/indus-act/oatt-reform/staff-guidance.pdf. (General guidance for formula rate updates which are intended to aid utilities in the preparation of their annual updates and annual update informational filings in order to avoid common deficiencies).
[7] *See e.g.,* Policy Statement, *Allocation of Capacity on New Merchant Transmission Projects and New Cost-Based, Participant-Funded Transmission Projects, Priority Rights to New Participant-Funded Transmission*, 142 FERC ¶ 61,038 (2013) and *Chinook Power Transmission, LLC & Zephyr Power Transmission, LLC*, 126 FERC ¶ 61,134 (2009) ("*Chinook*") (approving an anchor tenant structure for merchant transmission projects with anchor tenants reserving capacity at negotiated rates and a subsequent open season allocating the remainder of the capacity).
[8] *See e.g.,* Order No. 1000, *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, Order No. 1000, FERC Stats. & Regs. ¶ 31,323, PP 499-500 (2011), order on reh'g, Order No. 1000-A, 139 FERC ¶ 61,132, order on reh'g, Order No. 1000-B, 141 FERC ¶ 61,044 (2012).
[9] *See e.g.,* Policy Statement, *Promoting Transmission Investment Through Pricing Reform*, 141 FERC 61,129 (2012) (Guidance on transmission incentives policies under FPA, Section 219), and Order No. 679, *Promoting Transmission Investment Through Pricing Reform,* Order No. 679, 71 Fed. Reg. 43,294 (July 20, 2006), *order on reh'g,* Order No. 679-A, 72 Fed. Reg. 1152 (Dec. 22, 2006), *order on reh'g,* 119 FERC ¶ 61,062 (2007).

Commission is within its authorities to proactively provide guidance on new rate design structures and provide a framework for their consideration. Such action is warranted here.

FERC's ANOPR comes at a perfect time to embrace new mechanisms of cost allocation. Interest rates are at historic lows and investors are seeking energy transition opportunities. Congress is acting to provide unprecedented financial support for new transmission lines. The generation fleet is evolving at a dizzying pace. And finally other countries have pioneered mechanisms that, with adjustments to accommodate market structures, will work well in the US.

Now is the time to push for the new inter-grid and interregional facilities that will bring greater connections between markets and enhance access to low-cost energy. Timely action, in the form of policy guidance on innovative rate design for shared benefits between transmission owners and load will accelerate grid evolution. Moreover, in doing so, the Commission can underscore that incentivizing transmission and promotion of net benefits for load can be mutually realized through new approaches in transmission rate design.

Respectively submitted,

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