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

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Offshore Wind Integration in	)	Docket No. AD20-18-000
RTOs/ISOs	)	

## OPENING STATEMENT OF THEODORE J. PARADISE ANBARIC DEVELOPMENT PARTNERS, LLC

Chairman Chatterjee, Commissioner Glick, and Commission staff, good afternoon. Thank you for convening this important, timely, and necessary discussion. And I want to thank Commissioner Glick for his kind words about Ed Krapels. All of us at Anbaric deeply appreciate them.

America's offshore wind industry has seen explosive growth, with procurement targets doubling in some areas since this same time last year; now at almost 30 gigawatts for the mid-Atlantic and northeast, with far more than that needed to meet legislated climate goals that are in some case less than a decade away.

There is growing recognition, based on recent studies and developments in Europe, that this level of wind build-out requires a shift from radial transmission bundled with each wind farm, to a planned grid. Recent studies have shown that planned, open access transmission-first projects — that is transmission designed and procured separately from wind generation, and that enables the interconnection of many wind farms over fewer transmission cables — has many benefits over the radial-to-each-wind-farm approach.

Recent studies show that planned transmission, as compared with generator-specific radial lines, results in 50% less transmission cabling in New England, and five versus 18 cables needed to connect 9,000 MWs into New York; important for consumer cost savings, but also for the environment and fisheries. This is also important for permitting. Fewer cables carrying more power to the best interconnection points will mean that the build-out of offshore wind has far less risk in the permitting process: what I would argue could be the largest time delay for projects.

Recent studies also show that planned transmission makes the best use of the existing grid – which is costly, time consuming, and difficult to expand. For example, ISO-NE found that – when a radial approach is used - 5,800 MWs of OSW power could be integrated before significant onshore upgrades are necessary. Brattle working with GE found that number moved to 11,700 MW with a planned system. And importantly, load flow studies show that curtailments of offshore wind are dramatically reduced with a planned system over radials.

As we move towards the integration of more renewable resources, a planned approach is also essential for grid reliability and resiliency, providing grid operators with multiple paths for offshore wind energy to reach load.

And while the benefits of planned transmission are significant, and better understood than ever before, there are non-technical barriers to the development of planned transmission. These vary from RTO to RTO, but in short, the fundamental issue is that tariffs have developed so that the expansion of the grid using a transmission-first approach was simply never contemplated. As we see in California, MISO, ERCOT, Europe, and now NYISO, this is not a technical issue. But current tariffs allow bundled radial transmission to be studied at their injection capability and move ahead with certainty of upgrades associated with a queue position, while planned transmission – outside of Order No. 1000 – may not; with no studies and associated rights on which significant investments can be made.

States may choose to use Order No. 1000, but they also may choose to continue to directly procure transmission as they are doing today (which we heard earlier is the preference in New England).

And let's not talk ourselves into insurmountable challenges. While larger regional planning may be desirable, planned transmission-first is not all or nothing. One or a group of states may choose to procure and realize the benefits of transmission-first systems today. And let me be clear: there are not a long list of issues must be addressed for planned transmission to be utilized by states today: cost allocation or payment mechanisms are not the issue. Technical standards are not a barrier. States have, and continue to, pay for transmission for offshore wind today. And states could procure unbundled, open access transmission-first projects today.

However, simple changes, as we recently saw approved for NYISO, are needed to remove barriers by ensuring that RTO tariffs provide currently absent provisions for unbundled, transmission-first expansion. For that reason, a notice of proposed rulemaking to correct these barriers as a targeted, near term fix is *something FERC can do immediately* that will not cause delay. Rather it will help unleash private enterprise solutions: advanced development work – as seen in Anbaric's 2018 and 2019 BOEM applications for transmission ROW, and other advanced work that will help the states meet their goals more rapidly.

Thank you for the invitation and opportunity to participate today, and I look forward to your questions.

Dated: October 27, 2020