

171 FERC ¶ 61,241
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;
Richard Glick, Bernard L. McNamee,
and James P. Danly.

Anbaric Development Partners, L.L.C.

Docket No. EL20-10-000

v.

PJM Interconnection, L.L.C.

ORDER DENYING COMPLAINT

(Issued June 18, 2020)

1. On November 18, 2019, pursuant to sections 206 and 306 of the Federal Power Act (FPA)¹ and Rule 206 of the Commission's Rules of Practice and Procedure,² Anbaric Development Partners, L.L.C. (Anbaric) filed a complaint against PJM Interconnection, L.L.C. (PJM) arguing that PJM's Open Access Transmission Tariff (Tariff) is unjust and unreasonable and unduly discriminatory and preferential for its failure to allow three proposed offshore transmission projects to receive transmission injection rights (TIR).³ As discussed below, we deny the complaint.

¹ 16 U.S.C. § 824(e) (2018); 16 U.S.C. § 825e (2018).

² 18 C.F.R. § 385.206 (2019).

³ Pursuant to the Tariff, if an interconnecting merchant facility connects PJM to another control area and is Direct Current (DC) and/or Controllable Alternating Current (AC), it may elect to receive Energy or Capacity TIRs. TIRs are the rights to schedule energy and capacity deliveries at a point of interconnection of a Merchant Transmission Facility with the transmission system. PJM, Tariff, Section 232.1, Purpose (0.0.0). *See also* PJM Tariff, C-D, OATT Definitions – C-D (Capacity Transmission Injection Rights) (22.0.0).

I. Background

2. Merchant Transmission Facilities are facilities developed by independent entities for which the developer assumes all risks associated with the project and, in return, the developer can charge negotiated rates for transmission service, though the developer cannot pass its risk onto captive customers.⁴ Commission rules allow merchant transmission developers seeking negotiated rate authority to engage in an open solicitation of interest in their projects from potential transmission customers (e.g., generators) in lieu of a formal open season.⁵ The rules and practices addressing interconnection of merchant transmission facilities vary from one region to another.

3. In PJM, the Tariff requires Merchant Transmission Facilities⁶ seeking to interconnect to the PJM system to submit a transmission interconnection request, which includes a Transmission Interconnection Feasibility Study Agreement. If the interconnecting facility connects two points within the PJM region, PJM will conduct a power flow analysis and assign the facility transmission rights based on the extent to which it increases transfer capability. If the interconnecting facility connects PJM to another control area and is DC and/or controllable AC,⁷ it may elect to receive energy or

⁴ See generally *TransEnergie U.S., Ltd.*, 91 FERC ¶ 61,230 (2000).

⁵ *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 at PP 23, 28 (2013).

⁶ The Tariff defines Merchant Transmission Facilities as “[AC] or [DC] transmission facilities that are interconnected with or added to the Transmission System... provided, however, that Merchant Transmission Facilities shall not include (i) any Customer Interconnection Facilities, (ii) any physical facilities of the Transmission System that were in existence on or before March 20, 2003, (iii) any expansions or enhancements of the Transmission System that are not identified as Merchant Transmission Facilities in the Regional Transmission Expansion Plan and Attachment T to the Tariff, or (iv) any transmission facilities that are included in the rate base of a public utility and on which a regulated return is earned.” PJM, Tariff, § 1, L-M-N, OATT Definitions – L-M-N (22.0.0).

⁷ The Tariff defines controllable AC Merchant Transmission Facilities as transmission facilities that (1) employ technology which Transmission Provider reviews and verifies will permit control of the amount and/or direction of power flow on such facilities to such extent as to effectively enable the controllable facilities to be operated as if they were direct current transmission facilities, and (2) that are interconnected with the Transmission System pursuant to Tariff, Part IV and Tariff, Part VI. PJM, Tariff, § 232.1, Purpose (0.0.0) and PJM, Tariff, § 1, C-D, OATT Definitions – C-D (22.0.0).

capacity TIRs at each terminal where it connects with the PJM system.⁸ Capacity TIRs provide an interconnection customer the right to schedule energy and capacity deliveries at the point of interconnection of a Merchant Transmission Facility with the transmission system.⁹ In addition, the DC or controllable AC merchant project sponsor must, within 30 days after submitting an interconnection request to PJM, provide evidence of an application to interconnect to the other control area.¹⁰

4. Submission of a complete and fully executed Transmission Interconnection Feasibility Study Agreement triggers the assignment of a queue position to the transmission interconnection customer's facility.¹¹ The Transmission Interconnection Feasibility Study Agreement¹² requires the interconnection customer to provide certain specifications including: (a) the location of the proposed transmission facilities; (b) substations where the interconnection customer proposes to interconnect; (c) the proposed transmission facilities' voltage and nominal capability; (d) a description of the proposed transmission facilities; (e) the planned date in service of the proposed transmission facilities; and (f) whether the proposed transmission facilities will be AC, DC or controllable AC transmission facilities.

5. Once the project proceeds to the System Impact Study phase, the transmission interconnection customer is required to demonstrate site control, which is the exclusive right to control the physical space in which the proposed project facilities will be located.¹³ At the conclusion of the study process, PJM tenders an Interconnection

⁸ PJM, Tariff, § 36.1.03(1)(e)(ii), General (8.0.0).

⁹ PJM, Tariff, § 1, Definitions C-D (11.0.0).

¹⁰ *Id.* § 36.1.03(6) (8.0.0).

¹¹ *Id.* § 36.1.03(1) (8.0.0).

¹² *Id.* ATTACHMENT S (5.0.0).

¹³ *Id.* § 204.3, Interconnection Requests (0.0.0) (“(iv) in the case of a Transmission Interconnection Customer, shall (A) provide [PJM] with evidence on an ownership interest in or right to acquire or control, the site(s) where major equipment...would be installed). See also PJM Manual 14G, *Generator Interconnection Requests*, § 2.4, <https://www.pjm.com/-/media/documents/manuals/m14g.ashx>.

Service Agreement (ISA) to the transmission interconnection customer for execution, and TIRs are awarded upon commencement of service under the ISA.¹⁴

II. Anbaric Complaint

6. Anbaric states that it is a developer of large-scale electric transmission systems, including underwater and subsea transmission cables linking adjacent control areas and linking offshore generation resources to onshore grids.¹⁵ Anbaric indicates that it has filed an application for a right-of-way with the U.S. Bureau of Ocean Energy Management (BOEM) for its NY/NJ Ocean Grid project, which would connect to the onshore PJM transmission system at one or more points of interconnection.¹⁶

7. Anbaric states that its proposed transmission project would entail the construction, installation, and operation of an offshore transmission system, including several offshore collector platforms, each connected to one or more high voltage submarine cables, that would connect to onshore points of interconnection in PJM.¹⁷ According to Anbaric, each offshore collector platform could accommodate 800 MW to 1,200 MW of offshore wind generation with the ability to connect multiple offshore wind generation resources and would thereby allow for the phased development of offshore wind generation.¹⁸

8. Anbaric states that, in March 2018, it submitted interconnection requests to PJM for two proposed AC transmission platform projects that it believes qualify as Merchant Transmission Facilities, each with 1,100 MW of capacity (i.e., the capability to inject 1,100 MW into the PJM system).¹⁹ Anbaric states that a PJM representative

¹⁴ See PJM Manual 14E, Attach. B; See also PJM, Tariff, § 232.3, Determination of Transmission Injection Rights (0.0.0).

¹⁵ Complaint at 8. Anbaric notes that its Neptune Regional Transmission System project, which uses an underwater High Voltage Direct Current (HVDC) transmission line, and its Hudson Transmission project, which uses back-to-back HVDC terminals, connect the PJM and New York transmission systems allowing generation resources in PJM to deliver electric energy and capacity into the New York Independent System Operator (NYISO). *Id.*

¹⁶ *Id.* at 9.

¹⁷ Anbaric refers to this type of project as a “transmission platform project.”

¹⁸ Complaint at 9.

¹⁹ *Id.* at 16. Anbaric explains that transmission platform projects are designed to connect “expected” remote generation resources to the PJM transmission system. *Id.* at 2.

subsequently informed Anbaric that the proposed AC transmission platform projects would move forward only if Anbaric partnered with a generator on its interconnection request or if it presented the issue in the stakeholder process.²⁰ Anbaric states that, four months later, PJM issued a combined Feasibility/System Impact Study Report for both proposed AC transmission platform projects reflecting “a proposed 0 MW Energy, 0 MW Capacity AC offshore wind transmission system.”²¹

9. Anbaric states that, in June 2018, it submitted to PJM a second interconnection request for a proposed DC transmission platform project that it believes qualifies as a Merchant Transmission Facility, with 1,200 MW of capacity.²² Anbaric states that, in May 2019, PJM issued a feasibility report in which PJM assumed the project would have 1,200 MW of TIRs, and then executed with Anbaric a System Impact Study Agreement. Anbaric states that on November 1, 2019, nearly 18 months after it submitted its interconnection request, PJM changed course and informed Anbaric that it would instead process the interconnection request for the proposed DC transmission platform project assuming 0 MW of TIRs.²³

10. Anbaric states that PJM’s interconnection procedures contained in Tariff sections 36.1.03 and 232 deny meaningful open access interconnection service to merchant transmission projects when those projects take the form of transmission platform projects designed to connect expected remote generation resources to the PJM transmission system.²⁴ Anbaric adds that PJM’s Tariff denies Anbaric the opportunity to obtain “meaningful and material interconnection rights.”²⁵

11. Anbaric argues that the Tariff only provides TIRs to Merchant Transmission Facilities that (1) are DC or “controllable” AC and (2) that connect with another control area outside the PJM region. Anbaric states that the Tariff does “not even contemplate

²⁰ *Id.* (citing Affidavit of Howard Kosel at P 10 (Kosel Aff.)).

²¹ *Id.* at 17.

²² *Id.*

²³ *Id.* at 18.

²⁴ *Id.* at 15.

²⁵ Anbaric uses the term “material interconnection rights” to mean the ability of transmission platform projects to interconnect to the PJM transmission system and obtain TIRs. *Id.* at 1-2 n.5. For consistency with the Tariff, in our determinations in this order we only refer to TIRs

that ‘non-controllable’ radial AC Merchant Transmission Facilities can obtain TIRs.”²⁶ Anbaric requests that the Commission direct PJM to adopt certain Tariff changes so that (1) PJM’s interconnection procedures accommodate transmission platform projects and grant them TIRs, and (2) PJM can accept right-of-way applications accepted by BOEM as demonstrations of site control.²⁷

12. Anbaric further requests that the Commission establish a refund effective date to prevent Anbaric’s projects with queue positions from being processed without receiving TIRs or losing their queue positions.²⁸

13. Anbaric argues that there are no technical reasons to deny transmission platform projects the opportunity to obtain material interconnection rights under the Tariff, or require that such projects connect to another control area.²⁹ Anbaric states that PJM’s interconnection procedures contemplate only transmission facilities interconnecting (1) within the already developed PJM transmission system, (2) the PJM transmission system to another existing transmission system, or (3) a “gen-tie”³⁰ for an identified generation resource.³¹ Anbaric states that PJM, through such overly restrictive interconnection procedures, is now in the position of picking winners and losers in what type of offshore transmission facilities can be developed to serve offshore wind generation resources.³²

14. Anbaric argues that there is no technical reason to require that merchant AC must be more controllable than other radial transmission facilities.³³ Anbaric argues that a

²⁶ Complaint at 15.

²⁷ *Id.* at 49.

²⁸ *Id.* at 53. PJM subsequently sent Anbaric a communication requesting evidence of interconnection of the proposed DC line with an adjacent control area by January 23, 2020, failure of which will result in loss of Queue Position AE-1-084. Anbaric First Answer, Ex. 1 at 1.

²⁹ Complaint at 31-32.

³⁰ The term “gen-tie” will be referred to herein in the Commission’s terminology as Interconnection Customer’s Interconnection Facilities.

³¹ Complaint at 6.

³² Anbaric First Answer at 4.

³³ Complaint at 32-33.

merchant AC transmission platform project should be treated the same as an Interconnection Customer's Interconnection Facilities. Anbaric explains that under the Tariff, Interconnection Customer's Interconnection Facilities are only required to be able to inject energy or capacity at a defined point of interconnection within the PJM transmission system in order to obtain Capacity Interconnection Rights; and that PJM's decision to deny merchant AC transmission that same treatment is arbitrary.³⁴

15. Anbaric recommends that because it has already demonstrated to BOEM's satisfaction that it has the technical and financial capability to construct, operate, maintain, and decommission certain other offshore projects, that these BOEM milestones should be considered and incorporated by PJM in its already existing process for determining whether a proposed project can demonstrate site control.³⁵

16. Anbaric argues that PJM's interconnection rules violate well-founded Commission policy. For example, Anbaric states that in Order No. 845, the Commission recognized that tariffs had not provided for language to ensure that material interconnection rights for electric storage resources were comparable to those afforded traditional generating facilities and revised the definition of "Generating Facilities" in its *pro forma* interconnection procedures and agreements to include electric storage resources.³⁶

17. Anbaric further points to FPA section 202(a), which requires the Commission to assure "an abundant supply of electric energy throughout the United States" by "promot[ing] and encourag[ing] such interconnection and coordination within each such district and between such districts."³⁷ Anbaric also points to Order Nos. 845 and 1000 as examples of Commission policies designed to remove barriers to the development of new transmission and generation resources.³⁸ Anbaric states that Order No. 1000 requires an

³⁴ *Id.* at 33 (citing PJM Manual 14E, Upgrade and Transmission Interconnection Requests at § 3.1.2).

³⁵ Complaint at 4 n.6 (citing BOEM Offshore Rule, 30 C.F.R. § 585.107 (2019)).

³⁶ Complaint at 23 (citing *Reform of Generator Interconnection Procedures and Agreements*, Order No. 845, 163 FERC ¶ 61,043 at P 275 (2018) (revising the definition of "Generating Facilities" in the Commission's *pro forma* interconnection procedures and agreement to include electric storage resources)).

³⁷ *Id.* at 23-24 (citing 16 U.S.C. § 824a(a) (2018)).

³⁸ *Id.* at 25 (citing Order No. 845, 163 FERC ¶ 61,043 at P 37 (stating current interconnection procedures "hinder timely development of new generation, stifle competition, result in uncertainty and inaccurate information, or potentially unduly discriminate against new technologies."); see also *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, Order No. 1000,

incumbent public utility to remove rights of first refusal (ROFR) provisions from its tariffs, and likens the Tariff's denial of material interconnection rights for transmission platform projects as providing a ROFR to proprietary wind farm Interconnection Customer's Interconnection Facilities owners and affiliates.³⁹

18. Anbaric further argues that sections 36.1.03 and 232 of PJM's Tariff impose unnecessary barriers to the development of offshore wind infrastructure.⁴⁰ Anbaric states that denying transmission platform projects the opportunity to obtain material interconnection rights violates core open access principles in Order Nos. 888 and 2003.⁴¹ Anbaric notes that the Commission has recognized that meaningful access to transmission is a necessary component of an efficient bulk power market.⁴² Anbaric further argues that open access to transmission is critical in the context of the growing offshore wind infrastructure industry and to the need to provide competitive, economically efficient, and environmentally friendly interconnection to accommodate the large-scale development of offshore wind generation.⁴³

19. Anbaric states that PJM's denial of material interconnection rights to its transmission platform projects will (1) cause Anbaric immediate and ongoing harm

136 FERC ¶ 61,051 at P 2 (2011) (stating certain regions struggle "with how to adequately address transmission expansion necessary to, for example, comply with renewable portfolio standards.").

³⁹ *Id.* at 26-27. Rather, Anbaric argues that providing material interconnection rights to transmission platform projects will increase competition "not only for transmission development but also for the development of offshore wind generation facilities, which can compete against each other head-to-head based on the price of their wind generation output at their point of interconnection to a nearby transmission platform project and not the cost of all of the interconnection transmission facilities needed to reach the onshore transmission grid. *Id.* at 27-28.

⁴⁰ *Id.* at 20.

⁴¹ *Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities and Recovery of Stranded Costs by Public Utilities and Transmitting Utilities*, Order No. 888, FERC Stats. & Regs. ¶ 21,540, at 21,605 (1996); *Standards of Generator Interconnection Agreements and Procedures*, Order No. 2003, 104 FERC ¶ 61,103, at P 12 (2003) (finding that interconnection "is a critical component of open access transmission service.").

⁴² Complaint at 21 n.50.

⁴³ *Id.* at 22.

because such projects may lose their queue positions or be processed under PJM's interconnection procedures assuming that they will have no TIRs; and (2) cause harm to the public interest by precluding coastal states within the PJM region, many with offshore mandates or goals,⁴⁴ from pursuing procurement of transmission platform projects.⁴⁵ Anbaric argues that transmission platform projects "may be the most cost-effective and efficient means of interconnecting large amounts of offshore wind generation resources to onshore grids."⁴⁶

20. Anbaric argues further that transmission platform projects are potentially a more economically efficient, cost-effective,⁴⁷ and environmentally friendly means to interconnect large amounts of remote offshore wind generation to the onshore grid than proprietary Interconnection Customer's Interconnection Facilities, and can provide greater resilience and fuel security benefits to an onshore transmission grid, when controllable line technology is used, by directing power to where it is needed most to bolster system security.⁴⁸

⁴⁴ *Id.* at 10-15.

⁴⁵ *Id.* at 5.

⁴⁶ *Id.* Anbaric adds that the eastern seaboard states in the PJM Region—in particular, New Jersey, Maryland, and Virginia—have ambitious offshore wind generation mandates or goals and have already begun contracting with offshore wind generating facilities to meet them.

⁴⁷ Anbaric argues that there is unrefuted evidence in this proceeding demonstrating that transmission platform projects like the ones Anbaric seeks to develop and interconnect to the PJM Transmission System are more efficient and cost-effective than alternatives, and that preventing such transmission facilities from even competing as a result of the PJM Tariff's interconnection procedures is plainly contrary to Commission precedent and is unjust, unreasonable and unduly discriminatory and preferential. Anbaric First Answer at 16.

⁴⁸ Complaint at 29-30 n.73-76. Anbaric states that, unlike proprietary gen-ties interconnecting one offshore wind generating facility (comprised of multiple offshore wind turbines) through a single offshore collector substation, a planned transmission platform project can optimize the placement and use of one or more offshore collector substations to interconnect multiple nearby offshore wind generating facilities (each comprised of multiple offshore wind turbines). Anbaric adds that the placement of collector substations is critical due to physical constraints including seafloor geography, shipping channels and fisheries; as such, a smaller proprietary substation could occupy

21. Anbaric argues that the Commission is required, pursuant to section 206 of the FPA, to replace an unjust, unreasonable or unduly discriminatory or preferential rate with one that is just and reasonable. As a replacement rate, Anbaric proposes the Commission should first direct PJM to remove from sections 36.1.03 and 232 of its Tariff, the requirement that Merchant Transmission Facilities must connect to another control area. Anbaric also recommends that the Commission require PJM to adopt in the Tariff a new category of Merchant Transmission Facilities called Remote Generation Interconnection Platforms (ReGRIPs), which would connect remote generation to the PJM system.⁴⁹ Anbaric recommends the Commission allow ReGRIPs to obtain TIRs up to the full amount requested and subject to all OATT requirements. In addition, Anbaric proposes that ReGRIPs cannot be Interconnection Customer's Interconnection Facilities and the definition of Merchant Transmission Facility should be expanded to include ReGRIPs, among other Tariff changes.⁵⁰

22. To further support its argument that there is no technical basis for PJM to deny granting TIRs to transmission platform projects, Anbaric states that NYISO recently submitted a filing to the Commission to amend its tariff to permit DC and controllable AC transmission platform projects to be processed through the NYISO interconnection queue, which the Commission has accepted.⁵¹

23. Anbaric argues that transmission platform projects have also been studied and deployed without technical issue in the Electric Reliability Council of Texas (ERCOT), California Independent System Operator (CAISO), and Midcontinent Independent System Operator (MISO) regions, and in Europe. Anbaric describes successful outcomes

the same amount of space as an open access collector substation connected to multiple generating facilities. *Id.* n.73.

⁴⁹ Anbaric proposes ReGRIP to mean an open access transmission facility or platform that is constructed for the primary purpose of connecting to the PJM transmission system generation facilities that are expected to be developed in a Remote Generation Resource Area. Complaint at 45-47.

⁵⁰ *Id.* at 47-48. For example, in addition to changes to sections 36.1.03, 38 and 232 of the Tariff to accommodate ReGRIPs, Anbaric proposes Tariff revisions to ensure that future generation units that seek to interconnect through ReGRIPs may use studies already completed when going through their respective interconnection processes with PJM. *Id.* at 48.

⁵¹ Anbaric First Answer at 13; Anbaric Supplemental Answer at 5 (citing N.Y. Indep. Sys. Operator, Inc., Transmittal, Docket No. ER20-638-000 (filed Dec. 19, 2019); *see also NY Indep. Sys. Operator, Inc.*, Docket No. ER20-638-000 ((Jan. 31, 2020) (delegated order)).

for the interconnection of location-constrained resources through CAISO's Location Constrained Resource Interconnection policy,⁵² MISO's multi-value project (MVP) process,⁵³ and ERCOT's Competitive Renewable Energy Zones (CREZ) process.⁵⁴

24. Anbaric argues that transmission platform projects should be studied in PJM's transmission interconnection process in the same manner that PJM studies Interconnection Customer's Interconnection Facilities that serve a wind generator (i.e., using proxy wind turbines while more efficient wind turbines are being developed and then truing up interconnection studies to account for differences between proxy and actual turbines). Anbaric suggests that transmission platform projects can be studied similarly, wherein such proxies can be considered equivalent to the amount of TIRs that a transmission platform project is requesting for study purposes. One advantage afforded by PJM's interconnection process to Interconnection Customer's Interconnection Facilities, according to Anbaric, is that it allows the developers of offshore wind infrastructure to identify optimal interconnection points and make investments in permitting and equipment.⁵⁵

25. Anbaric contrasts the Tariff's treatment of transmission platform projects with its treatment of proposed interconnection transmission facilities that are "bundled" with identified offshore wind generating facilities, which are studied for and provided material

⁵² CAISO adopted the Location Constrained Resource Interconnection (LCRI) policy to allow radial transmission facilities to connect to CAISO two or more LCRI generators, so long as one of which is not an affiliate of another. Complaint at 37. *See also* CAISO, Tariff, § 24.4.6, Categories of Transmission Solutions (6.0.0), § 24.6.3.2.

⁵³ MISO developed a portfolio of MVPs to provide a low-cost approach to wind siting considering both generation and transmission capital costs. One such project, the Michigan Thumb Loop Project, provided a backbone transmission system to accommodate anticipated wind generation, subsequently connecting 1,000 MW of remote wind. Complaint at 38-39.

⁵⁴ The Public Utility Commission of Texas designated CREZ to develop transmission capacity necessary to deliver the electric output from renewable energy technologies in the CREZs. Complaint at 40 (citing 2005 Tex. Sess. Law Serv. 1st Called Sess. Ch. 1 (S.B. 20); TEX. UTIL. CODE ANN. §§ 39.904(a), (g)(1)-(2)).

⁵⁵ Complaint at 34. Anbaric explains that proxies are used due to delay caused by the pace of technological innovation and commercial development of taller, more efficient, and more powerful wind turbines; and that when the actual wind turbines that will be installed in the wind generation project are identified, interconnection studies are trued up to identify any differences in system interaction or changes to needed upgrades. *Id.*

interconnection rights.⁵⁶ Anbaric adds that such “bundled” projects are likely to be studied based on assumed or hypothetical wind turbines but PJM still studies the impact of their estimated power injections into PJM’s transmission system and identifies the upgrades necessary to accommodate those injections.⁵⁷ Anbaric argues that there is “no technical reason” this same interconnection process cannot be applied to transmission platform projects.⁵⁸

26. Anbaric further argues that proprietary Interconnection Customer’s Interconnection Facilities may impose barriers to entry to potential, competing developers of offshore wind generating facilities because Interconnection Customer’s Interconnection Facilities may have the ability to only serve offshore wind generating facilities under common ownership or allow the owner of such offshore transmission facilities to hoard interconnection capacity to later be used by themselves or their affiliates.⁵⁹

27. Anbaric concedes that, in theory, the states could seek to procure transmission platform projects with the equivalent of material interconnection rights through PJM’s transmission planning process, which considers Public Policy Requirements,⁶⁰ or, one or

⁵⁶ *Id.* at 3.

⁵⁷ *Id.* Anbaric adds that the developer of such a bundled project can then decide whether to invest the capital to pay for the system upgrades that will enable their project to interconnect to the PJM transmission system, knowing that once their material interconnection rights have been secured, those rights can be relied upon by the associated offshore generating facilities to inject power generated by their later actually-installed wind turbines into the PJM transmission system. *Id.*

⁵⁸ *Id.*

⁵⁹ *Id.* n.78 (citing *Open Access and Priority Rights on Interconnection Customer’s Interconnection Facilities*, Order No. 807, 150 FERC ¶ 61,211, at PP 55-56 (2015)). Anbaric adds that if such Interconnection Customer’s Interconnection Facilities—based development of offshore transmission facilities is the only option, the PJM Eastern Seaboard States may find themselves in a situation where the initial developers of such facilities, by default, effectively have the ability to impose barriers to competition as between potential competing developers of offshore wind generating facilities. *Id.*

⁶⁰ Public Policy Requirements are defined as “refer[ring] to policies pursued by: (a) state or federal entities, where such policies are reflected in duly enacted statutes or regulations, including but not limited to, state renewable portfolio standards and requirements under Environmental Protection Agency regulations; and (b) local governmental entities such as municipal or county government, where such policies are

more states could agree to pay for the cost of such a project under PJM's State Agreement Approach.⁶¹ However, as a practical matter, Anbaric argues that PJM's planning process for projects that address Public Policy Requirements does not appear to provide a ready means by which a state or states could procure a transmission platform project through a state-sponsored solicitation with any certainty as to what they are buying including costs until the project is actually studied and included in PJM's Regional Transmission Expansion Plan (RTEP).⁶² Anbaric states that similarly, PJM's planning process for projects that address Public Policy Requirements does not appear to provide the developers of transmission platform projects an opportunity to undertake the time-intensive and expensive process of developing interconnection arrangements for such projects.⁶³

III. Notice of Filings and Responsive Pleadings

A. Notice of Filings

28. Notice of the complaint was published in the *Federal Register*, 84 Fed. Reg. 65,151 (Nov. 26, 2019), with answers, interventions, and comments due on December 9, 2019.⁶⁴

29. Notices of intervention were filed by Illinois Commerce Commission and Maryland Public Service Commission. Timely motions to intervene were filed by the

reflected in duly enacted laws or regulations passed by the local government entity.” PJM, Intra-PJM Tariffs, Operating Agreement, § 1 Definitions, O-P (18.0.0).

⁶¹ The State Agreement Approach provides an alternate mechanism to “allow a state governmental entity (or group of state governmental entities) to voluntarily submit a project that addresses Public Policy Requirements identified by the state(s).... [Those states] may agree voluntarily to be responsible for the allocation of all costs of a proposed transmission expansion or enhancement that addresses state Public Policy Requirements identified or accepted by the state(s).” *PJM Interconnection, L.L.C.*, 152 FERC ¶ 61,162, at P 4 (2015). *See also* PJM Operating Agreement, Schedule 6, § 1.5.9. The State Agreement Approach “supplements, but does not conflict [with] or otherwise replace PJM’s process to consider transmission needs driven by public policy requirements as required by Order No. 1000.” *PJM Interconnection, L.L.C.*, 142 FERC ¶ 61,214, at P 142 (2013).

⁶² Complaint at 5-6 n.8 (citing PJM Manual 14B, PJM Region Transmission Planning Process § 2.1 and PJM Operating Agreement, Schedule 6, § 1.5.9).

⁶³ *Id.*

⁶⁴ On December 3, 2019, the answer period was extended to December 19, 2019.

following parties: American Electric Power Service Corporation; American Municipal Power, Inc.; American Wind Energy Association (AWEA); The AES Corporation; Atlantic Shores Offshore Wind, LLC; Avangrid Networks, Inc.; Avangrid Renewables, LLC; Calpine Corporation; Delaware Division of the Public Advocate; Dominion Energy Services, Inc.; Duke Energy Corporation; Exelon Corporation; EDP Renewables North American LLC; Equinor Wind US LLC; FirstEnergy Transmission Companies;⁶⁵ Institute for Policy Integrity – New York University School of Law (IPI); LSP Transmission Holdings II, LLC and Central Transmission, LLC (collectively, LS Power); the PJM Market Monitor, in its capacity as the independent market monitor for PJM; New Jersey Board of Public Utilities (NJ BPU); New Jersey Division of Rate Counsel (NJ Rate Counsel); New York Transmission Owners;⁶⁶ NRG Power Marketing LLC; Orsted Wind Power North American, LLC; Public Citizen, Inc., Public Service Enterprise Group (PSEG) Companies;⁶⁷ Rock Island Electric Company; Shell Energy North America, L.P. (Shell); Southern Maryland Electric Cooperative, Inc.; and the Virginia State Corporation Commission. On December 20, 2019, Delaware Public Service Commission filed a late notice of intervention and on December 26, 2019, North Carolina Electric Membership Corporation filed a motion to intervene out-of-time.

30. On December 19, 2019, PJM filed an answer (PJM First Answer) and NJ Rate Counsel, Shell, IPI, and NJ BPU each filed comments.⁶⁸ On January 6, 2020, LS Power filed an answer. On January 9, 2020, the PJM Market Monitor filed an answer. On February 18, 2020, PSEG Companies filed an answer. On January 3, 2020, Anbaric filed an answer to the PJM First Answer (Anbaric First Answer). On January 21, 2020, PJM filed an answer to the Anbaric First Answer (PJM Second Answer). On February 2, 2020,

⁶⁵ First Energy Transmission Companies includes American Transmission Systems, Incorporated, Jersey Central Power & Light Company, Mid-Atlantic Interstate Transmission LLC, West Penn Power Company, The Potomac Edison Company, and Monongahela Power Company.

⁶⁶ New York Transmission Owners includes Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., Long Island Lighting Company d/b/a Power Supply Long Island, Long Island Power Authority, New York Power Authority, New York State Electric & Gas Corporation, Niagara Mohawk Power Corporation d/b/a National Grid, Orange and Rockland Utilities, Inc., and Rochester Gas and Electric Corporation.

⁶⁷ PSEG Companies includes Public Service Electric and Gas Company, PSEG Power LLC and PSEG Energy Resources & Trade LLC.

⁶⁸ NJ BPU seeks only to clarify that it has not yet adopted a policy position on offshore wind transmission. NJ BPU Comments at 2.

Anbaric filed a supplemental answer to the Second PJM Answer (Anbaric Supplemental Answer).

31. On January 22, 2020, Anbaric filed a Motion to Lodge (Anbaric Motion to Lodge).⁶⁹ On January 29, 2020, PJM Filed an answer to the Anbaric Motion to Lodge (PJM Answer to Anbaric Motion to Lodge).

B. Responsive Pleadings

32. PJM responds that, while Anbaric proposed three projects with a combined capacity of 3,400 MW, Anbaric provides no evidence that it has made arrangements with offshore wind developers, or any other customers, for use of the proposed merchant lines and that it could be an extended period before Anbaric secures commitments for any substantial portion of its proposed capacity.⁷⁰ PJM further responds that Anbaric's proposed Tariff changes would allow Anbaric to hold valuable TIRs for an undefined and potentially extended period while it attempts to market transmission services to offshore wind generators.⁷¹

33. PJM states that it processed Anbaric's Merchant Transmission Facilities in accordance with the Tariff and notified Anbaric that it would not be awarded TIRs because Anbaric's proposed AC lines do not meet two of the prerequisites for TIRs, i.e., that the facilities must be either DC or Controllable AC, and they must connect to another control area.⁷²

34. PJM states that, while it processed Feasibility and System Impact Studies for the two AC lines at 0 MW energy, 0 MW capacity and no TIRs, it took a different approach with respect to Anbaric's DC line, wherein it completed a feasibility study assessing the impacts on the PJM system if the project had 1,200 MW of firm TIRs.⁷³ PJM states it

⁶⁹ Anbaric requests the Commission lodge in this docket New Jersey Bill S3985/A5663, which Anbaric characterizes as a bill authorizing the New Jersey BPU to procure open access offshore transmission facilities for offshore wind generation separately from offshore wind generation facilities by adding the term "open access offshore wind transmission facility" and providing that the NJBPU may conduct competitive solicitations for such facilities. Anbaric Motion to Lodge at 2.

⁷⁰ PJM First Answer at 1-2.

⁷¹ *Id.* at 2.

⁷² *Id.*

⁷³ *Id.* at 11.

also held a stakeholder process to explore the possibility of a consensus tariff change that would grant TIRs to a project like Anbaric's.⁷⁴ PJM explained that the stakeholder process concluded without reaching consensus on Tariff changes that would grant TIRs to merchant transmission projects terminating in the ocean. PJM states that as a result, it presented Anbaric the options to (1) convert its request to an Attachment N project by coupling the request with an identified generator, (2) proceed with 0 MW of TIRs, or (3) withdraw the request.⁷⁵

1. The PJM Tariff's Interconnection Requirements for Merchant Transmission Facilities

35. PJM argues that, while Anbaric concedes that its proposed projects are not eligible to obtain TIRs under the Tariff, Anbaric has failed to demonstrate that the Tariff is unjust and unreasonable under section 206 of the FPA.⁷⁶ PJM argues that the Tariff is just and reasonable because it does not discriminate in processing all requests for interconnections service and subjects them to similar evaluation criteria.⁷⁷ PJM argues, moreover, that the Tariff contains safeguards to prevent generation and transmission developers from hindering competitors from achieving commercial operation by forcing unreasonably long delays and costly restudies.⁷⁸

36. PJM argues that section 206 of the FPA does not require it to (1) relieve Anbaric's projects' obligation of a showing of generation comparable to that used for other project types (whether internal to PJM, or connecting to another control area); (2) grant more time than PJM allows other interconnection customers to demonstrate project viability; or (3) ignore generation site control when Anbaric proposes a line that will connect offshore generation, but require generation site control if an offshore generator proposes its own interconnecting line.⁷⁹

37. PJM further responds that it created TIRs and TWRs specifically for merchant transmission projects that would import power from (or, in the case of TWRs, export

⁷⁴ *Id.*

⁷⁵ *Id.* at 11-12.

⁷⁶ *Id.* at 13.

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ *Id.* at 14-15.

power to) another control area.⁸⁰ According to PJM, a feature shared by all transmission-related rights is the ability to evaluate generation at the source end of the transmission: PJM can measure congestion between a source and a sink and assess deliverability based on the system's ability to move generation across constraints to serve load under capacity conditions. PJM states that, for TIRs specifically, it relies on corresponding assessments by PJM and the other Balancing Authority of a merchant transmission project's ability to move generation output from one control area to another.⁸¹

a. PJM's "Control Area" Requirement

38. PJM states that Anbaric fails to demonstrate that the "control area" requirement of the Tariff is unjust and unreasonable.⁸² It argues that the requirement to have a source and a sink avoids the problem of undue hoarding of headroom by transmission projects with generation source uncertainty. According to PJM, Anbaric's proposed projects do not have a source and Anbaric has provided no certainty as to the timing and extent of the ultimate generation sources. As such, PJM would need to make a host of planning assumptions, introducing considerable uncertainty into the study process.⁸³

39. PJM further responds that requirements such as the ability to interconnect to another control area protect interconnection customers from undue harm caused by higher-queued projects, whether from delays associated with restudies or potential cost

⁸⁰ PJM First Answer at 4 (citing PJM, Transmittal, Docket No. ER03-405-000, at 11-12 (filed Jan. 10, 2003) (establishing TIRs and TWRs for merchant transmission customers "that inject capacity/energy into the PJM system from another control area") (TIR Filing)). PJM adds that TIRs and TWRs supplement other rights, such as Incremental Auction Revenue Rights and Incremental Deliverability Rights, that PJM affords to merchant projects that increase transmission capability between points within the PJM Region. *Id.* at 4.

⁸¹ *Id.* at 14. PJM adds that in connecting to another control area, generation already exists in a quantity far in excess of the capability of any given merchant tie line and for this reason, if one contract arrangement should fall through, there would be many other existing generator customers, in either control area, that might use the service available on the merchant transmission line interconnecting the two control areas. By contrast, PJM affiant Ms. Susan Glatz notes in the case of a merchant radial line that would connect to offshore projects, there is not a pool of existing generation customers that could practically contract for the use of the line and justify initially granting the transmission rights and then preserving them. *Id.* at 20 (citing Glatz Aff. at ¶ 16).

⁸² *Id.* at 19.

⁸³ *Id.* (citing Glatz Aff. at ¶¶ 14-15).

shifting for transmission upgrades.⁸⁴ PJM argues that none of the three lines proposed would connect to another control area and are therefore ineligible to obtain TIRs.⁸⁵

40. Anbaric characterizes PJM's argument that it created TIRs for the specific purpose of merchant transmission projects importing power from another area as "circular," rephrasing it as "TIRs cannot be awarded to [Merchant Transmission Facilities] that do not connect to another control area because TIRs require connecting to another control area."⁸⁶ According to Anbaric, this logic produces the absurd result that a radial Merchant Transmission Facility will be afforded no rights to inject power into the PJM transmission system, while a generation resource connected to the PJM transmission system through radial Interconnection Customer's Interconnection Facilities can and will be afforded such rights.⁸⁷ Anbaric states that this is precisely why it filed the complaint.⁸⁸

41. Anbaric further contends that the certainty in scheduling energy and capacity that drives PJM's requirement that Merchant Transmission Facilities must connect to another control area does not consider that Merchant Transmission Facilities must enter into contracts with entities willing to schedule such deliveries over the Merchant Transmission Facility, which is entirely dependent on uncertain market conditions and price differentials between the two control areas.⁸⁹ Anbaric further responds that requiring a source makes no sense for any sort of open access radial transmission facility as such a facility cannot realistically designate its sources when it submits an interconnection request (unlike a proprietary Interconnection Customer's Interconnection Facilities).⁹⁰

b. PJM's "Controllability" Requirement

42. Regarding controllability, PJM states that the Tariff requirement that Merchant Transmission Facilities be controllable is just and reasonable. According to PJM, a

⁸⁴ PJM Second Answer at 4.

⁸⁵ PJM First Answer at 10.

⁸⁶ Anbaric Supplemental Answer at 5 n.14.

⁸⁷ *Id.*

⁸⁸ *Id.*

⁸⁹ *Id.*

⁹⁰ Anbaric First Answer at 21.

Merchant Transmission Facility’s “controllability” is what permits scheduled deliveries of energy and capacity on that facility. PJM explains that, in order for a transmission owner to dictate the quantity and direction of flow on a specific AC transmission line, PJM requires that there be control mechanisms in place to adjust such flows.⁹¹

43. PJM argues that Anbaric fails to provide evidence that its two proposed AC lines meet the definition of “controllable,” i.e., that they employ technology that will “permit control of the amount and/or direction of power flow on such facilities to such extent as to effectively enable the controllable facilities to be operated as if they were [DC] transmission facilities.”⁹²

44. According to PJM, rather than demonstrating it will use transmission control equipment, Anbaric has instead asserted that its proposed projects will be “controllable” because Anbaric would be able to adjust the output of the generators connected to its platform. According to PJM, “Anbaric is not responsible for adjusting generator output—that is PJM’s role.”⁹³ Further, PJM describes generation dispatch as an insufficient, “blunt instrument” that is not intended to set and maintain flows on a specific line at a specific level and this is the very reason merchant transmission is provided either by DC lines or by AC lines that have transmission control equipment.⁹⁴

45. In addition, PJM states that each interconnection customer must satisfy certain criteria as a prerequisite to obtaining interconnection rights,⁹⁵ including satisfaction of operational milestones and a demonstration of site control. According to PJM, these criteria account for the “first-come, first-served” nature of the availability of rights in the PJM interconnection queue and protect interconnection customers from unjust and unreasonable delays caused by speculative and non-viable projects.⁹⁶

c. PJM’s Site Control Requirement

46. PJM states that Anbaric’s proposal to adopt demonstrations made to BOEM in right-of-way applications as evidence of site control for purposes of interconnection with

⁹¹ PJM First Answer at 22.

⁹² PJM, Tariff § 1, Definitions C-D (11.0.0).

⁹³ PJM First Answer at 22.

⁹⁴ *Id.* at 23.

⁹⁵ PJM uses the term “interconnection rights” to refer collectively to several rights available to interconnection customers.

⁹⁶ PJM First Answer at 6.

PJM weakens site control rules, which would be unfair to other projects, encourage speculation, and open up opportunities for offshore generators to circumvent existing site control rules.⁹⁷ PJM states that it accepts leases issued by BOEM as demonstrating site control for offshore wind generation facilities, and such generators commonly secure BOEM leases before submitting their interconnection requests to PJM. PJM argues that Anbaric's transmission interconnection requests also should show that their intended generation sources meet the site control requirement. PJM states that allowing generators that may be unable to meet offshore generation site control requirements (by securing a BOEM lease) for months or years to nonetheless gain earlier-queued interconnection rights (i.e., through a merchant transmission provider such as Anbaric) would be unfair to generation projects that invested the time and effort to secure on a timely basis the minimum generation site control required by the Tariff.⁹⁸

47. Anbaric responds that rather than attempting to circumvent site control rules, it seeks to expand the PJM transmission system to accommodate the large-scale development of offshore wind infrastructure. Anbaric states that once transmission platform projects are fully studied and move forward, offshore wind generation resources that will connect to the expanded PJM transmission system will separately go through the PJM interconnection process, including demonstrating site control with respect to their generating facilities, just like any other electric generation resource seeking interconnection to the PJM transmission system.⁹⁹

2. The PJM Tariff's Consistency with Commission Policies

48. Regarding Anbaric's arguments that the Tariff violates long-standing Commission policies and rules, PJM responds that Commission policy supports PJM's efforts to weed out speculative projects from the interconnection queue.¹⁰⁰ PJM also states that a Commission finding that an untested business plan of a single developer renders the

⁹⁷ *Id.* at 23.

⁹⁸ *Id.* at 23-24. *See also* Glatz Aff. ¶ 22 ("In the case of a merchant transmission line without existing generation on the other end, the only reasonable equivalent of site control would be site control of the future generation resource.").

⁹⁹ Anbaric First Answer at 10-11, 21. Anbaric adds that offshore wind generation resources will be PJM resources subject to dispatch by PJM.

¹⁰⁰ PJM First Answer at 6-7.

Tariff unjust or unreasonable would require PJM to rewrite the Tariff to meet any particular business plan, tested or not.¹⁰¹

49. PJM further argues that Anbaric fails to explain why PJM must accommodate transmission platform projects in order for shoreline states to meet their offshore wind procurement targets. PJM adds that Anbaric has failed to show that PJM's current interconnection rules are somehow impeding offshore wind project development as PJM currently has more than 13,000 MW of offshore wind generation in its queue, which PJM states is hardly indicative of a barrier to offshore wind development.¹⁰²

50. Anbaric responds that the Commission has routinely addressed such concerns regarding managing interconnection queues through queue reforms and that even so, the nature of project development means that only a small percentage of projects that enter an interconnection queue will achieve commercial operation. Anbaric notes that the PJM Market Monitor estimates that approximately two-thirds of all generating capacity that enters the PJM interconnection queue are ultimately withdrawn and do not achieve commercial operation.¹⁰³ Anbaric asserts that the fact that such a low percentage of projects in the PJM interconnection queue actually achieve commercial operation does not and cannot mean that all projects, or even two-thirds of such projects, should be categorically prevented from seeking to be interconnected to the PJM transmission system.¹⁰⁴ Anbaric also characterizes PJM's concerns regarding management of the queue as "generalizations" and states that general concerns regarding PJM's management of its interconnection queue are an insufficient basis to categorically prohibit transmission platform projects from obtaining material interconnection rights.¹⁰⁵

51. Anbaric states that PJM's characterization of transmission platform projects as speculative is contradicted by the PJM states' goals for offshore wind as well as the interconnection requests for offshore wind generation resources pending in the PJM

¹⁰¹ *Id.* at 4-5.

¹⁰² *Id.* at 4.

¹⁰³ Anbaric First Answer at 4, n.7 (citing 2019 Quarterly State of the Market Report for PJM: Jan. through Sep. at 588, https://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2019/2019q3-som-pjm.pdf).

¹⁰⁴ *Id.* at 4.

¹⁰⁵ *Id.* at 12.

interconnection queue.¹⁰⁶ To support its contention, Anbaric lists a number of PJM state offshore wind commitments and goals.¹⁰⁷

3. Anbaric's Proposed Replacement Rate

52. PJM argues that Anbaric's proposal is flawed because it (1) seeks to lock up valuable headroom (i.e., the transmission grid's current capability in excess of current system needs) for an extended period while attempting to sell that headroom to the very generators who could reserve that headroom by submitting their own interconnection requests; (2) would tie up headroom in a manner that could harm others in the queue due to the uncertainty surrounding how much generation will eventually connect to Anbaric's facility;¹⁰⁸ (3) seeks a more lenient standard for site control than the Tariff requires to discourage speculative projects; (4) would create an intra-PJM merchant transmission line that PJM loads might have to pay to access PJM region offshore wind generation; and (5) would create opportunities for generation developers to use Anbaric's line to circumvent PJM's current Tariff provisions, such as proof of site control.¹⁰⁹

53. PJM witness Suzanne E. Glatz notes Anbaric's proposal presents a number of operational concerns that would need to be resolved before embarking on granting interconnection rights for an RTO-internal merchant transmission line.¹¹⁰ These include (1) whether PJM would be responsible to dispatch the DC line; (2) whether a generator interconnected to a Merchant Transmission Facility that has been awarded TIRs would be eligible to receive Capacity Interconnection Rights; and (3) in the case of a free-flowing AC line, the fact that it is not possible to dispatch the line, only the generation connected to it.¹¹¹ Ms. Glatz raises a further concern about intra-PJM transmission rates wherein it is unclear from Anbaric's proposal how a Merchant Transmission Facility moving PJM

¹⁰⁶ Anbaric First Answer at 16-17.

¹⁰⁷ *Id.* at 17-18.

¹⁰⁸ PJM notes that there are 815 active or under construction requests in the queue behind Anbaric's AC line requests, including 90 in New Jersey, and, as such, treating Anbaric's Complaint "as an appropriate platform for upsetting the settled expectations of numerous interconnection customers would be unjust." PJM First Answer at 28.

¹⁰⁹ *Id.* at 3.

¹¹⁰ *Id.* at 21 (citing Glatz Aff. at ¶ 17).

¹¹¹ *Id.*

generation to PJM load would be compensated given that loads currently access generation by paying the network service rate for their zone of delivery.¹¹²

54. In order to accommodate management of PJM's interconnection queue, Anbaric proposes a milestone that a transmission platform project is required to execute a contract with a transmission service customer within three years of the effective date of the project's interconnection service agreement.¹¹³ According to Anbaric, this firm three-year timeline, paired with substantive site control requirements tied to the BOEM right-of-way acquisition process, will address PJM's concern about purely speculative offshore transmission projects clogging the interconnection queue while simultaneously striking the right balance for the developers of such projects given the complexities of offshore wind infrastructure development, including accommodating the iterative and phased nature of the PJM states' solicitation processes for such infrastructure.¹¹⁴

55. PJM responds that its issue with the complaint is not simply related to queue management, noting that PJM effectively manages numerous uncertainties that are inherent in a competitive queue process on a daily basis.¹¹⁵ Rather, PJM states that the complaint fails to address or explain how Anbaric's proposal would ensure that interconnection customers continue to be processed in a non-discriminatory manner.¹¹⁶

56. PJM further responds that Anbaric's three-year milestone proposal would at least double, and in cases where a project enters suspension, triple the amount of time in which a generator is required to satisfy the milestones for commercial operation.¹¹⁷ PJM expresses the concern that Anbaric's proposed three-year milestone says nothing about

¹¹² Glatz Aff. at ¶18.

¹¹³ Anbaric First Answer at 26. Anbaric adds that such a contract almost certainly would result from a state solicitation process and could be with either a specific utility or generation resource(s), depending on the nature of the state solicitation. *Id.* PJM responds that such a scenario does not address the fact that TIRs would be granted at the time the transmission platform project executes its Interconnection Service Agreement, and, as such, Anbaric is essentially asking that PJM grant TIRs for projects that may, at some point in the future, win a contract through a state competitive procurement process. PJM Second Answer at 13.

¹¹⁴ Anbaric First Answer at 26.

¹¹⁵ PJM Second Answer at 5.

¹¹⁶ *Id.*

¹¹⁷ *Id.* at 10.

when the generator enters service and Anbaric finally starts using the TIRs it was granted.¹¹⁸

57. PJM continues that under Anbaric's proposal, the generator would have up to three years after the effective date of Anbaric's ISA for the generator to even submit its own interconnection request. The TIRs granted to Anbaric would then remain idle and unused while PJM undertakes the processing of the generator's interconnection request and satisfaction of the generator's own separate set of milestones. While the total elapsed time Anbaric holds (without using) the TIRs could be shorter if the generator signs with Anbaric and submits its interconnection request earlier in Anbaric's proposed three-year period, PJM states that it also could be considerably longer, if, for example, the generator qualifies for a permitted extension (for up to three years) of its milestones under the Tariff.¹¹⁹ PJM adds that another shortcoming that could further delay a project under Anbaric's proposal is generator design uncertainty. According to PJM, design uncertainty can lead to delays in the short circuit and voltage studies, which rely on more accurate information about the expected actual generation.¹²⁰ Finally, PJM states that Anbaric's proposed milestone does not even address when the offshore generator would need to enter service, nor does it address any relationship between the quantity of TIRs and the quantity of generation addressed in the contract.¹²¹

58. Anbaric responds that offshore wind and transmission platform projects have the same development risk profiles, stating as support that the overwhelming majority of offshore wind generation projects are still in the early stages of the PJM interconnection process, with most not even having received a System Impact Study.¹²² Anbaric argues that the most important determinant of the relative development risk for an offshore wind infrastructure project is whether the project has received a contract that supports its development to commercial operation.¹²³ According to Anbaric, given the similar commercial development risks associated with the interconnection of offshore wind

¹¹⁸ *Id.*, Figure 1.

¹¹⁹ *Id.* at 11 (citing PJM, Tariff, Attachment P, Appendix 2, section 3.4).

¹²⁰ *Id.*

¹²¹ *Id.* at 12.

¹²² Anbaric Supplemental Answer at 9 and Figure 1 (citing Steven Herling, *Integrating Offshore Wind: PJM Perspective*, at 5 (Oct. 22, 2019), https://s23.a2zinc.net/clients/awea/owp2019/Custom/Handout/Speaker31190_Session5061_1.pdf).

¹²³ *Id.* at 10.

generation projects and transmission platform projects, their supposed differences in commercial development risk are no reason to treat them differently in terms of their ability to interconnect to the PJM transmission system.¹²⁴

59. Anbaric further notes that transmission platform projects and offshore wind generation with Interconnection Customer's Interconnection Facilities operate on similar solicitation, procurement, and development timelines. Anbaric provides the example of an 8,000 MW queue project with a commercial operation date ten years in the future and the fact that the only project illustrated that has proceeded past a System Impact Study has been delayed by two years.¹²⁵

60. Anbaric further argues that, contrary to PJM's assumption that development of the transmission platform project and interconnection with offshore wind generation would happen sequentially, in fact, the interconnection process for the generator regarding the expansion of the transmission system would commence prior to a contract being procured by the transmission platform project, just as several of the proposed offshore wind generation projects currently in the PJM interconnection queue have entered it prior to obtaining a contract ensuring their development and construction (and prior to states holding solicitations for such contracts).¹²⁶

61. Anbaric also notes that PJM's interconnection process has flexibility built in to allow for details still to be determined. Examples include selecting primary and secondary points of interconnection, changes to project size, and the use of provisional interconnection agreements.¹²⁷

4. Transmission Planning and Interconnection in Other Regions and PJM's Current RTEP Practices

62. Regarding Anbaric's references to other regions or countries that have planned transmission to access location-constrained generation, PJM responds that such references do not show that the Tariff is unjust and unreasonable. PJM notes that like MISO's MVP rules, PJM already has a regional planning option, i.e., the State

¹²⁴ *Id.*

¹²⁵ *Id.* at 13.

¹²⁶ *Id.* at 13-14.

¹²⁷ *Id.* at 14.

Agreement Approach, in the RTEP that could be used for transmission to offshore wind.¹²⁸

63. PJM further responds that under the State Agreement Approach, states, either individually or jointly, may agree voluntarily to be responsible for cost responsibility for transmission to address state Public Policy Requirements.¹²⁹ Under this approach, projects may be included in PJM's RTEP either as a Supplemental Project or a state public policy project.¹³⁰

64. According to Ms. Glatz, another option is for the transmission project sponsor to pair its proposed transmission facility with a generation facility, to be studied pursuant to PJM's study process for generators under the Tariff. Under this approach, the offshore wind generation developer is the interconnection customer for the interconnection process and the merchant transmission developer is a partner in the project, helping the interconnection customer meet its required project milestones. The transmission developer could also leverage the option under PJM's Tariff for shared use interconnection lines, working with multiple generators to develop a more efficient transmission solution.¹³¹

65. Anbaric responds that the PJM State Agreement Approach is highly questionable and may be impractical for transmission platform projects because multiple states "would need to agree *ex ante* to share the cost of the offshore transmission facilities" used to connect those offshore wind generation resources to the PJM transmission system.¹³² Anbaric also asserts that the State Agreement Approach suffers from a free rider problem wherein when offshore transmission facilities are funded by including them in a transmission owner's rate base under the PJM Tariff, the state sponsoring that project ultimately must pay for all of the costs of that project directly or indirectly through ratepayers in the sponsoring state; however, the sponsoring state bears the risk that

¹²⁸ PJM First Answer at 26. PJM also argues that CAISO's LCRIFs are wholly inapposite to PJM's queue-based interconnection system. *Id.* at 26 n.74.

¹²⁹ PJM First Answer at 24 (citing PJM Operating Agreement, Schedule 6, § 1.5.9).

¹³⁰ *Id.* at 24-25.

¹³¹ *Id.* at 25 (citing Glatz Aff. at ¶ 32. Under this approach, if the offshore wind generation component of the project is canceled, all interconnection rights to be awarded to the project are similarly canceled).

¹³² Anbaric First Answer at 28.

someone else, such as another state or an offshore wind generation developer serving another state, will benefit from the project.¹³³

5. Other Comments

66. The PJM Market Monitor opposes the complaint, arguing that it has no merit and fails to demonstrate why PJM's existing interconnection rules are unjust or unreasonable.¹³⁴ The PJM Market Monitor argues that energy injection rights should not be assigned to transmission facilities with no identified planned or existing resources.¹³⁵

67. The PJM Market Monitor states that firm TIRs may be combined with generation delivered to the Merchant Transmission Facility to obtain Capacity Interconnection Rights, and elaborates that a Merchant Transmission Facility can receive (1) TIRs or TWRs or (2) other injection rights, but not both.¹³⁶ The PJM Market Monitor states that all such injection rights are based on the existence of actual or planned generation resources that have met milestones defined in the rules and that granting the complaint would mean providing injection rights based on speculative and unidentified future generation resources, upsetting the current framework.¹³⁷

68. The PJM Market Monitor asserts that none of PJM's current rules prevent resources that may eventually interconnect with transmission platform project from obtaining injection rights once such resources can satisfy the requirements to enter the interconnection queue. The PJM Market Monitor claims that Anbaric does not explain why it cannot compete, or should not be required to compete, with other transmission developers under the current rules. The PJM Market Monitor alleges that granting the complaint would undo the fundamental requirement that only identifiable planned or

¹³³ *Id.* n.69.

¹³⁴ PJM Market Monitor Answer at 1.

¹³⁵ *Id.* at 2. PJM Market Monitor refers to the rights identified in its pleading collectively as "injection rights." For consistency with the Tariff, in this order we refer to the rights individually (i.e., TIRs, TWRs, etc.).

¹³⁶ *Id.* The PJM Market Monitor identifies other injection rights as Incremental Deliverability Rights (IDR), Incremental Available Transfer Capability Revenue Rights (IATCRR), and Incremental Auction Revenue Rights (IARR).

¹³⁷ *Id.*

existing resources can obtain injection rights, resulting in an unmanageable interconnection queue process.¹³⁸

69. The PJM Market Monitor asserts that allowing Anbaric to take an interconnection queue position for unidentified resources allows it to jump the queue and hoard system capability and time interconnection requests to minimize its costs while transferring costs to other entrants that have actual identified projects.¹³⁹

70. IPI argues that the build-out of transmission infrastructure will be critical for the electric sector to meet increasingly ambitious state clean energy development goals, including a growing number of state policies to develop offshore wind.¹⁴⁰ IPI states that the Commission has recognized that in order for Commission-jurisdictional services to be just and reasonable, RTOs must take into account the potential for more cost-effective transmission options to meet transmission needs driven by public policy requirements such as state renewable procurement goals or federal environmental standards.¹⁴¹ IPI explains that while regional transmission planning is the appropriate tool for the identification and deployment of an efficient, open-access, networked transmission system in an electric system with multiple transmission developers and generators, uncertainty in PJM's RTEP process creates practical obstacles to the development of offshore open-access transmission.¹⁴² IPI contends that Anbaric's requested changes would enable development of radial transmission platform projects that will make it more likely that PJM's markets yield just, reasonable, and not unduly discriminatory outcomes until such time that the regional transmission planning process can be reformed.¹⁴³

71. IPI further argues that wind developers have the ability and economic incentive to exclude other developers from connecting to the PJM system through their incumbent Interconnection Customer's Interconnection Facilities because Order No. 807 provides

¹³⁸ *Id.* at 3.

¹³⁹ *Id.* at 4.

¹⁴⁰ IPI Comments at 3 (citing Nicolas Lefevre-Martou et al., McKinsey & Co., *Building an Offshore Wind Industry Along the US East Coast: The Role of State Collaboration* (June 2019), <https://www.mckinsey.com/industries/electric-power-and-natural-gas/our-insights/building-an-offshore-wind-industry-along-the-us-east-coast-the-role-of-state-collaboration#>).

¹⁴¹ *Id.*

¹⁴² *Id.* at 4-5 (citing Anbaric Complaint at 5 n.8).

¹⁴³ *Id.* at 5.

Interconnection Customer's Interconnection Facilities with a blanket waiver from the Commission's open access requirements and allows them to exercise a ROFR.¹⁴⁴ IPI argues that, in contrast, merchant transmission developers have the incentive to build open access transmission platform projects, but their ability to do so is prevented by PJM's current Tariff.¹⁴⁵

72. IPI argues that revising PJM's tariff to allow for transmission platform projects can lower costs by enabling the use of competitive solicitations for offshore wind transmission.¹⁴⁶ IPI argues that removing barriers to merchant transmission platform projects would provide at least the possibility for state and local governments or a consortium of wind developers to solicit transmission-only offshore transmission.¹⁴⁷

73. New Jersey Rate Counsel explains that European models of offshore wind development can be divided into three ownership categories—developer owned, transmission system operator owned, and third party owned. New Jersey Rate Counsel encourages the Commission to convene a stakeholder proceeding through a Notice of Inquiry to address major issues of offshore wind development.¹⁴⁸

74. Shell contends that the current system, which it states encourages the development of offshore wind infrastructure on a bundled basis (i.e., combining generation and interconnection facilities) is inefficient and inconsistent with Commission rulemakings.¹⁴⁹ Shell asserts that the current, incremental approach to development of transmission interconnection, which it characterizes as having a short horizon, will make it impossible for states to achieve their long-term ambitions for offshore wind development.¹⁵⁰

¹⁴⁴ IPI Comments at 9.

¹⁴⁵ *Id.* at 9.

¹⁴⁶ *Id.* at 11.

¹⁴⁷ *Id.* at 13.

¹⁴⁸ New Jersey Rate Counsel Comment at 2-3. New Jersey Rate Counsel adds that the Commission should address cost allocation and seams issues related to the development of merchant transmission serving multiple states and possibly multiple RTOs. *Id.* at 1.

¹⁴⁹ Shell Comments at 2-3.

¹⁵⁰ *Id.* at 3.

75. Shell notes that, in Europe, most countries operate under a model where the transmission system operator has a legal obligation or government mandate to design, build, and operate the offshore grid.¹⁵¹ Shell contrasts the European model with PJM's Tariff which, Shell argues, risks being poorly coordinated because multiple parties are responsible for these investments.¹⁵² Shell also highlights Texas' experience with CREZ as a successful effort of ERCOT to assess system reliability of different transmission solutions and ensure sufficient transfer capacity, and asserts that PJM could play a similar role.¹⁵³ Shell argues that PJM's Tariff appears to be unduly discriminatory because it requires transmission platform projects to have a known power source, and agrees with Anbaric that there is no technical reason for this requirement. Shell states that it has participated in other markets, such as CAISO and ERCOT, where transmission has been built in anticipation of remote renewable generation (i.e., without a known power source), and that these markets have consequently experienced significant renewable resource deployment.¹⁵⁴

76. LS Power states that it fully supports competition in the development of transmission, both onshore and offshore, and therefore supports the position that PJM's Tariff should not preclude competition for the development of transmission platform projects.¹⁵⁵ LS Power maintains that there should be no ROFR of any type granted for offshore transmission development, neither to the incumbent onshore utility nor to the holder of offshore wind leases.¹⁵⁶

77. LS Power disagrees with Anbaric's assertion that the PJM planning processes that address Public Policy Requirements and the State Agreement Approach are not viable models for developing transmission platform projects, stating that there is no barrier today for a state (or group of states) to submit to PJM Public Policy Requirements for inclusion in an Order No. 1000 competitive window.¹⁵⁷

¹⁵¹ *Id.* at 3 n.9.

¹⁵² *Id.* at 4.

¹⁵³ *Id.*

¹⁵⁴ *Id.* at 5.

¹⁵⁵ LS Power Comments at 1.

¹⁵⁶ *Id.* at 5.

¹⁵⁷ *Id.* at 5-6.

78. LS Power also notes that section 1.5.9 of the PJM Operating Agreement provides that a project that addresses Public Policy Requirements will be included in the RTEP for cost allocation purposes only if there is an associated Commission-accepted allocation permitting recovery of the costs of the project.¹⁵⁸ LS Power asserts this tariff provision necessarily assumes that a project has been studied, the costs and benefits identified, and based on that information, a state (or group of states) has concluded that the benefits are worth the costs and has agreed to a cost allocation methodology.

79. PSEG Companies state that they agree with Anbaric that PJM's removal of both Anbaric's and PSEG's queue positions prevent transmission platform projects from having any interconnection rights, material or otherwise.¹⁵⁹ PSEG Companies state that on the same day that PJM withdrew Anbaric's interconnection queue positions, January 24, 2020, PJM also withdrew PSEG Companies' affiliate's transmission project for the same reason identified in the complaint.¹⁶⁰ PSEG Companies request that, if the Commission grants the relief requested by Anbaric (including reinstatement of interconnection queue positions), the Commission clearly state that such relief will be applied to all similarly situated merchant transmission projects that had submitted interconnection queue requests to PJM before the complaint was filed.¹⁶¹

IV. Discussion

A. Procedural Matters

80. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2019), the notices of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding. We also grant Delaware Public Service Commission's late-filed intervention and North Carolina Electric Membership Corporation's motion to intervene out-of-time given their interest in

¹⁵⁸ *Id.* at 7.

¹⁵⁹ PSEG Companies Answer at 3. PSEG Companies state that on November 8, 2018, its subsidiary submitted to PJM an interconnection queue request for a proposed transmission line interconnecting offshore wind generation resources offshore of Delaware, Maryland, New Jersey, and Virginia to the PJM transmission system and that the proposed line is similar to the projects proposed by Anbaric in that the proposed transmission line will not ultimately connect to another control area. *Id.* at 2-3.

¹⁶⁰ *Id.* at 3.

¹⁶¹ *Id.*

the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay.

81. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2019), prohibits answers to a protest or answer unless otherwise ordered by the decisional authority. We accept the answers filed in this proceeding because they have provided information that assisted us in the decision-making process. We deny Anbaric's Motion to Lodge because it does not aid the Commission in our decision-making.

B. Substantive Matters

82. As discussed below, we deny Anbaric's complaint. We find that Anbaric has failed to demonstrate in this proceeding that PJM's Tariff is unjust and unreasonable because it does not accommodate Anbaric's proposed project. We note, however, that we are issuing contemporaneously with this order a Notice of Technical Conference in Docket No. AD20-18-000 to discuss whether existing Commission transmission, interconnection, and merchant transmission facility frameworks in RTOs/ISOs can accommodate anticipated growth in offshore wind generation in an efficient and effective manner that safeguards open access transmission principles and to consider possible changes or improvements to the current framework should they be needed to accommodate such growth.¹⁶²

83. Anbaric contends that PJM's Tariff, specifically sections 36.1.03(6) and 232 of the Tariff, is unjust and unreasonable because it denies meaningful open access interconnection service to Merchant Transmission Facilities when those projects take the form of projects similar to Anbaric's proposal designed to connect expected remote generation resources to the PJM transmission system.¹⁶³ Anbaric has failed to demonstrate that the section 36.1.03(6) Tariff requirement that a Merchant Transmission Facility interconnect to an adjacent control area to secure TIRs makes it unjust and unreasonable. Similarly, Anbaric has failed to demonstrate that the Tariff section 232 controllability requirement is unjust and unreasonable. As relevant to the issues presented here, TIRs are specifically intended to accommodate interconnections between control areas, and thus the Tariff's requirements that a Merchant Transmission Facility be controllable and connect to another control area in order to obtain TIRs remain just and reasonable. PJM also explains that, for TIRs specifically, it relies on corresponding assessments by PJM and the other Balancing Authority of a Merchant Transmission

¹⁶² Notice of Technical Conference, Docket No. AD20-18-000 (June 18, 2020).

¹⁶³ Complaint at 15.

Facility's ability to move generation output from one control area to another.¹⁶⁴ Importantly in this regard, Anbaric is seeking firm delivery rights in the form of TIRs without evidence of any commitments or arrangements with offshore wind developers, or any other customers, for use of the proposed Merchant Transmission Facility. Therefore, the PJM Tariff does not permit TIRs for the type of interconnection service Anbaric seeks.

84. We also disagree with Anbaric's argument that PJM's interconnection rules are unduly discriminatory or preferential.¹⁶⁵ PJM's interconnection analyses require a source and a sink and controllability in order to meet operational requirements, such as measuring congestion and assessing deliverability. Rather than "picking winners and losers," these requirements enable PJM to ensure that its transmission system operates reliably and efficiently. Any Merchant Transmission Facilities that meet these Tariff requirements may seek interconnection to the PJM system.

85. As to Anbaric's concerns that PJM's interconnection requirements conflict with long-standing Commission policies and rules that promote open access interconnection and the expansion of transmission, we find that Anbaric has failed to demonstrate that PJM's Tariff's "control area" and "controllability" requirements are inconsistent with open access transmission service and interconnection rules or that they unreasonably limit transmission expansion.

86. As Anbaric has failed to demonstrate that PJM's existing Tariff is unjust and unreasonable, we need not address Anbaric's proposed replacement rate. As to Anbaric's other arguments, we find that providing for transmission platform projects in other regions does not render PJM's Tariff, which sets out a series of requirements Merchant Transmission Facilities must meet in order to interconnect to the PJM transmission system, unjust and unreasonable. While Anbaric characterizes the CAISO LCRI process, MISO MVP process, and ERCOT CREZ process as reforms that accommodate projects similar to Anbaric's proposal, the existence of processes in other regions does not mean that PJM's Tariff is unjust and unreasonable absent a similar process.¹⁶⁶ In addition, while NYISO and other regions may be considering tariff changes to accommodate such projects, Anbaric cites to no specific provision of the NYISO Tariff that would reflect the type of tariff changes that Anbaric has proposed in this case nor does Anbaric explain

¹⁶⁴ PJM First Answer at 14.

¹⁶⁵ Anbaric First Answer at 4.

¹⁶⁶ *N.Y. Indep. Sys. Operator, Inc.*, 126 FERC ¶ 61,320, at P 40 (2009) ("[T]here can be more than one just and reasonable planning process and RTOs and ISOs are not required to have identical planning processes.").

why NYISO's consideration of such a tariff change would necessarily render PJM's Tariff unjust and unreasonable.

87. In addition, Anbaric has not shown that its proposed project and Interconnection Customer's Interconnection Facilities should be considered technically equivalent in PJM's interconnection process. While, as Anbaric argues, "bundled" projects may be studied based on assumed or hypothetical wind turbines, in such cases the generator has at the very least identified itself sufficiently to propose interconnection with PJM pursuant to Schedule N, whereas no such generator has been identified for a project such as Anbaric's.

88. Anbaric also has not shown how proprietary Interconnection Customer's Interconnection Facilities would impose barriers to entry to potential competing developers of offshore wind generating facilities. Order No. 807 establishes a limited five-year safe harbor period during which time the Commission presumes that the Interconnection Customer's Interconnection Facilities owner has definitive plans to use its capacity. However, a third-party can rebut this presumption by demonstrating in part that the public interest is better served by granting access to the third party.¹⁶⁷ Accordingly, we find Anbaric's contention unpersuasive.

89. Finally, we disagree with Anbaric's contention that the existing Tariff prevents Anbaric's ability to move its projects forward. Anbaric has the opportunity to take on additional risk and build its facility with 0 MWs of TIRs. Furthermore, Anbaric has other options to pursue a platform project. Specifically, as Anbaric acknowledges in its complaint,¹⁶⁸ if Anbaric followed the existing regulatory framework, under the State Agreement Approach in PJM's Tariff, the PJM states have the option to include transmission necessary to interconnect offshore wind facilities in the RTEP if the states voluntarily agree to assume the cost of such projects either individually or jointly.¹⁶⁹ There are other options available to Anbaric as well, such as entering into a contract with one or more offshore wind developers and submitting a generator interconnection request under Attachment N of the Tariff.¹⁷⁰

The Commission orders:

Anbaric's complaint is hereby denied, as discussed in the body of this order.

¹⁶⁷ Order No. 807, 150 FERC ¶ 61,211 at PP 133, 138-139.

¹⁶⁸ Complaint at 5 n.8.

¹⁶⁹ PJM Answer at 24-25 (citing PJM Operating Agreement, Schedule 6, § 1.5.9).

¹⁷⁰ PJM, Tariff, ATTACHMENT N, OATT ATTACHMENT N (4.0.0).

By the Commission. Commissioner McNamee is concurring with a separate statement attached.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Anbaric Development Partners, L.L.C.

Docket No. EL20-10-000

v.

PJM Interconnection, L.L.C.

(Issued June 18, 2020)

McNAMEE, Commissioner, *concurring*:

1. I concur in today's order by the Commission to deny Anbaric Development Partners, L.L.C.'s complaint against PJM Interconnection L.L.C.¹ I write separately to highlight my support for the technical conference in Docket No. AD20-18-000 mentioned in today's order.²
2. The interest in developing offshore wind to provide electricity continues to grow. A key element to gaining access to offshore wind is the construction of and access to transmission to bring wind generated electricity onshore to the grid. As discussed in today's order, there are a number of complicated issues involving open access, financing and jurisdiction that need to be confronted.
3. I believe a technical conference, as announced in today's order, provides an opportunity for the Commission to hear from industry experts about the opportunities and challenges to developing offshore wind, particularly with regard to ensuring adequate access to transmission.

For these reasons, I respectfully concur.

Bernard L. McNamee
Commissioner

¹ *Anbaric Dev. Partners, L.L.C.*, 171 FERC 61,241 (2020).

² *Id.* P 82.