

162 FERC ¶ 61,086
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Kevin J. McIntyre, Chairman;
Cheryl A. LaFleur, Neil Chatterjee,
Robert F. Powelson, and Richard Glick.

PJM Interconnection, L.L.C.

Docket Nos. ER17-2291-000
ER17-2291-001

ORDER ACCEPTING TARIFF REVISIONS SUBJECT TO CONDITION

(Issued February 5, 2018)

1. On August 11, 2017, as amended on December 7, 2017, PJM Interconnection L.L.C. (PJM) filed, pursuant to section 205 of the Federal Power Act (FPA)¹ and Part 35 of the Commission's regulations,² revisions to the Amended and Restated Operating Agreement (Operating Agreement) and the Open Access Transmission Tariff (Tariff) to clarify the requirements for dynamic transfers of generators into the PJM Region and incorporate three agreements: two *pro forma* pseudo-tie agreements and a *pro forma* system modification reimbursement agreement for adding pseudo-tied resources into the PJM Region (collectively Pseudo-tie Agreements). PJM proposes an effective date of November 9, 2017. As discussed below, we accept the proposed revisions and Pseudo-tie Agreements, effective November 9, 2017, as requested, subject to condition, and require PJM to submit a compliance filing within 30 days of the date of this order.

I. Background

2. PJM explains that dynamic transfers include dynamic schedules and pseudo-ties, which are mechanisms that allow a generation unit in a Native Balancing Authority³ to

¹ 16 U.S.C. § 824d (2012).

² 18 C.F.R. pt. 35 (2017).

³ A Balancing Authority is defined as: "The responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time." A Native Balancing Authority is defined as: "A Balancing Authority from which a portion of its physically interconnected generation and/or load is transferred from its effective

deliver power in an Attaining Balancing Authority.⁴ PJM incorporates by reference the definitions of pseudo-tie and dynamic schedule in the North American Electric Reliability Corporation (NERC) Glossary into the Operating Agreement.⁵ A pseudo-tie involves the real-time transfer of control of a generating resource from the Native Balancing Authority, in which that resource or load is physically located, to an Attaining Balancing Authority in a different geographic location.⁶ The Attaining Balancing Authority maintains the operational and dispatch responsibility of the generator. In contrast, a dynamic schedule is a dynamic transfer where the MW output of a generator physically interconnected to the Native Balancing Authority is not telemetered to, nor deemed produced in, the Attaining Balancing Authority. That external generator remains under the control of the Native Balancing Authority.⁷

3. PJM explains that, for several years, it has allowed generators physically interconnected in a neighboring Balancing Authority to be either pseudo-tied or dynamically scheduled into PJM. PJM further explains that prior to 2015, it only had a few pseudo-tied resources, which were primarily located in close physical proximity to the seams between PJM and neighboring Balancing Authorities. PJM adds that these pseudo-tied resources did not create significant concerns or challenges, explaining that:

control boundaries to the Attaining Balancing Authority through a Dynamic Transfer.” *See Glossary of Terms Used in NERC Reliability Standards*, North American Electric Reliability Corporation (NERC Glossary), www.nerc.com/files/glossary_of_terms.pdf.

⁴ *See* PJM Transmittal at 2-3 & n.10. An Attaining Balancing Authority is defined as: “A Balancing Authority bringing generation or load into its effective control boundaries through a Dynamic Transfer from the Native Balancing Authority.” *See* NERC Glossary, www.nerc.com/files/glossary_of_terms.pdf.

⁵ Per the NERC Glossary, a pseudo-tie is defined as “A time-varying energy transfer that is updated in Real-time and included in the Actual Net Interchange term (NIA) in the same manner as a Tie Line in the affected Balancing Authorities’ control [Area Control Error] equations (or alternate control processes).” A dynamic schedule is defined as: “A time-varying energy transfer that is updated in Real-time and included in the Scheduled Net Interchange (NIS) term in the same manner as an Interchange Schedule in the affected Balancing Authorities’ control ACE equations (or alternate control processes).” PJM Transmittal at 3; *see also* NERC Glossary, www.nerc.com/files/glossary_of_terms.pdf.

⁶ *See* PJM Transmittal at 3; *see also* NERC Glossary, www.nerc.com/files/glossary_of_terms.pdf.

⁷ *See* PJM Transmittal at 4.

(1) PJM had adequate modeling of the Native Balancing Authorities' system and constraints near the seam between PJM and the Native Balancing Authorities; and
(2) PJM managed those pseudo-tied resources on a case by-case basis and they did not require extensive policies or procedures.⁸

4. In 2015, as part of broader capacity market reforms submitted by PJM (the Capacity Performance Proposal), the Commission accepted PJM's proposal that, in order to qualify as a Capacity Performance Resource, an external generation resource must, *inter alia*, be pseudo-tied into PJM.⁹ As a result of this reform, between June 2015 and July 2017, the number of MW from external pseudo-tied resources in the PJM Balancing Authority increased from 560 MW to 5,577 MW.¹⁰ PJM explains that it has limited visibility of the resources associated with these newer requests for pseudo-ties because these generators are often located farther from the seam with PJM's neighboring Balancing Authorities. PJM further explains that after implementation of the influx of new pseudo-tied resources in 2015 and 2016, it realized that it needed to improve the process to address and clearly delineate the roles and responsibilities of all parties involved in a pseudo-tied resource into the PJM Balancing Authority.¹¹

5. To produce a pseudo-tie agreement that would be acceptable to other Native Balancing Authorities, PJM states that it and its members reviewed similar pseudo-tie agreements that the Commission accepted for other Regional Transmission Organizations (RTO) and Independent System Operators (ISOs). In addition, PJM notes that it had numerous discussions with its stakeholders, and sought the input of several neighboring Balancing Authorities.¹²

⁸ *Id.*

⁹ *PJM Interconnection, L.L.C.*, 151 FERC ¶ 61,208, at P 97 (2015) (Capacity Performance Order), *order on reh'g*, 155 FERC ¶ 61,157 (2016).

¹⁰ PJM Transmittal at 15. According to PJM, the increases in Pseudo-Tie volumes into PJM were from the following Balancing Authorities: MISO from approximately 156 MW in June 2015 to 2,301 MW in June 2016, to 2,145 MW in June 2017; Duke from 0 MW in June 2015, to 165 MW in June 2016, to 215 MW in June 2017; LG&E KU from 0 MW in June 2015, to 0 MW in June 2016, to 416 MW in June 2017; and Ohio Valley Electric Cooperative from 0 MW in June 2015, to 2,060 MW in June 2016, to 2,060 MW in June 2017. *Id.* at 15 n.40.

¹¹ *Id.* at 17.

¹² PJM states it sought input from the following Balancing Authorities: Midcontinent Independent System Operator (MISO), Southwest Power Pool, Inc. (SPP),

6. PJM states that enhancement of its proposed dynamic transfer provisions will help PJM ensure compliance with all NERC and Commission requirements, and ensure that all parties involved know who is responsible for Area Control Error (ACE), operational control, and re-dispatch before they implement a pseudo-tie. PJM further explains that the pseudo-tie agreements will allow for uniformity among the pseudo-tie and dynamic schedule requirements and increase awareness, transparency, and efficiency through a robust implementation process.¹³

II. PJM's Filing

7. PJM proposes to revise its Tariff and Operating Agreement to: (1) clarify that it is not required to permit a dynamic schedule or pseudo-tie just because one has been requested; and (2) require that a mutually agreeable interregional congestion management agreement is in place before PJM will permit a dynamic transfer. Specifically, proposed revisions to section 1.12(d), Schedule 1 of the Operating Agreement require that an entity requesting a pseudo-tie execute a mutually agreeable interregional congestion management agreement as contemplated in section 2.6A (Interface Prices) of Schedule 1, and requires an entity seeking a dynamic transfer to enter an agreement prescribing the requirements that must be met before PJM will implement it. PJM states that these revisions are necessary to ensure that a pseudo-tie will not cause any operational or reliability concerns within the bulk power system, and are consistent with NERC Standard INT-004-3.1, "to ensure Dynamic Schedules and Pseudo-Ties are communicated and accounted for appropriately in congestion management procedures."¹⁴

8. PJM proposes two *pro forma* pseudo-tie agreements that set forth the provisions for implementing and operating pseudo-ties under two different scenarios: (1) when there is no joint operating agreement addressing pseudo-tie implementation and operation between PJM and the Native Balancing Authority;¹⁵ and (2) when PJM and the Native

Tennessee Valley Authority (TVA), New York Independent System Operator, Inc. (NYISO), Duke Energy Progress and Duke Energy Carolinas, and Louisville Gas and Electric Company and Kentucky Utilities Company (LG&E KU). *Id.* at 5.

¹³ *Id.* at 5-6.

¹⁴ *Id.* at 6-7 (citing NERC, Draft Dynamic Tag Exclusion Reference Document, v. 1 (April 2017), <http://www.nerc.com/comm/OC/ReferenceDocumentsDL/Dynamic%20Tag%20Exclusion%20v1.pdf>).

¹⁵ This *pro forma* agreement is set forth in proposed Attachment MM of the PJM Tariff.

Balancing Authority have executed a joint operating agreement addressing pseudo-tie implementation and operation.¹⁶ According to PJM, there are relatively few differences between these two *pro forma* pseudo-tie agreements.¹⁷ Under proposed Attachment MM, which applies when there is no existing agreement addressing implementation and operation of pseudo-ties, PJM requires the Native Balancing Authority to be a party. Whereas, under proposed Attachment NN, the Native Balancing Authority is not required to be a party because PJM does have such an agreement with the Native Balancing Authority.¹⁸ PJM explains that the proposed *pro forma* pseudo-tie agreements are necessary to resolve an inconsistency in permitting generators to be dynamically transferred into PJM. PJM states that, currently, it has no Commission-accepted standard form of agreement for implementing a pseudo-tie or dynamic schedule and specifying the roles and responsibilities among the Native Balancing Authority, PJM, and the pseudo-tied entity. PJM further explains that the lack of a standard Commission-accepted agreement has resulted in multiple variations of arrangements for pseudo-ties and dynamic schedules.¹⁹

9. PJM also proposes a *pro forma* reimbursement agreement (Reimbursement Agreement) to address PJM's recovery of costs associated with performing studies and modifying its models or systems to establish and accommodate a pseudo-tie.²⁰ The proposed Reimbursement Agreement, among other things, sets forth the terms and conditions for effectuating any necessary system and model modifications; addresses confidentiality, limitations on liability, assignment, notices, waiver, amendments; and

¹⁶ This *pro forma* agreement is set forth in proposed Attachment NN of the PJM Tariff.

¹⁷ Attachment K of the PJM Transmittal provides a comparison of the two *pro forma* pseudo-tie agreements. *Id.* at 18 n.47.

¹⁸ PJM states that Attachment NN was developed to eliminate the administrative burden of requiring PJM and a native BA to execute a pseudo-tie agreement when they have already agreed on generally acceptable implementation and operation details in a separate agreement. *Id.* at 18.

¹⁹ *Id.* at 14.

²⁰ This *pro forma* agreement is set forth in proposed Attachment MM-1 of the PJM Tariff (Form of System Modification Reimbursement Agreement for Pseudo-Tie in the PJM Region).

adds an administrative fee to cover PJM's cost to perform the study to determine the feasibility of the pseudo-tie.²¹

10. PJM proposes to incorporate the three above-described Pseudo-tie Agreements into its Tariff as service agreements. According to PJM, current un-filed agreements between PJM and entities with existing pseudo-ties are not akin to the agreements addressing the implementation and operation of pseudo-ties at issue in this proceeding, but rather are agreements regarding PJM's evaluation of a request for a pseudo-tie. Therefore, PJM asserts that those agreements need not be terminated.²² PJM states it will require all entities with pseudo-ties to execute the new *pro forma* pseudo-tie agreement and will "seek the Commission's permission to terminate any existing Pseudo-Tie for which a Member refuses to execute the agreement."²³ PJM asserts this approach is consistent with PJM's *Memphis* Clause, set forth in part I, section 9 of the PJM Tariff, which permits prospective changes to its contract rate, terms, conditions, and charges.²⁴

III. Recent Pseudo-Tie Reforms

11. In November 2017, the Commission accepted PJM's proposal to establish new pseudo-tie requirements for new external resources that wish to participate in PJM's forward capacity auctions, and a transition period with deliverability requirements to allow for existing pseudo-tied resources that had previously cleared a forward capacity auction to comply with the new pseudo-tie requirements.²⁵

12. In December 2017, the Commission accepted Midcontinent Independent System Operator, Inc. (MISO) and PJM's identical proposed revisions to the Joint Operating Agreement between MISO and PJM (PJM-MISO JOA) to improve the administration and coordination of pseudo-tied resources.²⁶

²¹ *Id.* at 10.

²² *Id.* at 29.

²³ *Id.* at 29-30.

²⁴ *Id.* at 30 (citing *United Gas Pipe Line Co. v. Memphis Light, Gas & Water Div.*, 358 U.S. 103, 110-13 (1958)).

²⁵ *PJM Interconnection, L.L.C.*, 161 FERC ¶ 61,197 (2017) (Pseudo-Tie Enhancements Order).

²⁶ *PJM Interconnection, L.L.C.*, 161 FERC ¶ 61,313 (2017) (Pseudo-Tie JOA Revisions Order).

IV. Notices of Filings and Responsive Pleadings

13. Notices of PJM's August 11, 2017 filing in Docket No. ER17-2291-000 was published in the *Federal Register*, 82 Fed. Reg. 39,423 (2017), with interventions and comments due on September 1, 2017.

14. The following entities filed timely motions to intervene: American Municipal Power, Inc. (AMP); Ameren Services Company; Buckeye Power, Inc.; Cogentrix Energy Power Management, LLC (Cogentrix); Dayton Power & Light Company; Delaware Division of the Public Advocate; East Kentucky Power Cooperative, Inc.; Entergy Services, Inc.; Illinois Municipal Electric Agency (IMEA); ITC Lake Erie Connector LLC (ITC Lake Erie); MISO; Potomac Economics, Ltd., in its capacity as the Independent Market Monitor for MISO (MISO IMM); Monitoring Analytics, L.L.C., in its capacity as the Independent Market Monitor for PJM (PJM IMM); New York Independent System Operator, Inc. (NYISO); North Carolina Electric Membership Corporation (NCEMC); Northern Illinois Municipal Power Agency; NRG Power Marketing, LLC and GenOn Energy Management, LLC; and Wabash Valley Power Association, Inc. A notice of intervention was filed by the Illinois Commerce Commission.

15. On September 7, 2017, New York Transmission Owners (NYTOs), filed a motion to intervene out of time, motion for leave to answer, and answer (NYTOs First Answer).

16. Protests were filed by AMP (AMP First Protest), IMEA, the MISO IMM, NCEMC, and NYISO. Comments were filed by Cogentrix (Cogentrix First Comments), ITC Lake Erie, NIMPA, and the PJM IMM. On September 25, AMP filed an answer to the comments filed by the PJM IMM (AMP Answer).

17. On October 3, 2017, PJM filed an answer to the protests and comments (PJM First Answer). On October 12, 2017, the PJM IMM filed an answer to AMP (PJM IMM Answer). On October 18, 2017, NYTOs filed an answer to PJM's answer (NYTOs Second Answer).

18. On November 7, 2017, Commission staff issued a deficiency letter to PJM seeking additional information regarding firm point-to-point transmission service, suspension and termination of pseudo-tied resources, and partial pseudo-ties.

19. On December 7, 2017, PJM filed, in Docket No. ER17-2291-001, a response to Commission staff's November 7, 2017 deficiency letter (Deficiency Response). Notice of the Deficiency Response was published in the *Federal Register*, 82 Fed. Reg. 58,801 (2017), with interventions and comments due on December 28, 2017. On December 22, 2017, Cogentrix filed comments (Cogentrix Second Comments) in response and, on December 28, 2017, AMP filed a protest (AMP Second Protest) in response. On January 11, 2018, PJM filed an answer to AMP Second Protest and Cogentrix Second

Comments (PJM Second Answer). On January 26, 2017, AMP filed an answer to the PJM Second Answer.

V. Discussion

A. Procedural Matters

20. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2017), the notice of intervention and the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d), the Commission will grant NYTOs' motion to intervene out-of-time given its interest in the proceedings, the early stage of the proceedings, and the absence of undue prejudice or delay.

21. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure prohibits an answer to a protest unless otherwise ordered by the decisional authority. We will accept the answers because they have provided information that has assisted us in our decision-making process. However, we are not persuaded to accept AMP's January 26, 2017 answer and will, therefore, reject it.

B. Substantive Matters

22. We accept the proposed revisions and Pseudo-tie Agreements, effective November 9, 2017, as requested, subject to condition, as discussed below.²⁷ We agree with PJM that the Pseudo-tie Agreements and corresponding Tariff and Operating Agreement revisions promote uniformity among the pseudo-tie and dynamic schedule requirements and increase the transparency and efficiency of the implementation process. Each of the contested issues will be discussed in turn below.

1. Related Proceedings

a. Comments

23. The MISO IMM and Cogentrix argue that PJM's proposal should not be considered in isolation from other pseudo-tie proceedings pending before the

²⁷ The United States Court of Appeals for the District of Columbia Circuit has held that, in certain circumstances, the Commission has "authority to propose modifications to a utility's [FPA section 205] proposal *if the utility consents to the modifications.*" *NRG Power Mktg., LLC v. FERC*, 862 F.3d 108, 114-15 (D.C. Cir. 2017).

Commission.²⁸ The MISO IMM argues that the filing does not address the core concerns raised in the MISO IMM Complaint²⁹ regarding the adverse economic and reliability effects of the pseudo-ties. Likewise, NIMPA states that while the proposed *pro forma* agreement addresses issues related to the operation and implementation of new pseudo-ties, the Commission's determination in this proceeding does not obviate the need for the Commission to review issues that NIMPA raised in other proceedings on pseudo-ties, specifically the issue of double-charges for congestion.³⁰ AMP similarly protests that the instant filing reflects a "piecemeal" rather than coordinated approach to addressing issues affecting generators that are pseudo-tied from MISO into PJM, including double-charges for congestion.³¹

24. Cogentrix requests that the Commission delay implementation of any new pseudo-tie filings, including PJM's instant filing, until the Commission has had the opportunity to fully evaluate all the outstanding PJM pseudo-tie issues.³² The MISO IMM requests a technical conference to address the interrelated nature of the issues and concerns raised

²⁸ MISO IMM Comments at 4; Cogentrix First Comments at 4. In addition to the reforms recently accepted in the Pseudo-Tie Enhancements Order and Pseudo-Tie JOA Revisions Order, discussed above, there are several other pending proceedings related to pseudo-ties. MISO filed a *pro forma* pseudo-tie agreement in Docket No. ER17-1061-000 (MISO), which has been accepted subject to refund and further Commission order. *Midcontinent Indep. Sys. Operator, Inc.*, 160 FERC ¶ 62,135 (2017) (delegated letter order). There are also several pending complaints regarding congestion double-charging, in Docket Nos. EL17-31-000 and EL17-37-000 (against PJM), and in Docket Nos. EL16-108-000, EL17-29-000, and EL17-54-000 (against MISO). In addition, the MISO IMM filed a complaint against PJM on April 6, 2017, in Docket No. EL17-62-000, challenging PJM's requirement for external resources to be pseudo-tied to PJM in order to participate in the PJM forward capacity auctions (the MISO IMM Complaint).

²⁹ MISO IMM Comments at 3-4.

³⁰ NIMPA Comments at 4.

³¹ AMP First Protest at 2-3; *see also* AMP Answer at 10-12 (describing "at least a dozen" proceedings that AMP contends illustrate PJM and MISO's "haphazard and incomplete efforts to resolve issues involving pseudo-ties").

³² Cogentrix First Comments at 4.

by pseudo-ties and contends that the Commission should defer action until that technical conference is complete.³³

25. The MISO IMM also argues that nothing in the PJM proposed filing ameliorates the significant problems caused by pseudo-tied resources. The MISO IMM further adds that the rapid growth in resources pseudo-tying into PJM has been caused almost entirely by PJM's requirement that external capacity resources must be pseudo-tied, which the MISO IMM has challenged in a pending complaint against PJM.³⁴ The MISO IMM argues that this requirement adversely impacts the commitment and dispatch of the MISO and PJM systems, resulting in substantial economic and reliability harm to the customers in both areas.³⁵

b. Answers

26. PJM argues that the issues addressed by this proceeding and those addressed in the other pseudo-tie proceedings are not inextricably linked, as suggested by some of the parties.³⁶ Specifically, PJM asserts that the proposed Tariff and Operating Agreement changes formalize its current practices for implementing and operating pseudo-tied resources, and incorporate new practices in its governing documents. PJM asserts that each pending pseudo-tie-related filing can, and should, be addressed and considered for separate approval.³⁷

c. Commission Determination

27. As discussed below, we accept PJM's filing subject to condition. The terms of the proposed revisions and Pseudo-tie Agreements are not unjust and unreasonable merely because the Commission has not yet acted in the other proceedings. Although parties have raised similar issues and arguments in other pending pseudo-tie related proceedings, in this order we address issues related to the instant filing, which can be adjudicated separately from issues that remain pending in other proceedings and we see no need to defer action on the instant filing; this proceeding specifically addresses the agreements

³³ MISO IMM Comments at 4.

³⁴ MISO IMM Comments at 3 (referencing the MISO IMM Complaint).

³⁵ *Id.*

³⁶ PJM First Answer at 5.

³⁷ *Id.* at 5-6.

that market participants enter into with PJM regarding the implementation and operation of a pseudo-tied resource from any Balancing Authority external to PJM.³⁸

28. Also, concerns that the proposed revisions and Pseudo-tie Agreements do not address congestion overlap go beyond the scope of this proceeding, which is not intended to address congestion overlap. Moreover, no evidence has been presented to demonstrate that the provisions filed by PJM are unjust and unreasonable because congestion overlap issues are not addressed in this filing. In addition, we note that on October 23, 2017, MISO and PJM made separate filings to address the congestion overlap issue; those filings are pending in Docket No. ER18-136-000 for MISO and Docket No. ER18-137-000 for PJM. Any concerns about the congestion overlap proposals may be addressed in those proceedings.

29. We also decline the MISO IMM's request for a technical conference in this proceeding, as the Commission can, without further procedures, adjudicate the issues pending in this proceeding.

2. Interregional Coordination

a. PJM's Filing

30. PJM proposes to modify section 1.12(d) of Schedule 1 of the Operating Agreement to require an entity seeking to utilize a pseudo-tie to execute a mutually agreeable interregional congestion management agreement before PJM will permit the pseudo-tie.³⁹ In addition, PJM states that to produce a pseudo-tie agreement that would be acceptable to its members and other Native Balancing Authorities, it reviewed similar pseudo-tie agreements that the Commission accepted for other RTOs and ISOs and

³⁸ We also note that subsequent to most of the pleadings in this proceeding, the Commission issued orders accepting PJM's tariff filing in Docket No. ER17-1138-000, *et al.*, pertaining to PJM's proposal to enhance pseudo-tie requirements for external resources (Pseudo-Tie Enhancements Order), and PJM and MISO's joint filing addressing the terms of pseudo-tie coordination between PJM and MISO in the Joint Operating Agreement (Pseudo-Tie JOA Revisions Order).

³⁹ PJM Transmittal at 6-7. This requirement applies to both pseudo-ties and dynamic schedules. PJM also proposes to revise section 1.12(d) of Schedule 1 of the Operating Agreement to require that an entity seeking a dynamic transfer will execute an agreement prescribing the requirements that must be met before PJM will implement the dynamic transfer.

sought the input of several neighboring Balancing Authorities, including MISO, SPP, TVA, NYISO, and LG&E KU.⁴⁰

b. Comments

31. NYISO argues that it cannot accommodate a number of PJM's proposed pseudo-tie requirements and cannot be expected to change its market design to do so.⁴¹ NYISO asserts that PJM's filing is unjust and unreasonable, at least as applied to generation that is directly interconnected to the New York Control Area (NYCA) transmission system.⁴² According to NYISO, PJM has not justified "requiring the NYISO to make the sweeping changes to its Tariffs, market rules and software that would be necessary to accommodate PJM's proposals without compromising reliability or market efficiency in New York."⁴³ NYISO expresses its willingness to work with PJM to develop an alternative method of selling capacity across their common border, but rejects the possibility of a "one size fits all" approach. NYISO asks the Commission to condition its acceptance of PJM's proposals on PJM's submission of tariff rules that do not mandate the use of pseudo-ties at all of its borders.⁴⁴

32. NYISO explains that resources in New York have never pseudo-tied out of NYISO into PJM or any other region.⁴⁵ NYISO describes how the NYISO-PJM seam fundamentally differs from PJM's seams with other regions, and asserts that implementing the *pro forma* pseudo-tie agreements would result in inefficient scheduling and congestion management at the NYISO-PJM interface, and would be incompatible with the Joint Operating Agreement between NYISO and PJM (PJM-NYISO JOA).⁴⁶

⁴⁰ PJM states that there are no external resources currently pseudo-tied into PJM from TVA, NYISO, or SPP. *Id.* at 5 n.14.

⁴¹ NYISO Protest at 1-2.

⁴² *Id.* at 27.

⁴³ *Id.* at 27.

⁴⁴ *Id.* at 28 (referring to the instant filing and PJM's March 2017 filing in Docket No. ER17-1138-000).

⁴⁵ *Id.* at 7.

⁴⁶ *Id.* at 8-9.

According to NYISO, PJM's filing does not reflect input from NYISO regarding impacts to New York.⁴⁷

33. NYISO objects to PJM's requirement that PJM will have operational control of a pseudo-tied resource, citing local reliability rules,⁴⁸ and describing market efficiency concerns.⁴⁹ NYISO also asserts that permitting PJM to have dispatch control is at odds with the close coordination between NYISO, transmission owners, and generators that is required due to the unique operational and reliability challenges posed by New York City. NYISO asserts that ceding dispatch control to PJM could violate the NYISO transmission owners' agreement.⁵⁰

34. NYISO interprets the proposed *pro forma* pseudo-tie agreements as authorizing the Native Balancing Authority Area: "(1) to specify or to limit the output of, a pseudo-tied Facility in order to address or mitigate local transmission reliability concerns; and/or (2) to use the output of the pseudo-tied Facility to serve the load of the Native Balancing Authority Area in order to address or mitigate local transmission reliability concerns," which NYISO views as helpful.⁵¹ However, NYISO argues that the *pro forma* pseudo-tie agreement appears to be silent on whether and when external resources will be available for commitment by the Reliability Coordinator of the Native Balancing Authority Area. NYISO asks the Commission to require PJM to revise its *pro forma* pseudo-tie agreement "to explicitly permit the Native Balancing Authority Area to schedule, dispatch and compensate a PJM Generation Capacity Resource at times when: (a) PJM has not committed the resource; and (b) the PJM Generation Capacity Resource's operation is necessary to protect reliability in the Native Balancing Authority Area."⁵²

⁴⁷ *Id.* at 9-10 (citing Capacity Performance Order, 151 FERC ¶ 61,208, at P 96 (requiring PJM to reach agreement with external Balancing Authorities regarding pseudo-tie implementation to minimize seams issues)).

⁴⁸ *Id.* at 11-13. NYISO's comments focus on proposed Attachment MM to the PJM Tariff, which is the proposed *pro forma* agreement applicable when no joint operating agreement addresses pseudo-tie operation and implementation.

⁴⁹ *Id.* at 13-16.

⁵⁰ *Id.* at 12.

⁵¹ *Id.* at 26 (citing sections 2(1) and the preamble of the proposed *pro forma* pseudo-tie agreements).

⁵² *Id.* at 26-27.

35. NYISO asks the Commission to direct PJM to work with NYISO to develop alternative means of addressing PJM's objectives.⁵³

c. Answers

36. NYTOs echo many of the concerns raised by NYISO, and support NYISO's request and argue that the Commission should direct PJM to work with NYISO to develop an alternative method for selling capacity across their common border, but reject the possibility of a "one size fits all" approach to pseudo-tie requirements on all neighboring Balancing Authorities.⁵⁴

37. PJM argues that most of NYISO's complaints are beyond the scope of this proceeding. PJM states that the proposed *pro-forma* pseudo-tie agreements do not give PJM the unilateral authority to pseudo-tie an external resource. PJM asserts that to permit an external resource to pseudo-tie and execute the *pro forma* pseudo-tie agreements, there must be an agreement between PJM and NYISO. In addition to the agreement with the Native Balancing Authority (i.e., NYISO), the completion of the necessary studies is needed with regard to the implementation and operation of the requested pseudo-tie.⁵⁵ PJM states that if NYISO's governing documents do not allow a resource to request a pseudo-tie, then PJM and NYISO will not be able to come to agreement on the implementation and operation of the requested pseudo-tie as required by the applicable NERC Reliability Standards, and PJM will not allow the resource requesting the pseudo-tie to be implemented.⁵⁶

38. PJM states that many of NYISO's concerns can be addressed through amendments to the PJM-NYISO JOA or the terms of a mutually agreeable pseudo-tie agreement.⁵⁷ PJM further states that other concerns would be more appropriately addressed through regional differences and a non-conforming version of the current proposed *pro forma* pseudo-tie agreement.⁵⁸ PJM states that it recognizes the appropriateness of regional differences, and "is willing to provide operational transparency to NYISO in order to

⁵³ *Id.* at 27.

⁵⁴ NYTOs First Answer at 6-7.

⁵⁵ PJM First Answer at 35-36.

⁵⁶ *Id.* at 41.

⁵⁷ *Id.* at 36.

⁵⁸ *Id.* at 38-39.

satisfy NYISO system operation needs and address regional differences” and any legitimate concern about the reliable operation of the New York State Transmission System.⁵⁹ PJM further states that the Commission “allows, or even requires” a just and reasonable standard form of agreement to ensure customers receive non-discriminatory service.⁶⁰

39. In addition, PJM states that NYISO has recently advised PJM that it is willing to work with PJM to develop alternative agreements and implement rules to permit delivery to PJM of energy and capacity from resources that are directly interconnected to NYCA transmission facilities.⁶¹ Specifically, PJM states that “PJM and NYISO have agreed to engage in further good faith negotiations regarding: (a) seams issues including the process for exporting capacity and energy from each region to the other, to include the applicable studies to be performed; (b) the responsibility of costs associated with the export of such capacity and energy, including transmission congestion costs; (c) the associated transmission service requirements; (d) the rights and obligations of both the Native and Attaining Balancing Authority; and (e) operational coordination requirements.”⁶²

d. Additional Comments and Answers

40. In response, NYTOs state that they are pleased to hear that the two RTOs will have discussions on these issues, because the instant PJM filing is at odds with NYISO’s market structure and would adversely impact reliability in NYCA. NYTOs further state that they have shared responsibility with NYISO to maintain reliability in NYCA. Thus, NYTOs posit that, until these discussions take place between PJM and NYISO, it would be inappropriate and premature for the Commission to approve PJM’s proposed filing.⁶³

e. Commission Determination

41. We find that PJM’s proposal, which formalizes and clarifies the requirements for external resources that seek to pseudo-tie into the PJM region, is just and reasonable. We agree with PJM that the NYISO-specific concerns raised by NYISO and the NYTOs are beyond the scope of this proceeding because they do not relate to the proposed revisions

⁵⁹ *Id.* at 40.

⁶⁰ *Id.* at 36 (citing *MidAmerican Energy Co.*, 116 FERC ¶ 61,018, at P 7 (2006)).

⁶¹ *Id.* at 39.

⁶² *Id.* at 43.

⁶³ NYTOs Second Answer at 4.

and *pro forma* agreements between PJM and entities seeking to pseudo-tie that are at issue here. PJM is setting reasonable terms for pseudo-tied resources to participate in PJM markets. Contrary to NYISO's protest, these requirements place no burdens on NYISO to change its market design, as the pseudo-tied resource must obtain NYISO's permission to pseudo-tie and NYISO is under no obligation to approve a request that fails to accord with its market design. The proposed Tariff revisions, Operating Agreement revisions and *pro forma* agreements relate solely to PJM's requirement that an external resource must be pseudo-tied into PJM in order to qualify as a Capacity Performance Resource.

42. Thus, we find that NYISO and NYTOs' arguments related to potential inefficient scheduling and congestion management at the PJM-NYISO interface, and concerns about reliability impacts in NYISO, do not alter our finding that the proposed revisions and *pro forma* pseudo-tie agreements are just and reasonable. The instant proposal does not specifically address scheduling or congestion management practices at the interface between PJM and NYISO for pseudo-tied resources. As PJM clarifies, there are currently no pseudo-tied resources from NYISO into PJM and nothing in PJM's proposal seeks to change NYISO's tariff or dictate what NYISO must accept in the future.⁶⁴ If, in the future, a resource seeks to pseudo-tie from NYISO into PJM, the two regions could develop a mutual agreement for inclusion in the NYISO-PJM JOA. An external Balancing Authority has the flexibility to not approve a pseudo-tied resource if its reliability concerns are not addressed.

3. Firm Transmission and Firm Flow Entitlement

a. PJM's Filing

43. Section 2 of the *pro forma* pseudo-tie agreements describes the implementation of pseudo-ties under the *pro forma* pseudo-tie agreement. Section 2 requires, among other things, that a pseudo-tied resource shall secure long-term firm point-to-point transmission service and obtain transmission service in accordance with rules of the Native Balancing Authority.⁶⁵ With respect to congestion management requirements for any pseudo-tied resource for which the Native Balancing Authority has not executed a congestion

⁶⁴ NYTOs in Docket Nos. ER17-1138-000 and ER17-1138-001 noted that "NYPA has been advised by PJM personnel that PJM agrees [that NYPA's export transactions into PJM] should remain 'grandfathered' in accordance with longstanding precedent, so NYPA does not anticipate any opposition from PJM to this request." See NYTOs Answer, Docket No. ER17-1138-000 at 4-5 & n.20 (filed Apr. 19, 2017).

⁶⁵ PJM Transmittal at 21-22; Proposed Attachment MM § 2; Proposed Attachment NN § 2.

management agreement with PJM, section 7 of the *pro forma* pseudo-tie agreements states that such a Native Balancing Authority is required to, among other things, honor firm delivery status via third party firm flow limit calculation procedures specified in the Joint Operating Agreement between MISO and PJM.⁶⁶

b. Comments

44. NCEMC requests that the Commission direct PJM to modify section 2(b) of the proposed *pro forma* pseudo-tie agreements to state either that the term for the long-term firm point-to-point service is one year or state that the term is as defined in the PJM Tariff.⁶⁷ NCEMC is concerned that the proposed *pro forma* pseudo-tie agreement's definition of long-term firm point-to-point service, if not clarified and made consistent with the PJM Tariff, could result in the imposition of a requirement similar to one advanced by PJM in the Pseudo-Tie Enhancement proceeding, that pseudo-tied resources obtain long-term firm transmission service with rollover rights for a five-year term.⁶⁸ NCEMC asserts that the Commission has previously rejected an attempt by PJM to impose a five-year transmission requirement on pseudo-tied resources, and that this "unjustified requirement" should not be "reincarnated" here.⁶⁹

45. NYISO and NYTOs state that there are no express physical reservations of transmission capacity on the NYISO system under its financial reservation model.⁷⁰ NYISO contends that developing firm point-to-point service in NYISO would be highly burdensome, incompatible with the NYISO market design, and unnecessary. NYISO states that further discussion and coordination would be required to develop a mutually acceptable equivalent solution for pseudo-ties from the NYISO system.⁷¹

46. Regarding the *pro forma* pseudo-tie agreements requirement in section 7 that the Native Balancing Authority "honor firm delivery transfer status via third party firm flow limit calculation procedures," NYISO and NYTOs aver that this "firm flow entitlement" requirement is unjust and unreasonable because it provides PJM with the right to an

⁶⁶ Proposed Attachment MM § 7.

⁶⁷ NCEMC Comments at 4.

⁶⁸ *Id.* at 4-5 (citing Pseudo-Tie Enhancements Filing, *PJM Interconnection, L.L.C.*, Docket No. ER17-1138-000 (Mar. 9, 2017)).

⁶⁹ *Id.* at 5 (*PJM Interconnection, L.L.C.*, 155 FERC ¶ 61,303, at P 20 (2016)).

⁷⁰ NYISO Comments at 16-17; NYTOs First Answer at 6.

⁷¹ NYISO Comments at 17-18.

incremental additional use of the Native Balancing Authorities' transmission system and transmission rights without paying for them.⁷²

c. Answers

47. Regarding NCEMC's arguments that the section 2(b) of the proposed *pro forma* pseudo-tie agreements is unclear and should be revised, PJM states that it did not include the defined term Long-Term Firm Point-to-Point Transmission Service in that provision to ensure consistency with the Tariff and Operating Agreement provisions governing transmission service for pseudo-ties, noting its proposal in the Pseudo-Tie Enhancement Filing that the requisite long-term firm transmission service for pseudo-ties be for a term of at least five years.⁷³ PJM further contends that the Commission's prior order in the Capacity Import Limit proceeding does not preclude acceptance of this five-year term requirement, explaining that the requirements of the Pseudo-Tie Enhancement Filing concern only the rules for Capacity Performance Resources, and the Commission has determined that "a resource that seeks to be treated as comparable to PJM internal generation should be subject to a condition, which indicates a long-term commitment as PJM capacity."⁷⁴

48. PJM states that it has agreed with NYISO to conduct further good faith negotiations regarding transmission service requirements for pseudo-ties, among other things.⁷⁵ NYTOs express support for conduct of such future negotiations, but contends it would be inappropriate and premature for the Commission to approve PJM's filing until these discussions transpire.⁷⁶

d. Deficiency Response

49. PJM clarifies that the long-term firm point-to-point transmission requirement in section 2(b) of the *pro forma* pseudo-tie agreements is proposed in accordance with

⁷² *Id.* at 19-20; NYTOs First Answer at 6. NYISO cites section 6.2.1.1 of Schedule D of the NYISO-PJM JOA in support.

⁷³ PJM First Answer at 14. This proposal has been accepted by the Commission. Pseudo-Tie Enhancements Order, 161 FERC ¶ 61,197.

⁷⁴ *Id.* at 14-15 (quoting *PJM Interconnection, L.L.C.*, 147 FERC ¶ 61,060, at P 53 (2014)).

⁷⁵ *Id.* at 43.

⁷⁶ NYTOs Second Answer at 4-5.

several provisions of the PJM Governing Documents. Specifically, PJM explains that Tariff, Attachment K-Appendix 1.12(d) and reciprocal provisions of the Operating Agreement, Schedule 1, section 1.12(d) require an entity requesting a pseudo-tie to reserve the necessary amount of firm transmission service to deliver the amount of energy and ancillary services that it is committed to transmit to PJM.⁷⁷ PJM specifies that Schedule 10 of the Reliability Assurance Agreement establishes deliverability requirements for Generation Capacity Resources, including the requirement that such resources external to PJM with Unforced Capacity Obligations must demonstrate deliverability by obtaining or providing for Network Transmission Service and also comply with the requirements of PJM Tariff, Attachment DD, section 5.5A. PJM explains that PJM Tariff, Attachment DD, section 5.5A requires external capacity resources to be deliverable to load comparable to internal generation resources, including obtaining long-term point-to-point transmission service with rollover rights.⁷⁸

50. PJM clarifies that section 2(b) of the *pro forma* pseudo-tie agreements requires a company to secure long-term firm point-to-point transmission service “or equivalent thereof” to account for the possibility that in the future PJM may revise its Tariff and Operating Agreement to permit another form of transmission service for pseudo-ties. PJM specifically notes that NYISO does not currently have long-term firm transmission service, though PJM and NYISO may develop an alternative arrangement in the future.⁷⁹

e. Commission Determination

51. We find PJM’s proposed provision requiring pseudo-tied resources to secure long-term firm point-to-point transmission or the equivalent thereof, as required by PJM Governing Documents, is just and reasonable. We disagree with NCEMC that proposed section 2(b) should be revised to specify that the term for the required long-term firm point-to-point service is one year or to specifically reference the defined term in the PJM Tariff. We find it just and reasonable for the provision to incorporate all applicable provisions of PJM Governing Documents, as PJM proposes.

52. In the Pseudo-Tie Enhancements Order, the Commission addressed, and rejected, NCEMC’s arguments opposing PJM’s requirement for long-term firm transmission rights with rollover rights for external resources seeking to pseudo-tie. There, the Commission found the requirement to be appropriate because it treats external and internal resources

⁷⁷ PJM Deficiency Response at 2.

⁷⁸ *Id.* at 4-5; PJM Tariff, Attachment DD, § 5.5A.

⁷⁹ *Id.* at 5-6.

comparably under PJM's Capacity Performance construct.⁸⁰ In that order, the Commission rejected NCEMC's argument that the requirement was in conflict with the Commission's prior order in the Capacity Import Limit proceeding.⁸¹

53. In response to NYISO's and NYTOs' specific concern regarding firm flow entitlements, the Commission accepted in the Pseudo-Tie Enhancements Order PJM's proposal that firm allocations associated with any coordinated flowgates applicable to an external resource seeking to pseudo-tie must be allocated by the Native Balancing Authority to PJM.⁸² PJM does not have a unilateral right to the firm flow entitlements; rather, the pseudo-tied resource must take the necessary steps to implement these arrangements.

54. In response to the other arguments raised by NYISO, we again note that NYISO is not obligated to approve a pseudo-tie with PJM if these requirements conflict with NYISO's tariff. Moreover, no pseudo-tie currently exists between NYISO and PJM. If generators located in NYISO want to take advantage of pseudo-ties, NYISO and PJM can negotiate pseudo-tie coordination rules between their two Balancing Authorities. We note that PJM acknowledges the need for additional negotiations with NYISO on this matter,⁸³ and appropriately includes accommodating language in section 2(b) of the *pro forma* pseudo-tie agreements to account for the possibility of developing an equivalent to firm transmission service between PJM and NYISO in the future.

4. NERC Tagging and Third Party Consent

a. PJM's Filing

55. With respect to congestion management requirements, section 7 of the *pro forma* pseudo-tie agreements states that no party will tag or request to tag energy flows from a Generation Capacity Resource that uses a pseudo-tie because: (1) PJM-operated pseudo-

⁸⁰ Pseudo-Tie Enhancements Order, 161 FERC ¶ 61,197 at PP 114-118.

⁸¹ As explained in the Pseudo-Tie Enhancement Order, that prior order applied to a subset of resources for PJM's prior capacity product or resources planning to be Capacity Performance resources. The Commission made clear that "to continue to meet the on-going must-offer obligation, an external resource must provide assurance to PJM that, at the time it offers into the capacity auction, that resource is deliverable to PJM in a manner comparable to that of an internal resource's deliverability to PJM." *Id.* P 118.

⁸² Pseudo-Tie Enhancements Order, 161 FERC ¶ 61,197 at PP 89-90; 99-102.

⁸³ See PJM First Answer at 43.

ties cannot be subject to NERC Interchange Distribution Calculator tag curtailments per the PJM RAA; and (2) information about the pseudo-tied resource is included in a congestion management procedure via an alternate method as described in NERC Reliability Standard INT-004-3.1.⁸⁴ Section 7 of the *pro forma* pseudo-tie agreements states that PJM will include the pseudo-tied resource impacts in its market flow calculation consistent with any applicable Commission-approved congestion management agreement to which PJM participates.

56. Section 7 and Section 8 of PJM’s proposed *pro forma* pseudo-tie agreements contain additional language to be included in the agreement for “any pseudo-tie for which Native Balancing Authority/Native Reliability Coordinator/Native Transmission Operator has not executed a congestion management agreement.” Specifically, where applicable, Section 7 (Congestion Management Requirements) of the *pro forma* pseudo-tie agreements requires the Native Balancing Authority, the Native Reliability Coordinator, or the Native Transmission Operator to: (1) waive NERC tagging; (2) agree to control impacts from the pseudo-tie resource via the NERC IDC re-dispatch process; (3) honor firm delivery status via third party firm flow limit calculation procedures pursuant to the same congestion management procedures which have been agreed to by PJM and MISO in the PJM-MISO JOA; and (4) recognize impacts from the pseudo-tie resource via market flow calculations as described in the congestion management process provisions in the PJM-MISO JOA.⁸⁵ Likewise, Section 8 (Establishment of Flowgates) provides that flowgates will be established based on the congestion management process coordinated flowgate procedure as described in the PJM-MISO JOA.⁸⁶

b. Comments

57. NYISO raises concerns with PJM’s proposed provision in the *pro forma* pseudo-tie agreements requiring the Native Balancing Authority Area to agree to waive the NERC tagging requirement for the energy produced by pseudo-tied resources, and providing that the Native Balancing Authority and PJM will include the real-time pseudo-tie value in their respective calculations of Actual Net Interchange and Area Control Error. Detailing the unique features of the NYISO-PJM interface, and citing the rule PJM and NYISO jointly developed regarding the scheduling of transaction and operation of phase angle regulators at the NYISO-PJM border, NYISO argues that it is necessary “to explicitly incorporate the scheduled output from PJM capacity resources that are interconnected to the NYCA transmission system into the scheduled interchange between

⁸⁴ Proposed Attachment NN § 7; Proposed Attachment MM § 7.

⁸⁵ *Id.*

⁸⁶ Proposed Attachment NN § 8; Proposed Attachment MM § 8.

the NYISO and PJM Balancing Authority Areas.”⁸⁷ NYISO states that it is willing to work with PJM to ensure PJM has access to the information it requires to monitor deliveries from resources located in New York.⁸⁸

58. IMEA opposes the requirements of sections 7 and 8 of the *pro forma* pseudo-tie agreements because it asserts that no RTO, Balancing Authority, Reliability Coordinator, or Transmission Operator should have the right to prevent the pseudo-tie of external resources that are owned by or under long-term contract to a load-serving entity with long-term firm transmission rights to serve load in PJM.⁸⁹

c. Answers

59. PJM counters IMEA’s argument that sections 7 and 8 of the *pro forma* pseudo-tie agreements, which address tagging, are unjust and unreasonable because they condition the pseudo-tie on agreement by the Native Balancing Authority, the Native Reliability Coordinator and the Transmission Operator if those entities do not have a congestion management agreement with PJM. PJM avers that the provisions are just and reasonable because they ensure that the requirements of NERC Reliability Standard INT-004-3.1, which requires PJM to come to agreement with the Native Balancing Authority on the implementation and operation of pseudo-tied resources, are met.⁹⁰ PJM also explains that it and NYISO are willing to develop mutually agreeable rules to address pseudo-ties across the NYISO-PJM seam.⁹¹

d. Commission Determination

60. We agree with PJM that it is just and reasonable to condition a potential pseudo-tie on agreement with the indicated third parties if those entities do not have in place a congestion management agreement with PJM. We concur that this measure ensures PJM’s compliance with Reliability Standard INT-004-3.1. For this reason, we reject the arguments of IMEA and NYISO opposing these provisions. As we found above, NYISO

⁸⁷ NYISO Comments at 23-25.

⁸⁸ *Id.* at 25.

⁸⁹ IMEA Protest at 22.

⁹⁰ PJM First Answer at 23. PJM claims the Commission already has recognized that such coordination should minimize seams issues. *Id.* (citing Capacity Performance Order, 151 FERC ¶ 61,208 at P 96).

⁹¹ *Id.* at 42-43.

is not required to participate in any pseudo-tie agreement, and NYISO and PJM may develop appropriate procedures acceptable to both parties and the Commission.⁹² Echoing our previous finding, we find that NYISO retains the flexibility to not approve a pseudo-tie if NYISO's reliability concerns are not sufficiently addressed.

5. Non-Recallability

a. PJM's Filing

61. The *pro forma* pseudo-tie agreements provide, in a "whereas" recitals clause, that a resource pseudo-tied to PJM and committed to PJM as a Generation Capacity Resource is non-recallable to ensure that it will not be directed to serve load in the Native Balancing Authority when PJM requires its output, except in certain circumstances such as local transmission reliability emergency per NERC Standards IRO-001-4 and TOP-001-3.⁹³

b. Comments

62. The PJM IMM states that the proposed *pro forma* pseudo-tie requirements should not be approved as filed because the proposed non-recallable provision does not allow external capacity resources to be full substitutes for internal capacity resources due to the uncertainty of whether the external resource can be available or under PJM's dispatch control.⁹⁴ The PJM IMM further asserts that no exception to non-recallability should be permitted, and the proposed provisions on non-recallability include language that allows the Native Reliability Coordinator to commit, decommit, or redispatch a pseudo-tied resource in the event of a local system operating limit (SOL) or interconnection reliability operating limit (IROL).⁹⁵

⁹² See Pseudo-Tie Enhancements Order, 161 FERC ¶ 61,197 at P 102 ("[N]o pseudo-ties currently exist between NYISO and PJM, but if this were to change, PJM and NYISO would need to develop pseudo-tie coordination rules between their two Balancing Authorities.").

⁹³ Attachment MM at 3; Attachment NN at 3.

⁹⁴ PJM IMM Comments at 5-6.

⁹⁵ *Id.* at 5.

c. Answers

63. AMP disagrees with the PJM IMM's assertion that imported capacity is an inferior capacity product because it is not a full substitute for an internal capacity resource.⁹⁶ AMP argues that the PJM IMM ignores the fact that PJM cannot count on absolute control or availability of generating resources, whether internal or external, and that the PJM IMM has not presented any evidence demonstrating that the alleged differences between internal and external capacity resources result in a material effect on reliability. Instead, AMP avers that external capacity products need not be precisely identical substitute products, but rather "adequate substitutes."⁹⁷ AMP contends that it has shown that the IMM's approach would discriminate against external resources, and that non-recallability is unnecessary to achieve parity between internal and external capacity resources because retention of limited control over external resources by the Native Balancing Authority creates no less certainty over a resource's availability to the Attaining Balancing Authority than that resulting from internal SOL or IROL events affecting the availability of internal resources.⁹⁸ AMP asserts that the Commission has already found that pseudo-tied external capacity resources are comparable to internal resources and are treated as full substitutes for native capacity, and the PJM IMM's assertions constitute a collateral attack on prior Commission orders.⁹⁹

64. The PJM IMM asserts that AMP mischaracterizes its position. The PJM IMM contends that the same standards should apply to both external and internal capacity resources, but the proposed pseudo-tie revisions do not require external capacity resources to meet the same standards as internal resources in PJM.¹⁰⁰ Further, the PJM

⁹⁶ AMP Answer at 5-6. AMP's Answer was filed jointly to Docket Nos. ER17-2291, ER17-2218, and ER17-2220.

⁹⁷ *Id.* (citing *Red Lake Gas Storage, L.P.*, 103 FERC ¶ 61,277, at P 8 (2003) (citing *Alternatives to Traditional Cost-of-Service Ratemaking for Natural Gas Pipelines and Regulation of Negotiated Transportation Services of Natural Gas Pipelines*, Policy Statement, 74 FERC ¶ 61,076, at 61,231, *reh'g and clarification denied*, 75 FERC ¶ 61,024 (1996))).

⁹⁸ *Id.* at 6-7.

⁹⁹ *Id.* at 3-5 (citing *PJM Interconnection, L.L.C.*, 147 FERC ¶ 61,060, at PP 44 and 50 (2014)); Capacity Performance Order, 151 FERC ¶ 61,208 at PP 96-97, *order on reh'g*, 155 FERC ¶ 61,157 at P 44).

¹⁰⁰ PJM IMM Answer at 2-3. PJM IMM's Answer was filed jointly to Docket Nos. ER17-2291, ER17-2218, and ER17-2220.

IMM argues that AMP fails to explain how the PJM IMM position would impose higher standards on external capacity resources or how such resources would be treated worse than PJM's internal capacity resources.¹⁰¹

d. Commission Determination

65. We find PJM's "whereas" clause inclusion to be just and reasonable because PJM has sufficiently delineated the circumstances under which a pseudo-tied resource can be committed, decommitted, or redispatched. A pseudo-tied resource that fails to meet its capacity obligation remains subject to the same non-performance charges under the PJM Tariff as internal capacity resources.¹⁰²

66. The PJM IMM argues that the non-recallability provisions of the *pro forma* pseudo-tie agreements prevent external capacity resources from being full substitutes for internal capacity resources, however, as the Commission recently found in the Pseudo-Tie Enhancement proceeding, "external resources should serve as comparable substitutes for internal resources,"¹⁰³ and previously determined that "[t]reating similarly-situated resources on a comparable basis does not necessarily mean that the resources are treated the same."¹⁰⁴ We find that while external resources to PJM are expected to be comparable to internal resources in PJM, we note that in all situations, there may be some necessary differences, such as when there is an SOL or IROL that requires the Native Balancing Authority to redispatch an external resource for local reliability needs.

6. Suspension and Termination Provisions

a. PJM's Filing

67. Proposed sections 17 and 18 of the *pro forma* pseudo-tie agreements set forth the circumstances under which PJM or the Native Balancing Authority may suspend or terminate a pseudo-tied resource, and the processes to be followed. Under proposed section 17 of the *pro forma* pseudo-tie agreements, PJM reserves the right to provide

¹⁰¹ *Id.* at 2-3.

¹⁰² See Pseudo-Tie JOA Revisions Order, 161 FERC ¶ 61,313 at P 36 (referencing PJM Tariff, Attachment DD, § 10A).

¹⁰³ Pseudo-Tie Enhancement Order, 161 FERC ¶ 61,197 at P 28.

¹⁰⁴ See *Preventing Undue Discrimination and Preference in Transmission Service*, Order No. 890, FERC Stats. & Regs. ¶ 31,241, *order on reh'g and clarification*, Order No. 890-A, FERC Stats. & Regs. ¶ 31,261, at P 216 (2007).

immediate notice of a suspension of a pseudo-tie if PJM reasonably determines the pseudo-tied resource poses a risk to system reliability or causes PJM to violate applicable reliability standards. PJM also reserves the right to immediately suspend if the pseudo-tied resource “no longer satisfies the PJM Governing Document requirements for Pseudo-Ties, criteria for participation in PJM’s markets as an external resource, or other applicable regulatory, legal or reliability requirements,” or if the pseudo-tied resource commits a material default under the pseudo-tie agreement or has failed to cure any breach. In addition, PJM may suspend if a pseudo-tie fails to provide real-time pseudo-tie MW values in a timely manner.¹⁰⁵ Proposed section 17 of the *pro forma* pseudo-tie agreements explains that two suspensions within a 30-day period constitute a breach pursuant to proposed section 18, in which case the *pro forma* pseudo-tie agreement could be terminated pursuant to proposed section 18 thereof.¹⁰⁶ PJM further explains that any suspension must be coordinated among the parties because the pseudo-tie is physically located in the Native Balancing Authority and is still interconnected to the facilities of the Native Balancing Authority, which are not under PJM’s operational control.¹⁰⁷

68. With respect to termination, proposed section 18 of the *pro forma* pseudo-tie agreements provides that any party, in its sole discretion, shall have the right to terminate the pseudo-tie *pro forma* agreement.¹⁰⁸ PJM proposes to require 42-months’ notice of a request to terminate if there is no system reliability concern, explaining its view that termination should have the least impact on the pseudo-tied resource, particularly if it is committed in PJM’s capacity market, which commitment occurs up to three years prior to the Delivery Year in which the energy from that generator must be offered into PJM’s energy markets.¹⁰⁹ Further, PJM explains that the 42-month notice requirement is

¹⁰⁵ PJM notes that if the issue that caused the suspension can be resolved, PJM would lift the suspension and restore the pseudo-tie. PJM Transmittal at 25.

¹⁰⁶ Proposed section 17 of the *pro forma* pseudo-tie agreements notes that the party seeking the right to terminate must provide notice of such termination within 180 days of the second suspension.

¹⁰⁷ PJM Transmittal at 25.

¹⁰⁸ PJM states that per Tariff, Attachment K-Appendix, section 1.12, and the identical provisions of Operating Agreement, Schedule 1, section 1.12, it already has the authority to terminate a Dynamic Transfer under certain circumstances. The *pro forma* pseudo-tie agreements simply provide further detail and specificity on how much notice must be provided before termination can be effectuated. *Id.* at 25 n.61.

¹⁰⁹ *Id.* at 26. PJM explains that the 42-month notice period enables the pseudo-tie entity to provide notice to PJM and the PJM IMM that it can no longer offer the MW

appropriate because it corresponds to the existing notice requirement for a Capacity Market Seller that wishes to deactivate a generator.¹¹⁰ Proposed section 18 of the *pro forma* pseudo-tie agreements also provides that if PJM experiences an emergency or other unforeseen condition that impairs or degrades the reliability of the transmission system, it would have the right to terminate the *pro forma* pseudo-tie agreement within 60 days' notice.¹¹¹

b. Comments

69. Several parties contend that the proposed termination and suspension provisions are unjust and unreasonable and impermissibly vague.¹¹² AMP, Cogentrix, and IMEA contend that the suspension and termination provisions are unjust and unreasonable because they vest PJM with far-reaching unilateral authority to suspend or terminate a pseudo-tied resource at PJM's sole discretion.¹¹³ Cogentrix specifically asserts that the suspension and termination provisions create "material uncertainty as to the value and reliability of the pseudo-tie and the generator's ability to meet its PJM capacity and energy supply obligations," and thus could "complicate the ability of pseudo-tied generators to obtain critical financing or enter into other important contractual arrangements."¹¹⁴ IMEA argues that PJM's right to suspend a pseudo-tied resource should be limited to extreme technical circumstances, emergencies, or for willful misconduct, but it should not have the right to terminate a pseudo-tie.¹¹⁵ Cogentrix avers

from the resource in the PJM capacity market, and enables PJM engineers to plan for the impact. *Id.*

¹¹⁰ *Id.* at 27 (citing PJM's Tariff, Attachment DD, § 6.6(g)).

¹¹¹ Proposed Attachment MM § 17; Proposed Attachment NN § 17.

¹¹² IMEA Protest at 21-26; AMP First Protest at 4-5; Cogentrix First Comments at 5-12.

¹¹³ IMEA Protest at 10, 22-24; AMP First Protest at 5; Cogentrix First Comments at 5.

¹¹⁴ Cogentrix First Comments at 12.

¹¹⁵ IMEA Protest at 22.

that PJM should specify particular requirements outside of its pseudo-tie requirements that justify a suspension right.¹¹⁶

70. IMEA contends that the suspension provision is unjust and unreasonable because it subjects a pseudo-tied resource to suspension if that resource no longer satisfies the requirements of the PJM Governing Documents,¹¹⁷ which could be changed in the middle of a Delivery Year.¹¹⁸ Further, IMEA asserts that it is unjust and unreasonable that a pseudo-tied resource is subject to suspension if the problems are caused by PJM itself, either through its misconduct or negligence.¹¹⁹ Cogentrix argues that PJM should have an obligation to use reasonable efforts to expedite restoration of a pseudo-tie in cases involving system conditions not caused by the pseudo-tied resource.¹²⁰

71. Cogentrix and IMEA assert that PJM fails to explain why, under proposed section 17 of the *pro forma* pseudo-tie agreements, two suspensions within 30 days serve as the appropriate trigger to terminate a pseudo-tied resource, and that it is arbitrary for PJM to exercise the right to terminate up to 180 days after the second suspension.¹²¹ For instance, Cogentrix asserts that PJM has not justified why it is just and reasonable to terminate a pseudo-tied resource that is suspended twice in 30 days for failure to provide real-time MW values.¹²² IMEA contends that section 17 of the *pro forma* pseudo-tie agreements does not take into account the causes of the suspensions, thereby raising the prospect of termination for events beyond the control of the pseudo-tied resource.¹²³

¹¹⁶ Cogentrix First Comments at 6.

¹¹⁷ The recitals in Attachment MM and Attachment NN define the PJM Governing Documents as the PJM Open Access Transmission Tariff, Amended and Restated Operating Agreement of PJM Interconnection, L.L.C., Reliability Assurance Agreement Among Load Serving Entities in the PJM Region and the PJM Manuals.

¹¹⁸ IMEA Protest at 23.

¹¹⁹ *Id.*

¹²⁰ Cogentrix First Comments at 6.

¹²¹ IMEA Protest at 23-24; Cogentrix First Comments at 7.

¹²² Cogentrix First Comments at 7.

¹²³ IMEA Protest at 23.

72. Cogentrix states that PJM’s proposed termination right, in cases of emergency or other unforeseen conditions not caused by the pseudo-tied resource, is discriminatory and should not be allowed.¹²⁴ IMEA opposes permitting PJM to terminate a pseudo-tied resource “without cause” on 42-months’ notice, asserting that 42 months is insufficient time to recover the investments of the pseudo-tied entities,¹²⁵ and further argues that the termination provisions are unduly discriminatory because they allow external generators’ rights to be terminated for things that would not cause an internal generator to lose its interconnection rights.¹²⁶ Cogentrix similarly believes that any termination or suspension should be limited to Commission-approved requirements that are fully vetted through the stakeholder process “and should be consistent with the grounds for suspension of an internal generator’s interconnection rights – e.g., emergencies or abnormal system conditions,” and PJM should be required to obtain Commission approval prior to terminating a pseudo-tied resource.¹²⁷

73. To address its concerns, Cogentrix provides potential modifications to the proposed language of sections 14 (breach), 17 (suspension), 18 (termination), 19 (liability), and 20 (indemnification and consequential damages) of the *pro forma* pseudo-tie agreements.¹²⁸ Cogentrix specifically argues that, similar to the CAISO *pro forma* pseudo-tie agreement, PJM should be required to add provisions to the agreements addressing the effect of events of force majeure on breach, suspension and termination rights.¹²⁹ AMP argues that the termination provision should be rejected without prejudice to PJM providing clear guidelines on when it is appropriate to terminate a pseudo-tied resource.¹³⁰

¹²⁴ Cogentrix First Comments at 7-8. Cogentrix states that it understands PJM’s attempt to model the *pro forma* pseudo-tie agreements on those adopted by the California Independent System Operator Corporation (CAISO) and Southwest Power Pool, Inc. (SPP), but avers that those are “very different market structures from PJM.” Cogentrix First Comments at 7.

¹²⁵ IMEA Protest at 25.

¹²⁶ *Id.*

¹²⁷ Cogentrix First Comments at 6-7, 13.

¹²⁸ *Id.* at 9-13.

¹²⁹ *Id.* at 12.

¹³⁰ AMP Protest at 4-5.

74. The PJM IMM argues that the proposed suspension and termination provisions do not permit external capacity resources to be full substitutes for internal capacity resources because: (1) during the suspension it is unclear whether PJM still has the right to any energy produced by the pseudo-tied resource or how PJM would treat the manual dispatch of energy in its area control error; and (2) the 60-day notice termination would mean that the external capacity resource could no longer be a capacity resource. For these reasons, the PJM IMM requests that these provisions be removed from the proposed *pro forma* pseudo-tie agreements.¹³¹

c. Answers

75. PJM states that it understands Cogentrix's and IMEA's concerns regarding PJM's unilateral right to suspend a pseudo-tied resource, but believes it must retain suspension and termination authority in those limited circumstances necessary to address immediate threats to the reliable operation of the grid.¹³² Without these provisions, PJM argues that it would lack tools to ensure overall system security and reliability, such as those available to the Native Balancing Authority.¹³³

76. Regarding arguments that sections 17 and 18 of the *pro forma* pseudo-tie agreements are unjust and unreasonable because they permit suspension and termination of a pseudo-tied resource for reasons other than reliability, PJM asserts that it "has no intention of liberally utilizing its right to suspend or terminate," and only in rare situations would PJM resort to either option. PJM contends the reasons it would seek to terminate a pseudo-tied resource are, for the most part, related to situations involving system instability or reliability concerns, and are spelled out in the *pro forma* pseudo-tie agreements.¹³⁴ PJM contends that the Commission accepted similar provisions in the CAISO *pro forma* pseudo-tie agreement.¹³⁵ PJM also asserts that "[t]he ability of system operators to address transactions which are causing instability in the system is not a new feature being proposed by PJM. Indeed for years the Commission has recognized the use of [Transmission Loading Relief (TLR)] as an essential reliability tool that can override

¹³¹ PJM IMM Comments at 6-9.

¹³² PJM First Answer at 24.

¹³³ *Id.*

¹³⁴ *Id.* at 25.

¹³⁵ *Id.* (citing *Cal. Indep. Sys. Operator, Inc.*, 136 FERC ¶ 61,239 (2011)).

contractual transmission rights.”¹³⁶ PJM asserts that provisions permitting PJM to suspend or terminate a pseudo-tied resource for failing to provide real-time data are reasonable, as it is of the utmost importance that PJM receive required real-time data to ensure system reliability.¹³⁷ PJM also asserts that giving entities 42-months’ notice to terminate a pseudo-tied resource for reasons other than reliability—an option PJM does not expect to utilize—gives the entity sufficient time to ensure that it does not enter into a capacity obligation for another year.¹³⁸

77. In response to Cogentrix’s argument regarding the uncertainty created by the suspension and termination provisions, PJM argues that by virtue of the fact that a resource is pseudo-tied and is not an internal resource, it is inherently subject to additional risk that it accepted by choosing the configuration.¹³⁹ PJM acknowledges the increased risk associated with a pseudo-tied resource, but avers that the risk is not unjust or unreasonable, given that an RTO’s primary responsibility is ensuring reliability and stability of the grid.¹⁴⁰ Moreover, PJM points out that the choice to participate in PJM’s capacity market utilizing a pseudo-tied resource is a voluntary decision and made with knowledge of the risks involved.¹⁴¹ PJM agrees that a pseudo-tied resource should be afforded reasonable notice and an opportunity to cure if it would not place any party in violation of a law or regulatory requirement, noting that sections 14, 17, and 18 of the proposed *pro forma* pseudo-tie agreements allow for a cure period.¹⁴²

78. Regarding Cogentrix’s argument that PJM should be required to obtain Commission approval before terminating a pseudo-tied resource, PJM explains the *pro forma* pseudo-tie agreements are proposed as service agreements subject to the requirements of 18 C.F.R. § 35.10a, which means that only *pro forma* pseudo-tie agreements that contain non-conforming changes will have to be filed with the Commission. However, a non-conforming agreement that is required to be on file with

¹³⁶ *Id.* at 26.

¹³⁷ *Id.* at 26-27.

¹³⁸ *Id.* at 27.

¹³⁹ *Id.* at 28.

¹⁴⁰ *Id.* at 28 (citing 18 C.F.R. § 35.34(j)(3)-(4)).

¹⁴¹ *Id.* at 29.

¹⁴² *Id.* at 29 & n.90.

the Commission can only be terminated upon filing a notice with the Commission.¹⁴³ PJM opposes any new requirement to file a notice of termination of a conforming agreement, as it would be an expansion of current Commission rules and could lead to confusion.¹⁴⁴

79. In response to arguments that suspension and termination rights for pseudo-tied resources should be the same as those for internal resources, PJM explains that it must treat external, pseudo-tied resources differently by virtue of the fact that they are located outside of PJM's physical boundaries, but contends that it has designed rules to avoid disparate treatment in favor of internal resources.¹⁴⁵ To illustrate, PJM explains that when an internal resource pushes into a constraint and does not timely follow PJM's dispatch signal to ramp down, PJM can direct the transmission owner to effectively trip the resource off-line; thus suspension of an internal resource is not required. In contrast, PJM explains, it does not have the same authority to require transmission owners located in another Balancing Authority Area to take this action with respect to pseudo-tied resources, making the suspension provisions necessary to address near-term reliability and operating issues.¹⁴⁶

80. PJM asserts that the MISO IMM's concerns that the Native Balancing Authority loses operational control of, and the Attaining Balancing Authority gains operational control of, the pseudo-tied resource, and the PJM IMM's concerns about uncertainty associated with suspension, are beyond the scope of this proceeding because the proposed agreements do not create this uncertainty.¹⁴⁷ PJM underscores that the Commission permits resources to be pseudo-tied, and it is PJM's responsibility to put proper procedures in place to address the operation of such resources.¹⁴⁸

d. Deficiency Response

81. PJM clarifies that "suspension" means "the temporary period of time during which PJM and/or the Native Balancing Authority have determined the pseudo-tied generator

¹⁴³ *Id.* at 30 (citing 18 C.F.R. § 35.15(a)).

¹⁴⁴ *Id.* at 31.

¹⁴⁵ *Id.* at 32.

¹⁴⁶ *Id.* at 32-33.

¹⁴⁷ *Id.* at 47.

¹⁴⁸ *Id.* at 48.

must not operate utilizing the pseudo-tie . . . or participate in the Attaining Balancing Authority's markets . . . until the conditions are rectified or deemed to be un-rectifiable," in which case PJM and/or the Native Balancing Authority could seek to terminate the pseudo-tie.¹⁴⁹ PJM states that the Balancing Authorities may seek to suspend a pseudo-tied resource if the resource is not being operated consistent with the Balancing Authorities' tariff or business rules, or if required data that could impact system operations is not being provided.¹⁵⁰ PJM further states that suspension of a pseudo-tied resource will always involve curtailment and restriction from participation in day-ahead and real-time market activities.¹⁵¹

82. PJM clarifies that suspension is different from termination in that suspension is a temporary state, during which time the Balancing Authorities collaborate with a pseudo-tied resource to resolve an operational issue.¹⁵² PJM states that, during suspension, the resource will not participate in the Attaining Balancing Authority's markets, will operate under manual instructions given to the unit by the Attaining Balancing Authority, will remain in the Energy Management System (EMS) and commercial models as a pseudo-tie, and all energy from the pseudo-tied resource is injected into the Attaining Balancing Authority.¹⁵³ By contrast, PJM explains, termination involves removal of the previously pseudo-tied resource from the EMS and commercial models as a pseudo-tie, and all energy is injected into the Native Balancing Authority Area. PJM explains that, similar to the rationale set forth by California Independent System Operator in its *pro forma* pseudo-tie agreement accepted by the Commission, it may need to suspend or terminate a pseudo-tied resource when it may cause a violation of reliability standards, or that a pseudo-tied resource may create reliability concerns in some circumstances that are not known at the time the pseudo-tie is implemented.¹⁵⁴ PJM reiterates that it expects suspensions and terminations to be very exceptional events.

¹⁴⁹ PJM Deficiency Response at 7.

¹⁵⁰ *Id.*

¹⁵¹ *Id.* at 12.

¹⁵² *Id.* at 8.

¹⁵³ *Id.*

¹⁵⁴ *Id.* at 8-9 (citing *California Independent System Operator, Inc.*, Tariff Amendment to Modify Tariff Provisions Regarding Dynamic Transfers, Docket No. ER11-4161-000 (July 29, 2011), at 21-22).

83. PJM clarifies that it proposes to require 42 months' notice of a request to terminate a pseudo-tied resource if there is no reliability concern because this amount of time provides a company owning the pseudo-tied resource enough time to notify PJM and the PJM IMM that it can no longer offer the MW from its external generator in PJM's capacity market, before having to commit themselves to the capacity auction for another Delivery Year. PJM explains that this time frame is appropriate particularly when the pseudo-tied resource may be committed up to three years in advance in PJM's capacity market, and also provides PJM's planning engineers to account for the impact of such termination in determining RPM planning parameters that must be posted by February 1.¹⁵⁵

e. Additional Comments and Answers

84. Cogentrix contends that PJM's right to suspend or terminate a pseudo-tied resource upon 60-day notice are redundant since suspension always results in full curtailment of the pseudo-tied resource.¹⁵⁶ Accordingly, Cogentrix avers that the Commission should find the 60-day termination right is unjust and unreasonable because sufficient protection is already afforded to PJM by the suspension rights.¹⁵⁷ Cogentrix contends that the expedited termination provision exposes resources to a significantly greater risk of improper termination and PJM should not be afforded leeway to permanently terminate a pseudo-tied resource when suspension is a more reasonable remedy.¹⁵⁸

85. AMP argues that PJM's explanation of its suspension provision is unclear where it may disallow a suspended pseudo-tied resource from participating in the Native Balancing Authority's day-ahead and real-time markets in addition to disallowing participation in the Attaining Balancing Authority's (in this case, PJM) markets.¹⁵⁹ AMP avers that a pseudo-tied resource that does not participate in the PJM capacity market

¹⁵⁵ *Id.* at 9.

¹⁵⁶ Cogentrix Second Comments at 1.

¹⁵⁷ *Id.* at 3 (citing PJM Deficiency Response at 12).

¹⁵⁸ *Id.* at 4.

¹⁵⁹ AMP Second Protest at 3-4. AMP explains that in PJM's response to Deficiency Letter Question 2.e., PJM does not limit the scope of prohibition for market participation of a suspended pseudo-tie to the Attaining Balancing Authority's markets, implying that PJM may intend to prevent a suspended pseudo-tie from participating in the Native Balancing Authorities markets as well.

should be able to participate in its native markets during a suspension period, if it is free to participate in its native markets in the absence of suspension.¹⁶⁰ AMP further contends that the suspension and termination provisions in the *pro forma* pseudo-tie agreements remain impermissibly vague, and, as a result, the Commission should reject PJM's filing rather than conditionally accepting the rules subject to inclusion of these practices in the Tariff and Operating Agreement.¹⁶¹

86. In response to AMP, PJM explains that an external generator that wishes to participate in PJM's energy markets, but not in the PJM capacity market, can request to pseudo-tie into the PJM Balancing Authority Area. However, PJM further states that an external generator that does not want to participate in the PJM capacity market should instead be dynamically scheduled since it would not be considered to be electrically located in the PJM Balancing Authority Area. That is, that dynamically scheduled generator would retain the flexibility to offer its MW output into its Native Balancing Authority's markets or in the PJM energy markets.¹⁶²

f. Commission Determination

87. We find PJM's suspension and termination provisions to be just and reasonable because they appropriately provide PJM with the ability to address system reliability concerns or compliance concerns related to pseudo-tied resources, as identified in sections 17 and 18 of the *pro forma* pseudo-tie agreements. We agree with PJM that, as grid operator, PJM requires sufficient tools to safeguard the reliable operation of the grid,¹⁶³ and that it is reasonable for PJM to reserve for itself the discretion to suspend or terminate a pseudo-tied resource in such circumstances. We underscore PJM's commitment that suspension or termination of a pseudo-tied resource would not, as a matter of course, be used absent reliability concerns. We also agree with PJM that provision of real-time data is critical to its ability to ensure grid stability, and that it is reasonable to subject a pseudo-tied resource that fails to provide this data to suspension.

¹⁶⁰ *Id.* at 4.

¹⁶¹ *Id.* at 5.

¹⁶² PJM Second Answer at 2-3.

¹⁶³ See 18 C.F.R. § 35.34(j)(3)-(4) (2017) (requiring an RTO to have "exclusive authority for maintaining the short-term reliability of the grid that it operates"); *Regional Transmission Organizations*, Order No. 2000, FERC Stats. & Regs. ¶ 31,089 (1999), *order on reh'g*, Order No. 2000-A, FERC Stats. & Regs. ¶ 31,092 (2000), *aff'd sub nom. Pub. Util. Dist. No. 1 of Snohomish Cnty., Wash. v. FERC*, 272 F.3d 607 (D.C. Cir. 2001).

88. We find that PJM's suspension and termination provisions, including procedures and timeframes for notification, and—where appropriate—opportunities to cure, provide a sufficient degree of specificity and clarity regarding the circumstances in which they apply. We do not find the suspension and termination provisions to be redundant, as suspension is a temporary state involving coordination among the Balancing Authorities, while termination is a permanent measure. We disagree with commenters who argue that it is unjust and unreasonable that PJM subjects pseudo-tied resources to suspension if the resource no longer satisfies the PJM Governing Document requirements, given that such requirements could be changed in the middle of a Delivery Year. To the contrary, we find it just and reasonable for PJM to require pseudo-tied resources to comply with any changed requirements in PJM Governing Documents regardless of when such changes occur. We agree with PJM that the choice to participate in PJM's capacity market utilizing a pseudo-tie is a voluntary decision made with the knowledge of the risks and requirements involved.

89. Regarding PJM's right to terminate a pseudo-tie in the event of two suspensions within a 30-day period, we note that such a termination is neither required nor automatic; rather, it requires mutual agreement from both Native Balancing Authority and PJM. Where more than one suspension in a 30-day period occurs due to events beyond the control of the pseudo-tied resource, we would expect PJM and the Native Balancing Authority to consider these circumstances in evaluating whether to terminate the pseudo-tie. We find that 180 days is a reasonable maximum period for PJM and the Native Balancing Authority to make such a decision, though we encourage PJM to make this decision as expeditiously as possible where circumstances permit. Regarding PJM's proposal for 42-months' notice of a request to terminate where there is no system reliability concern, we agree that 42-months' notice is an appropriate timeframe because it provides pseudo-tied resources with sufficient notice and allows PJM sufficient time to address changes in capacity market participation.

90. Regarding arguments that it is unjust and unreasonable to suspend a pseudo-tied resource due to issues caused by PJM itself, and that PJM should be obliged to use reasonable efforts to expedite restoration of a pseudo-tie where suspension is not caused by the pseudo-tied resource, we rely on PJM's representation that if the issue that caused the suspension can be resolved, PJM would lift the suspension and restore the pseudo-tie.¹⁶⁴ We reiterate our finding that PJM's suspension provisions are just and reasonable because PJM requires sufficient tools to safeguard the reliable operation of the grid, and PJM represents that suspension or termination of a pseudo-tied resource would not, as a matter of course, be used absent reliability concerns.¹⁶⁵ For the same reasons, we do not find it necessary that PJM revise the *pro forma* pseudo-tie agreements to specifically

¹⁶⁴ See PJM Transmittal at 25.

¹⁶⁵ See PJM First Answer at 25.

address the effects of force majeure, as Cogentrix suggests, because PJM and the Native Balancing Area Authority must have sufficient flexibility to address system conditions or reliability concerns. Moreover, Cogentrix and IMEA have not demonstrated that rights with respect to suspension and termination under the *pro forma* pseudo tie agreements should be the same as those under a generator interconnection agreement, in light of potential operational differences between internal resources and external pseudo-tied resources; we have found herein that the suspension and termination provisions provide PJM with appropriate tools to address operational and reliability concerns with respect to pseudo-tied resources.

91. We also reject the PJM IMM's argument that the proposed suspension and termination provisions should be removed because they do not permit external capacity resources to be full substitutes for internal capacity resources. Consistent with prior findings, we reiterate that external resources to PJM should be treated comparably to internal resources in PJM, but that may also result in there being some necessary differences between external and internal resources,¹⁶⁶ such as the application of the suspension and termination provisions for pseudo-tied resources that we accept as just and reasonable tools to address operational and reliability concerns.

92. In response to Cogentrix's argument that PJM should be required to seek Commission approval before terminating a pseudo-tie, we disagree with PJM's interpretation of our requirements. We clarify here that, although PJM is not obligated to file a pseudo-tie agreement that conforms to the *pro forma*, PJM is obligated pursuant to 18 C.F.R. § 35.15 to notify the Commission when it seeks to terminate a pseudo-tie agreement.¹⁶⁷

¹⁶⁶ See *supra* nn.103-104 and accompanying text.

¹⁶⁷ See *Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities*, Order No. 888, FERC Stats. & Regs. ¶ 31,036, at 31,806 (1996) (retaining the filing requirement in 18 C.F.R. § 35.15 for all transmission contracts), *order on reh'g*, Order No. 888-A, FERC Stats. & Regs. ¶ 31,048, *order on reh'g*, Order No. 888-B, 81 FERC ¶ 61,248 (1997), *order on reh'g*, Order No. 888-C, 82 FERC ¶ 61,046 (1998), *aff'd in relevant part sub nom. Transmission Access Policy Study Group v. FERC*, 225 F.3d 667 (D.C. Cir. 2000), *aff'd sub nom. New York v. FERC*, 535 U.S. 1 (2002); see also *Blumenthal v. NRG Power Mktg., Inc.*, 103 FERC ¶ 61,344, at PP 58-59 ("If a seller seeks to modify or abrogate a jurisdictional contract, the seller must make appropriate filings under FPA Sections 205 or 206 to change the contract, whether or not the contract itself has been physically filed."), *order denying reh'g*, 104 FERC ¶ 61,211, at PP 42-44 (2003).

93. Regarding the right of a suspended pseudo-tie resource to participate in the Native Balancing Authority's markets during a period of suspension from PJM, we interpret PJM's explanation in the Deficiency Response as pertaining only to a prohibition from participating in PJM's markets during such a period.¹⁶⁸ We expect that a pseudo-tied resource would retain any existing rights to participate in its native markets during a suspension, in accordance with that market's applicable market rules.

7. Unilateral Control and Existing Agreements

94. IMEA argues that aspects of PJM's proposed *pro forma* pseudo-tie agreements inappropriately provide PJM with unilateral control over the pseudo-tie.

a. Comments

95. IMEA argues that PJM's substitution of the word "may" for the word "shall" in proposed section 1.12(c) of Attachment K-Appendix is an example of PJM's unilateral authority over the implementation of pseudo-tied resources. Similarly, IMEA contends that proposed sections 17, 18, 19, and 20 of the *pro forma* pseudo-tie agreements reflect a theme of "unilateral authority" because they would, respectively, give PJM authority to: (1) suspend a pseudo-tie; (2) impose a 60-day right of termination at PJM's sole discretion; (3) exempt itself from liability from any claims except in cases of gross negligence by PJM; and (4) require a pseudo-tied generator to hold PJM harmless except in cases of gross negligence or intentional wrongdoing.¹⁶⁹

96. IMEA also argues that the unilateral authority PJM seeks over pseudo-tied resources threatens the vested rights of market participants under sections 217(b)(2) and (4) of the FPA and 18 C.F.R § 42.1(d)(4). IMEA states FPA section 217(b)(2) protects entities like IMEA that have long-term historic generation and transmission rights to serve load.¹⁷⁰ IMEA believes that the proposed *pro forma* agreements would give PJM unilateral right to rescind IMEA's existing dynamic transfer agreements and Network Integration Transmission Service Agreements executed with PJM more than a decade

¹⁶⁸ See PJM Deficiency Response at 7 (describing suspension as "the temporary period of time during which PJM and/or the Native Balancing Authority have determined the pseudo-tied generator must not operate utilizing the Pseudo-Tie . . . or participate in the Attaining Balancing Authority's markets, based on specified conditions . . .").

¹⁶⁹ IMEA Protest at 9-10.

¹⁷⁰ *Id.* at 11-17. IMEA has transmission rights to self-supply its load in the ComEd control area of PJM through 2035.

ago.¹⁷¹ According to IMEA, under the *Mobile-Sierra* doctrine, PJM cannot unilaterally modify those agreements PJM voluntarily entered into with IMEA unless it shows that they seriously harm the public interest,¹⁷² and there is no evidence to suggest the public interest requires abrogation.¹⁷³

b. Answers

97. In response to IMEA’s argument that PJM’s pseudo-tie termination authority and “unilateral veto authority” violates IMEA’s rights pursuant to FPA section 217(b), PJM contends that the Commission has previously heard and addressed the same arguments on rehearing in the Capacity Import Limitation proceeding.¹⁷⁴ PJM quotes the Commission’s findings on rehearing in that proceeding that FPA section 217 rights “apply in the energy market,” while capacity markets “were established to ensure the long-term reliability and adequacy of the system and, therefore, different requirements may reasonably be applied to these markets.”¹⁷⁵ PJM asserts that the proposed *pro forma* pseudo-tie agreements most likely will only be used by entities who seek to participate in PJM’s capacity market, because to participate in PJM’s energy markets, they could use a dynamic schedule. PJM also notes that, if FPA section 217 were to apply to capacity markets, it recognizes that firm transmission rights and financial transmission rights must be honored only to the extent deliverable.¹⁷⁶ Further, PJM asserts, “IMEA also has

¹⁷¹ *Id.* at 17-20. IMEA asserts that its Network Integration Transmission Service Agreements do not authorize unilateral modification or termination by PJM. *Id.* at 19 n.39.

¹⁷² *Id.* at 19 (citing *Morgan Stanley Capital Group, Inc. v. Pub. Util. Dist. No. 1*, 554 U.S. 527, 530 (2008); *Lansdale v. Fed. Power Comm’n*, 494 F.2d 1104, 1114 n.43 (D.C. Cir. 1974); *United Gas Pipe Line Co. v. Mobile Gas Service Corp.*, 350 U.S. 332 (1956); *FPC v. Sierra Pacific Power Co.*, 350 U.S. 348 (1956)).

¹⁷³ IMEA disagrees with PJM’s assertions that its previously entered dynamic transfer agreements relate to the evaluation rather operation and implementation of pseudo-ties, contending that their content and lack of the word “evaluate” undercut PJM’s position. *Id.* at 18.

¹⁷⁴ PJM First Answer at 6.

¹⁷⁵ *Id.* (citing *PJM Interconnection, L.L.C.*, 150 FERC ¶ 61,041, at P 19 (2015)).

¹⁷⁶ *Id.* at 7 n.30.

neglected to note that through section 217(c) Congress expressly limited the reach of the very provisions upon which IMEA relies as applied to PJM.”¹⁷⁷

98. PJM also contends that IMEA’s concerns are speculative, explaining that “IMEA has successfully pseudo-tied its share of historically contracted generators into the PJM Balancing Authority Area.”¹⁷⁸ PJM further explains that resources previously exempt from Capacity Import Limitations would be exempt from the new requirements imposed in the Pseudo-Tie Enhancement Filing if: “(1) the resource is owned by a Load Serving Entity and used to self-supply (under arrangements initiated before June 1, 2016, with a duration of at least ten years) such entity’s PJM Region load; or (2) the subject of a contract for energy or capacity or equivalent written agreement entered into on or before June 1, 2016 for a term of ten years or longer with a purchaser that is an internal PJM load customer”—and all of IMEA’s historic resources fall in to this category.¹⁷⁹ PJM concludes that at this time there is no evidence of a fundamental system change that would change the status of IMEA’s units.

99. In response to IMEA’s claim that the *pro forma* agreements conflict with and unlawfully amend agreements for existing pseudo-ties, PJM maintains that “it has not entered into a written agreement with a PJM member for an external generator that establishes the terms and conditions *for the operation and implementation* of a requested pseudo-tie between a Native Balancing Authority Area and the PJM Balancing Authority Area.”¹⁸⁰ Referencing the dynamic transfer agreements IMEA attached to its protest, PJM contends that the proposed *pro forma* agreements and the dynamic transfer agreements do not cover the same terms and conditions. PJM explains that the dynamic transfer agreements lack provisions that address, among other things, the calculation of losses, which Balancing Authority will model the resource, congestion management procedures, contingency operations, when suspension can occur, and agreement among the Balancing Authorities regarding operational control.¹⁸¹ To support its position that

¹⁷⁷ *Id.* at 8 n.32.

¹⁷⁸ *Id.* at 8.

¹⁷⁹ *Id.*

¹⁸⁰ *Id.* at 9-10 & n.36.

¹⁸¹ *Id.* at 9. Regarding the lack of limited liability and indemnification language in the dynamic transfer agreements, PJM avers that the agreements provide that they are “governed by all relevant and applicable terms contained in the PJM governing documents,” meaning that the applicable Tariff and Operating Agreement limited liability and indemnification provisions apply. *Id.* at 12.

the dynamic transfer agreements merely memorialize PJM's intent to evaluate a pseudo-tie request, PJM asserts that the word "evaluate" appears in the template form dynamic transfer agreement PJM previously utilized, and does not appear in three of twelve executed dynamic transfer agreements because it was removed at the request of IMEA and its joint owner entities because that agreement was signed after the evaluation had been completed.¹⁸² In a similar vein, PJM asserts that the proposed *pro forma* agreements do not modify existing dynamic transfer agreements in violation of the *Mobile-Sierra* doctrine because the dynamic transfer agreements do not address the operation and implementation of pseudo-tied resources, as the *pro forma* agreements do.¹⁸³

c. Commission Determination

100. We find that the proposed provisions set forth in sections 17 through 20 (addressing suspension, termination, liability, and indemnification) of the *pro forma* pseudo-tie agreements and PJM's proposed revision to section 1.12(c) of Attachment K-Appendix provide PJM with appropriate control over a pseudo-tied resource. As we have found elsewhere in this order, these respective provisions provide PJM with necessary tools, rights, responsibilities and protections to ensure the continued reliable operation of the bulk power system with respect to pseudo-ties.¹⁸⁴

101. Further, we disagree with IMEA that the proposed *pro forma* pseudo-tie agreement grants PJM unilateral authority over pseudo-ties, which threatens the vested rights of market participants under section 217 of the FPA.¹⁸⁵ Without a pseudo-tie, external resources are still able to sell energy into the PJM energy markets via dynamic schedules or other mechanisms such as long-term contracts, though they are unable to sell their capacity in the PJM capacity market. The Commission has previously held in

¹⁸² *Id.* at 10-11 (citing Attachment B, Miehle Aff. at ¶¶ 7-11).

¹⁸³ *Id.* at 12.

¹⁸⁴ *See, e.g., supra* PP 87-90; *infra* P 120.

¹⁸⁵ In the Final Order promulgating these regulations, the Commission described the intent of section 217 as ensuring that "long-term firm transmission rights must be made available with terms (and/or rights to renewal) that are sufficient to meet the reasonable needs of load serving entities to support long-term power supply arrangements used to satisfy their service obligations." *Long-Term Firm Transmission Rights in Organized Electricity Markets*, Order No. 681, FERC Stats. & Regs. ¶ 31,226, at P 2, *reh'g denied*, Order No. 681-A, 117 FERC ¶ 61,201 (2006), *order on reh'g and clarification*, Order No. 681-B, 126 FERC ¶ 61,254 (2009).

response to IMEA's challenge to PJM's Capacity Import Limits that section 217 does not apply to capacity markets, and reiterated this finding in the Pseudo-Tie Enhancements Order and Pseudo-Tie JOA Revisions Order.¹⁸⁶ We reiterate this finding here. Further, we note PJM's explanation that resources previously exempt from Capacity Import Limitations would be exempt from the new requirements imposed in the Pseudo-Tie Enhancement Filing if it meets certain criteria; PJM explains that all of IMEA's existing pseudo-tied resources fall in to this category.¹⁸⁷

102. We also agree with PJM that the *pro forma* pseudo-tie agreements address operational and implementation issues not covered under existing dynamic transfer agreements, and we find that IMEA has not demonstrated that PJM's proposal unlawfully abrogates those prior agreements. PJM represents that there is no need to terminate the dynamic transfer agreements and that such agreements can remain in place, which supports our finding.

8. Partial Pseudo-tied Resources

a. PJM's Filing

103. Proposed section 2(p) of the *pro forma* pseudo-tie agreements addresses the situation where only a portion of a resource is pseudo-tied into PJM. Section 2(p) of the *pro forma* pseudo-tie agreements includes two options for the amount of capacity and energy of a resource that is pseudo-tied into PJM: a fixed MW amount or a percentage of the unit's output.¹⁸⁸ Section 2(p) of the *pro forma* pseudo-tie agreements provides that when only a portion of the MW output is being pseudo-tied into PJM, the remaining amount of installed capacity will remain with the Native Balancing Authority. Proposed Attachment NN, the *pro forma* agreement for pseudo-tied resources when a Joint Operating Agreement addresses pseudo-tie operation and implementation between PJM and the Native Balancing Authority, includes an additional sentence stating that the

¹⁸⁶ *PJM Interconnection, L.L.C.*, 150 FERC ¶ 61,041 at P 19 ("Section 217 applies to firm transmission rights or financial transmission rights. These rights apply in the energy market. Capacity markets, however, were established to ensure the long-term reliability and adequacy of the system and, therefore, different requirements may reasonably be applied to these markets."); *see also* Pseudo-Tie Enhancements Order, 161 FERC ¶ 61,197 at P 178; Pseudo-Tie JOA Revisions Order, 161 FERC ¶ 61,313 at P 59.

¹⁸⁷ PJM First Answer at 8.

¹⁸⁸ Proposed Attachment NN § 2(p); Proposed Attachment MM § 2(p).

pseudo-tied entity is required to obtain the Native Balancing Authority's agreement for the partial pseudo-tied resource option before PJM will approve it.¹⁸⁹

b. Comments

104. NYISO contends that section 2(p) of the *pro forma* pseudo-tie agreements provisions, addressing partial pseudo-ties, raises a number of practical operating questions that the instant filing does not answer, such as how a partially pseudo-tied resource would structure its energy and ancillary service offers to recover its incremental costs at times when the generator's commitment is not economic in both of the markets in which the resource participates.¹⁹⁰ According to NYISO, the provisions of section 2(p) "leave the door open to scenarios in which a [resource] might have to produce energy at a loss in one of the two markets where it has assumed a capacity obligation."¹⁹¹ NYISO also questions how start-up costs would be allocated between the two Balancing Authorities. NYISO asserts that the partial pseudo-tied resource provisions are unjust and unreasonable in the absence of negotiated rules agreed to by both Balancing Authorities governing bifurcated capacity sales.¹⁹²

105. IMEA argues that section 2(p), as it appears in Attachment NN, but not as it appears in Attachment MM, gives one of the Balancing Authorities the unilateral right to prevent a pseudo-tie if the Native Balancing Authority refuses to agree to either of the two available options.¹⁹³ IMEA states that Attachment NN is unjust and unreasonable because of the inclusion of the additional sentence requiring that the Native Balancing Authority has agreed to the selected option or else PJM will not approve the pseudo-tied resource.¹⁹⁴

c. Answers

106. In response to IMEA's objections to the partial pseudo-tie provision of proposed Attachment NN, PJM avers that its proposed requirement that the pseudo-tied entity

¹⁸⁹ Proposed Attachment NN § 2(p). This additional sentence is not included in Attachment MM.

¹⁹⁰ NYISO Comments at 21-22.

¹⁹¹ *Id.* at 22.

¹⁹² *Id.*

¹⁹³ IMEA Protest at 21.

¹⁹⁴ *Id.* at 21.

obtain the Native Balancing Authority's agreement is consistent with NERC Reliability Standard INT-004-3.1.¹⁹⁵ PJM explains that “[w]hen a Native Balancing Authority signs the version of the proposed Pro Forma Pseudo-Tie Agreement that is designated as proposed Tariff, Attachment MM, it is acknowledging its agreement to the partial pseudo-tie reflected therein. However, since the Native Balancing Authority does not sign the version of the proposed Pro Forma Pseudo-Tie Agreement that is designated as proposed Tariff, Attachment NN, it must acknowledge its agreement to the partial Pseudo-Tie reflected therein outside of that agreement.”¹⁹⁶

d. Deficiency Response

107. PJM explains that PJM and the Native Balancing Authority will only send dispatch signals to the specific portion of the partial pseudo-tie resource that is designated as each of their respective shares, which is coordinated when the pseudo-tie is established and is documented in the technical attachments to individual pseudo-tie agreements.¹⁹⁷ PJM states that critical details of partial pseudo-tied resource coordination between two Balancing Authorities, including procedures to address congestion management, use of flowgates, and local congestion mitigation, among other things, are documented in existing operating guides between PJM and MISO, PJM and Tennessee Valley Authority, and pseudo-tie agreements between PJM and Duke Energy Progress, LLC and Duke Energy Carolinas, LLC.¹⁹⁸ PJM explains that it will seek to come to agreement with any Balancing Authority where no operating guide or agreement exists between PJM and the Native Balancing Authority that specifies procedures for dispatch of pseudo-tied resources prior to approving a pseudo-tie into the PJM Region.¹⁹⁹

108. PJM explains that the only limitations imposed on a Market Seller's ability to offer and clear energy, ancillary services, or capacity in its native markets are defined by existing provisions of PJM's Tariff and Operating Agreement. PJM states that the terms of the *pro forma* pseudo-tie agreements do not affect the ability of partially or wholly

¹⁹⁵ PJM First Answer at 34-35.

¹⁹⁶ *Id.* at 35.

¹⁹⁷ PJM Deficiency Response at 13.

¹⁹⁸ *Id.* at 14. PJM explains that details regarding MISO-PJM coordination also are provided in the MISO-PJM JOA. *Id.*

¹⁹⁹ *Id.*

pseudo-tied resources to participate in native markets.²⁰⁰ For example, PJM explains that a pseudo-tied resource that is a Generation Capacity Resource in PJM is obligated to offer into PJM's capacity auctions for each Delivery Year unless the Capacity Market Seller has been granted an exception to the must-offer requirement.²⁰¹ Likewise, any Market Seller of a Generation Capacity Resource is obligated to offer the cleared MW of that resource into the PJM day-ahead and real-time markets every day when it cleared in the capacity auction. PJM explains that when such a resource offers, but does not clear in the day-ahead or real-time markets for a given time interval, under some circumstances it may offer megawatts of energy from the generator into the native markets for that time interval.²⁰²

109. Regarding start-up costs, PJM explains that when a resource is partially pseudo-tied out of PJM into another Balancing Authority Area, the Market Seller can request start-up costs for that resource from PJM; such costs will be allocated to PJM to the extent MW from that resource remain serving load in PJM and are offered into PJM's markets. However, when a resource is partially pseudo-tied into PJM from another Balancing Area Authority, that resource is not eligible to include start-up costs in its offers, and thus none of that resource's start-up costs are allocated to PJM. Thus it would be incumbent on the Market Seller to "factor applicable start-up costs into its offers for that [resource] in the Native Balancing Authority's markets."²⁰³

e. **Commission Determination**

110. We find that it is just and reasonable for PJM to require the Native Balancing Authority's explicit acknowledgement of a partial pseudo-tied resource arrangement in proposed Attachment NN. We agree with PJM that requiring such an acknowledgement is appropriate, in light of the requirements of NERC Reliability Standard INT-004-3.1, which requires that pseudo-tied resources are communicated and appropriately accounted for in congestion management procedures, because the Native Balancing Authority is not party to the pseudo-tie agreement under proposed Attachment NN.

111. Regarding NYISO's concerns about "practical operating questions" with respect to partial pseudo-ties that are not addressed in the *pro forma* pseudo-tie agreements, PJM

²⁰⁰ *Id.* at 15.

²⁰¹ *Id.*

²⁰² *Id.* PJM's deficiency response addresses in detail the circumstances under which a partially pseudo-tied generator may participate in its native markets.

²⁰³ *Id.* at 19-20.

represents that critical details of partial pseudo-tied resource coordination between Balancing Authorities, including procedures to address congestion management, use of flowgates, and local congestion mitigation, among other things, are documented in existing operating guides between PJM and Native Balancing Authorities, and that it will seek to come to agreement with any Balancing Authority where no operating guide or agreement exists. To the extent such procedures do not exist, the Native Balancing Authority is not required to approve the partial pseudo-tied resource. We rely on PJM's commitment to develop coordination procedures and an agreement with Balancing Authorities such as NYISO to clearly state the dispatch of partial pseudo-tied resources.²⁰⁴ Thus, NYISO would have the opportunity to withhold its consent or, alternatively, work with the entity seeking the pseudo-tie and PJM to develop a mutually agreeable non-conforming agreement.

112. We also find reasonable PJM's explanation that it is incumbent on the Market Seller for a partial pseudo-tied resource to account for that resource's start-up costs through its offers. It is appropriate for an entity seeking a pseudo-tie agreement with PJM to be required to account for certain operational and financial responsibilities associated with such an arrangement.

9. Transition Period

a. PJM's Filing

113. PJM explains that it will require all entities with existing pseudo-tied resources to execute the new *pro forma* pseudo-tie agreements upon Commission acceptance of its filing.²⁰⁵ PJM states that it has previously indicated to stakeholders that they could commence discussion with PJM regarding any non-conforming changes to the *pro forma* pseudo-tie agreement so that PJM can file such service agreements with the Commission "shortly thereafter" once the instant filing is accepted.²⁰⁶

b. Comments

114. Cogentrix objects to PJM's transition plan for handling existing pseudo-tied resources, which appears to provide very little time for negotiations once the Commission issues an order on the *pro forma* pseudo-tie agreements. Cogentrix argues that it is premature for resources to begin negotiating the terms of their agreements before the

²⁰⁴ *See id.* at 14.

²⁰⁵ PJM Transmittal at 29-30.

²⁰⁶ *Id.* at 30.

Commission has accepted the instant proposal without modification. Cogentrix argues that existing pseudo-tied resources must be given a reasonable timeframe within which to negotiate and execute the new *pro forma* pseudo-tie agreements.²⁰⁷

c. Commission Determination

115. Given that we are issuing this order in February 2018, we find PJM's proposal to require existing pseudo-tied resources to execute a pseudo-tie agreement after the issuance of this Commission order to be just and reasonable, since we interpret PJM's proposed revision to the Operating Agreement as requiring entities "seeking to utilize" a pseudo-tie in a future Delivery Year to execute an agreement. The next Delivery Year begins in June 2018. We find that there is sufficient time for parties to negotiate non-conforming agreements, if necessary, and file them for Commission approval.

10. Limits of Liability and Indemnification

a. PJM's Filing

116. PJM explains that proposed section 19 of the *pro forma* pseudo-tie agreements addresses limits on the liability of PJM and the Native Balancing Authority for damages. PJM explains that the liability provisions are based on the broad provisions of section 16.6 of the Operating Agreement and section 10.2 of the Tariff, which provide that PJM shall not be liable to any member or a third party for damages arising from its performance under the Operating Agreement or Tariff unless PJM's actions amount to gross negligence, or intentional or willful misconduct.²⁰⁸ In addition, proposed section 20 of the *pro forma* pseudo-tie agreements addresses indemnification and consequential damages. PJM explains that these provisions are consistent with section 10.3 of the Tariff, and ensure that the risk and costs associated with pseudo-tied resources are allocated to the entity seeking to pseudo-tie into PJM. PJM explains that both sections 19 and 20 of the *pro forma* pseudo-tie agreements are consistent with the CAISO *pro forma* pseudo-tie agreement, which was accepted by the Commission.²⁰⁹

²⁰⁷ Cogentrix First Comments at 4.

²⁰⁸ PJM Transmittal at 24.

²⁰⁹ *Id.* (citing CAISO Tariff, Appendix B.16, Pseudo-Tie Participating Generator Agreement (CAISO *pro forma*), § 9.1, http://www.caiso.com/Documents/AppendixB16_Pseudo_TieParticipatingGeneratorAgreement_Asof_Jun12_2013.pdf).

b. Comments

117. Cogentrix asserts that sections 19 and 20 *pro forma* pseudo-tie agreements should be revised to apply to any parties to the agreement, not only to PJM and the Native Balancing Authority.²¹⁰ Cogentrix argues that modifying these sections, as suggested, would be consistent with the protections afforded to all parties under a PJM interconnection agreement and that PJM has not justified limiting these provisions otherwise.²¹¹

118. IMEA argues that section 19 and section 20 of the *pro forma* pseudo-tie agreements, as proposed, reinforce PJM's unilateral control over pseudo-tied resources and are improper because they attempt to change the status quo under its dynamic transfer agreements and Network Integration Transmission Service agreements by eliminating PJM's liability in all circumstances but for gross negligence or willful misconduct.²¹² IMEA asserts that PJM's claim that most of its existing dynamic transfer agreements with other entities contain such indemnification and liability provisions is demonstrably false.²¹³

c. Answers

119. In response to IMEA, PJM reiterates that sections 19 and 20 of the proposed *pro forma* pseudo-tie agreements are consistent with broad protections provided under the PJM Tariff and Operating Agreement, as well as the analogous provision in the CAISO *pro forma* pseudo-tie agreement.²¹⁴

d. Commission Determination

120. We find that sections 19 and 20 of the *pro forma* pseudo-tie agreements, as proposed, are just and reasonable. We disagree with Cogentrix's argument that these

²¹⁰ Cogentrix First Comments at 13-14.

²¹¹ *Id.* at 14.

²¹² IMEA Protest at 17-18. According to IMEA, PJM seeks to impose a "far more lenient standard of liability, and a far more exacting standard of indemnification." *Id.* at 20.

²¹³ *Id.* at 18 (citing PJM Transmittal at 16).

²¹⁴ PJM First Answer at 20-22 (citing PJM Operating Agreement § 16.6; Tariff §§ 10.2, 10.3; CAISO *pro forma* § 9.1).

provisions should be modified to apply to any party to the agreement. These provisions are consistent with the broad liability and indemnification provisions included in the PJM Tariff and Operating Agreement. Nor do we find that it would be appropriate to shield resources from liability for negligence, as Cogentrix suggests, given that Capacity Performance Resources, under the PJM Tariff, are responsible for penalties for failing to perform their obligations except in well-defined circumstances.²¹⁵ We disagree with IMEA's contention that these provisions amount to an attempt to change the status quo under existing dynamic transfer agreements because, as we discuss above, the proposed *pro forma* pseudo-tie agreements address myriad operational issues not covered under existing dynamic transfer agreements.

11. Governing Law

a. PJM's Filing

121. In section 28 of the *pro forma* pseudo-tie agreements, PJM proposes "standard provisions" that the agreements will be construed under and governed by applicable Federal and/or Delaware laws.²¹⁶ Proposed section 28 also provides that the parties irrevocably consent, to the extent permitted by law, that any legal action or proceeding arising under or related to the agreements that is not subject to PJM's dispute resolution procedures will be brought in the state and federal courts of Delaware or, where the action is subject to this Commission's jurisdiction, this Commission.

b. Comments

122. IMEA argues that section 28 of the *pro forma* pseudo-tie agreements is unjust and unreasonable because Delaware law and venue do not bear any relationship to: "(a) the citizenship of the pseudo-tied generator; (b) the location of its principal place of business; or (c) the location (either the source or the sink) of the pseudo-tied generation," nor do they "relate in any way to the location where the contracts will be negotiated or the business activities they will govern."²¹⁷ IMEA claims the provisions are unjust and unreasonable because the *pro forma* pseudo-tie agreements are akin to "contracts of

²¹⁵ See generally, e.g., Capacity Performance Order, 151 FERC ¶ 61,208.

²¹⁶ See Transmittal at 23 (including section 28 among a list of "standard provisions").

²¹⁷ IMEA Protest at 27.

adhesion” between PJM and pseudo-tied resources that have no choice but to execute them to exercise their statutory rights.²¹⁸

c. Answers

123. In response to IMEA, PJM asserts that it was formed under Delaware law, and that its proposed choice of law and venue provision is consistent with the PJM Operating Agreement.²¹⁹

d. Commission Determination

124. We find PJM’s proposed choice of law and venue provision to be just and reasonable, as it assures the same provisions will apply to all pseudo-tied resources. PJM’s proposed choice of law provision is consistent with the governing law provision in the PJM Operating Agreement as well as consistent with similar agreements.²²⁰ The pseudo-tie agreements at issue permit a resource not located within the PJM footprint to be operated by PJM as if it were located in PJM’s footprint; thus we find it just and reasonable for the choice of law provision in the *pro forma* pseudo-tie agreement to be consistent with the choice of law provision under the PJM Operating Agreement. Contrary to IMEA’s assertion, the PJM Operating Agreement is not a contract of adhesion; entities that enter a pseudo-tie agreement with PJM are making a voluntary choice to participate in and access PJM’s markets utilizing a pseudo-tied resource. We find the uniformity provided under the proposed provision outweighs any potential for inconvenience to such entities, particularly given that disputes arising under the *pro forma* Pseudo-Tie Agreements are likely to be resolved before this Commission.²²¹

²¹⁸ *Id.*

²¹⁹ PJM First Answer at 22 (citing Operating Agreement § 4.2 (providing that Delaware law and the Federal Power Act govern)).

²²⁰ See PJM Tariff, Attachment OO, Form of Dynamic Schedule Agreement § 25; CAISO *pro forma* § 11.4.

²²¹ Further, the benefits of providing consistency among the choice of law provisions outweighs any potential slight inconvenience to corporations operating in a modern economy. See *Steele v. GD Searle & Co.*, 483 F.2d 339, 348 (5th Cir. 1973) (“In the horse and buggy days distance was a meaningful menace. Today we approach the speed of light, and corporations avail themselves of all the modern aspects of living.”).

12. Compensation

a. PJM's Filing

125. Proposed section 4 of the *pro forma* pseudo-tie agreements provides that, unless agreed upon by the Native Balancing Authority, the pseudo-tied entity, not PJM, will compensate the Native Balancing Authority for the costs associated with implementing the pseudo-tied resource. PJM asserts this is just and reasonable because the Native Balancing Authority does not benefit from the pseudo-tied resources' participation in PJM's markets and should not be responsible for such costs. PJM explains that this approach is consistent with Commission's precedent in *Southwest Power Pool* indicating that leaving cost responsibility up to negotiation between the company and Native Balancing Authority is not just and reasonable.²²²

b. Comments

126. AMP argues that the inclusion of proposed section 4 of the *pro forma* pseudo-tie agreements is unnecessary because it addresses terms and conditions of service by other Balancing Authorities. AMP argues that the *Southwest Power Pool* case cited by PJM is distinguishable from the circumstances in this case because MISO has filed its own *pro forma* pseudo-tie agreement that addresses its recovery of costs as the Native Balancing Authority. Thus, AMP proposes a revision to proposed section 4 that would tie cost responsibilities to a separate agreement between the pseudo-tied entity and the Native Balancing Authority.²²³

127. Cogentrix argues that, although the Commission has previously accepted a similar provision in SPP's *pro forma* pseudo-tie agreement, the Commission also explicitly recognized that a resource and Native Balancing Authority "may want to come to a different arrangement with regard to these costs, and they may do so by amending section 4 and filing the non-conforming agreement with the Commission for approval."²²⁴ Cogentrix explains that the Native Balancing Authority was required to be a party to the SPP *pro forma* pseudo-tie agreement, but that is not the case for the PJM proposed *pro forma* pseudo-tie agreement Attachment NN, which does not require the signature of the Native Balancing Authority. As such, Cogentrix argues, it would not be possible for a company to come to an agreement on amending section 4 of the *pro forma*

²²² PJM Transmittal at 22-23 (citing *Southwest Power Pool, Inc.*, 123 FERC ¶ 61,062, at P 34 (2008)).

²²³ AMP Protest at 3.

²²⁴ Cogentrix First Comments at 15.

pseudo-tie agreements with the Native Balancing Authority if the Native Balancing Authority is not party thereto.²²⁵

128. Cogentrix also objects to PJM's proposal that a pseudo-tied entity must implement two separate *pro forma* pseudo-tie agreements—one with PJM and one with MISO—for the same pseudo-tie arrangement.²²⁶ Cogentrix believes that there should be a single pseudo-tie agreement among all affected parties.²²⁷

c. Answers

129. PJM disagrees with AMP's arguments that section 4 of the *pro forma* pseudo-tie agreements is unjust and unreasonable because it addresses the terms and conditions of service provided by other Balancing Authorities. PJM reiterates that the Commission in *Southwest Power Pool* determined that the Native Balancing Authority should not be responsible for the costs of implementing the pseudo-tie of a resource out of its Balancing Authority Area, specifically finding that leaving cost responsibility up for negotiation between the external generator and Native Balancing Authority was unjust and unreasonable. In addition, the Commission required tariff revisions to ensure that external resources will compensate the Native Balancing Authority for reasonable implementation and operations related costs.²²⁸ PJM asserts that proposed section 4 of the *pro forma* pseudo-tie agreements is consistent with the *Southwest Power Pool* precedent, while AMP's proposed revisions violate it. Regarding any potential confusion stemming from MISO's proposed *pro forma* pseudo-tie agreement, PJM argues that MISO's compensation provision is irrelevant to whether section 4 of the PJM *pro forma* pseudo-tie agreements is just and reasonable.

130. PJM disagrees with Cogentrix's argument that section 4 of the *pro forma* pseudo-tie agreements is not appropriate for the *pro forma* pseudo-tie agreement that does not

²²⁵ *Id.*

²²⁶ *Id.* at 3-4 & n.2, 14-16. Cogentrix notes that MISO's pro forma agreement is subject to further Commission order in Docket No. ER17-1061.

²²⁷ For example, Cogentrix asserts that section 2(1) of the proposed *pro forma* pseudo-tie agreement identifies MISO's right to adjust the output of a pseudo-tied generator for local transmission reliability concerns, which "creates an undefined relationship between the generator and MISO that can be easily addressed if MISO is a party to the agreement." *Id.* at 15.

²²⁸ PJM First Answer at 16-17 (citing *Southwest Power Pool, Inc.*, 123 FERC ¶ 61,062 at P 34).

require the signature of the Native Balancing Authority (proposed Attachment NN). PJM avers that the Commission's directive in *Southwest Power Pool* that the *pro forma* pseudo-tie agreement should provide that the pseudo-tying entity will compensate the Native Balancing Authority is applicable in both versions of the *pro forma* pseudo-tie agreement, whether the Native Balancing Authority is party to the agreement or not. Further, PJM reiterates that, under either version, the provision clearly allows an entity and Native Balancing Authority to come to a different agreement if they choose and file the agreement as a non-conforming agreement with the Commission.²²⁹

d. Commission Determination

131. We find that proposed section 4 of the *pro forma* pseudo-tie agreements, specifically addressing compensation, is just and reasonable and accords with the Commission's precedent on cost responsibility between the entity seeking to pseudo-tie and the Native Balancing Authority. In *Southwest Power Pool*, the Commission found that "source balancing authorities should not be responsible for the costs of implementing the pseudo-tie arrangement" and ordered "SPP to revise its tariff to provide that external generators will compensate the source balancing authority for reasonable implementation and operations related costs incurred by the source balancing authority to provide services required by the *pro forma* agreement."²³⁰ Proposed section 4 of the *pro forma* pseudo-tie agreements appropriately provides that PJM will not be responsible for compensating the Native Balancing Authority for any costs associated with the implementation of the pseudo-tie, and, unless the pseudo-tied entity and the Native Balancing Authority otherwise agree,²³¹ the entity entering the pseudo-tie agreement will be responsible for such costs.²³²

132. We also find it just and reasonable that a pseudo-tie entity may be required to execute separate agreements with both the Attaining Balancing Authority and the Native Balancing Authority. For example, it is possible that PJM and MISO could negotiate a uniform agreement that would avoid the need for two agreements; however, we find the

²²⁹ *Id.* at 19.

²³⁰ *Southwest Power Pool, Inc.*, 123 FERC ¶ 61,062 at P 34.

²³¹ Cogentrix argues that it would not be possible for a company to come to an agreement with the Native Balancing Authority if the Native Balancing Authority is not party to the *pro forma* agreement; however, PJM's proposal does not preclude the pseudo-tie entity and the Native Balancing Authority from entering a separate agreement or filing a non-conforming agreement.

²³² Proposed Attachment NN § 4.

requirement that the pseudo-tie entity enter into separate agreements to be just and reasonable, because the generator needs approval from both the Native and Attaining Balancing Authorities.

13. Reimbursement Agreement

a. PJM's Filing

133. PJM explains that before it can determine whether to allow any portion of the MW output of a resource to be pseudo-tied into its region, PJM must perform certain studies to verify that the requested dynamic transfer meets the requirements specified in the Operating Agreement, Tariff,²³³ and PJM Manual 12.²³⁴ Specifically, PJM asserts the pseudo-tie studies help to ensure that a dynamic transfer does not adversely impact PJM's transmission system, and that the energy output from the pseudo-tied resource is deliverable to PJM loads. Further, because pseudo-tied resources are not tagged as interchange transactions for the transfer of MW of energy between the two affected Balancing Authority Areas, PJM states that it must model them for inclusion in its congestion management processes.²³⁵ PJM explains that it incurs costs to effectuate any modifications to its models and other systems needed to accommodate the pseudo-tie. Accordingly, PJM developed a Reimbursement Agreement as a new type of service agreement in connection with its proposal to formalize the requirements that an entity enter into agreements with PJM before PJM will approve a request to pseudo-tie.

134. The Reimbursement Agreement sets forth the terms and conditions, including costs for conducting the pseudo-tie studies.²³⁶ PJM proposes two alternative versions of section 4 of the Reimbursement Agreement, regarding administrative fees. Under the first version of proposed section 4, PJM proposes to charge an administrative fee of \$500 to complete a high-level good faith estimate of the cost to effectuate any modifications to PJM's model and other systems to accommodate a pseudo-tied resource (option 1). PJM states that after receiving the high-level estimate the party may wish to receive an

²³³ See Operating Agreement, Schedule 1, § 1.12(d); Tariff, Attachment K-Appendix, § 1.12(d).

²³⁴ PJM, Manual 12: Balancing Operations, Att. F (rev. 36, Feb. 1, 2017), available at: <http://www.pjm.com/~media/documents/manuals/m12.ashx>.

²³⁵ PJM Transmittal at 8-9.

²³⁶ See Proposed Reimbursement Agreement. PJM states that with the Reimbursement Agreement, it proposes to charge an administrative fee ranging from \$500 to \$3,000 to recover costs associated with the PT Study. PJM Transmittal at 11.

additional, more detailed estimate of the costs to accommodate a pseudo-tie at an additional cost of \$2,500 (option 2). Alternatively, under the second version of proposed section 4, a party may elect up front to pay \$3,000 for a detailed estimate (option 3).²³⁷ We note that both versions of proposed section 4 reference a “High Level Estimate”; however, in the first version of section 4, the term refers to the initial estimate available for an administrative fee of \$500, and in the second version of section 4, the term refers to the more detailed estimate available for an up-front administrative fee of \$3,000.

135. PJM maintains that its proposal is consistent with the Commission’s cost causation principles, which allocate costs to the entity that caused or benefited from them.²³⁸ Further, because the entity seeking to pseudo-tie will benefit economically from participating in PJM’s capacity market, it should bear the cost associated with implementing and operating the pseudo-tied resource.

b. Comments

136. NIMPA is concerned that PJM has not addressed whether or not NIMPA and similarly situated pseudo-tying entities will be subject to the proposed administrative fees discussed in the proposed filing. NIMPA explains that since it already incurred costs associated with its existing pseudo-tied resources with PJM, it presumes that NIMPA will not need to execute a new Reimbursement Agreement and have to pay additional administrative fees.²³⁹

137. AMP contends that PJM should include in section 15 of the Reimbursement Agreement the same language included in section 20 of the *pro forma* pseudo-tie agreements that exempts municipal or political subdivisions from indemnification requirements.²⁴⁰

²³⁷ PJM Transmittal at 11 & n.26 (citing Proposed Reimbursement Agreement § 4). The second version of proposed section 4 describes the estimate that a pseudo-tying entity will receive for its \$3,000 up front administrative fee as a “detailed high-level good faith estimate.”

²³⁸ *Id.* at 12 (citing *Cal. Power Exch. Corp.*, 106 FERC ¶ 61,196, at P 17 (2004); *Cal. Indep. Sys. Operator Corp.*, 106 FERC ¶ 61,032, at P 10 (2004); *Midwest ISO Transmission Owners v. FERC*, 373 F.3d 1361, 1368 (D.C. Dir. 2004) (citing *KN Energy, Inc. v. FERC*, 968 F.2d 1295, 1300 (D.C. Cir. 1992))).

²³⁹ NIMPA Comments at 3.

²⁴⁰ AMP Protest at 4. Attachment MM, section 20 states, “[Include the following for any Company for which there is a law that prohibits that entity from indemnifying

138. Cogentrix contends that the two versions of section 4 of the Reimbursement Agreement are confusing because they mix the concepts of high level and detailed estimates.²⁴¹ Cogentrix states that PJM should be directed to clarify that an entity that elects option 3 (which is set forth in the second version of section 4) is entitled to detailed estimate rather than a high-level estimate.²⁴²

c. Answers

139. In response to NIMPA's concerns, PJM states that it "acknowledges this oversight and confirms that PJM will not require an entity with an existing Pseudo-Tie, or whose requested Pseudo-Tie is not yet implemented but which has already been studied by PJM, to pay the new administrative fee as there is no new analysis to be done for that Pseudo-Tie."²⁴³

140. PJM argues that it is not necessary to include a provision in the proposed Reimbursement Agreement to exempt municipal or political subdivisions from indemnification requirements, asserting that the Reimbursement Agreement only contains provisions related to compensating and reimbursing PJM for the costs it incurs to study its systems and models and make changes to accommodate the pseudo-tied resource.²⁴⁴ However, PJM states that it is willing to make the change if the Commission requires.

141. Finally, in response to Cogentrix's request for clarifying changes to section 4 of the Reimbursement Agreement, PJM asserts that no revisions are needed. PJM explains that if the Commission accepts PJM's Pseudo-Tie Enhancement Filing, the pseudo-tying entity will be required to obtain a detailed estimate up front, and thus only option 3 (paying a \$3,000 administrative fee for a "detailed high-level good faith estimate") will be available to pseudo-tying entities. PJM asserts that it drafted the administrative provision in such a way that references to "High Level Estimate" will correctly apply.²⁴⁵

other parties: To the extent permitted by applicable law, including but not limited to state law governing the activities of municipalities or political subdivisions . . .]."

²⁴¹ Cogentrix First Comments at 17.

²⁴² *Id.*

²⁴³ PJM First Answer at 44.

²⁴⁴ *Id.*

²⁴⁵ *Id.* at 45-46.

d. Commission Determination

142. We find that PJM's *pro forma* Reimbursement Agreement, as proposed, is just and reasonable, subject to the condition discussed below. In response to NIMPA, we note that PJM's instant filing of a *pro forma* Reimbursement Agreement does not establish an obligation on all parties with pseudo-ties to execute that *pro forma*. As PJM points out in its answer, an existing pseudo-tied resource or entity whose requested pseudo-tie has already been studied is not required to pay the administrative fee for a pseudo-tie study.²⁴⁶ We agree with PJM that AMP's requested revision to exempt municipal or political subdivisions from the indemnification requirements is unnecessary because the Reimbursement Agreement pertains to compensating and reimbursing PJM for the costs it incurs. We note that it is unlikely that another party would incur costs or damages associated with the pseudo-tie study, where PJM is the sole entity responsible for conducting such study.

143. In response to Cogentrix's concerns, PJM clarified that a detailed estimate is necessary to account for the criteria adopted in the Pseudo-tie Enhancement Order,²⁴⁷ thus the first version of section 4 will not apply. Rather, a party entering into a Reimbursement Agreement will be subject to the second version of section 4, and will pay an administrative fee of \$3,000 in order to obtain the detailed estimate described therein. However, because both versions of PJM's proposed section 4 use the term "High Level Estimate," and the term has two different meanings in each version, we agree with Cogentrix that the proposed Reimbursement Agreement is unclear. To eliminate this confusion, we direct PJM to revise the proposed Reimbursement Agreement, within 30 days of the date of this order, to remove the first version of section 4, consistent with PJM's statement that the proposed first version of section 4 will not apply.

14. Other Concerns

a. Comments

144. ITC Lake Erie argues that PJM's proposal relates to managing AC systems, but did not consider the implications of high voltage direct current (HVDC) systems.²⁴⁸ ITC

²⁴⁶ *Id.* at 44.

²⁴⁷ These criteria include tests for electrical distance, market-to-market flowgates, and modeling agreement between the Native Balancing Authority and PJM, among other things. *See* PJM Tariff, Attachment DD, 5.5A Capacity Resource Types.

²⁴⁸ ITC Lake Erie Comments at 3-6. ITC Lake Erie explains that the Lake Erie Connector is a 72 mile HVDC transmission line and Voltage Source Converter stations of 1,000 MW running from Ontario to Pennsylvania and will be the first direct connect

Lake Erie requests clarification from PJM or the Commission that the *pro forma* agreements may not address PJM capacity transactions conducted over HVDC systems, and that the process to qualify PJM capacity resources that take service and are delivered over HVDC systems should be subject of a separate proceeding before the Commission.²⁴⁹

b. Answers

145. In response to ITC Lake Erie, PJM advises that it does intend to use the proposed *pro forma* pseudo-tie agreements for pseudo-ties over HVDC systems, and acknowledges that some standards may not be applicable and this is not an issue that can be addressed today.²⁵⁰ If it becomes necessary in the future, PJM states that it will work with any entity seeking to pseudo-tie over an HVDC system to prepare a non-conforming version of the agreement.²⁵¹

c. Commission Determination

146. In response to ITC Lake Erie's concern, we find that if necessary, an entity seeking to pseudo-tie over an HVDC system may seek a non-conforming agreement or require PJM to file an unexecuted agreement, if the parties cannot agree.²⁵²

The Commission orders:

(A) PJM's proposed Tariff and Operating Agreement revisions and Pseudo-Tie Agreements are hereby accepted, subject to condition, effective November 9, 2017, as discussed in the body of this order.

between PJM and the Independent Electric System Operator of Ontario. ITC Lake Erie explains that injections over the Lake Erie Connector from Ontario to PJM would not utilize existing AC interties and would create incremental transfer capability. ITC Lake Erie states that the Lake Erie Connector is expected to get final approval by mid-2017.

²⁴⁹ *Id.* at 3.

²⁵⁰ PJM First Answer at 46.

²⁵¹ *Id.*

²⁵² *See* PJM Transmittal at 20.

(B) PJM is hereby directed to submit a compliance filing within 30 days of the date of this order, as discussed in the body of this order.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.

Appendix A

Tariff Records Accepted PJM Interconnection, L.L.C. Intra-PJM Tariffs

[OATT Table of Contents, PJM OATT Table of Contents, 27.0.0](#)

[OATT ATT K APPX Sec 1.12, OATT Attachment K Appendix Sec 1.12 Dynamic Scheduling., 3.0.0](#)

[OATT ATT MM, OATT Attachment MM - Form of Pseudo-Tie Agreement - with, 0.0.0](#)

[OATT ATT MM-1, OATT Attachment MM-1 - Form of System Modification Cost, 0.0.0](#)

[OATT ATT NN, OATT ATTACHMENT NN - Form of Pseudo-Tie Agreement - without, 0.0.0](#)

[OA Schedule 1 Sec 1.12, OA Schedule 1 Sec 1.12 Dynamic Scheduling, 3.0.0](#)

[OATT ATT MM, OATT Attachment MM - Form of Pseudo-Tie Agreement - with, 0.1.0](#)