

inaccuracies and clarifies the issues,⁶ assures a complete record in the proceeding,⁷ provides information helpful to the disposition of an issue,⁸ or permits the issues to be narrowed.⁹

This answer satisfies each of these criteria, and accordingly PJM respectfully requests that the Commission grant leave and accept this answer.

II. ANSWER

A. **PJM’s July 31 Filing—Endorsed by PJM Stakeholders With a 5.0/5.0 Vote—is Just and Reasonable on its Own, and the IMM’s Request that it Be Rejected For Failing to Immediately Implement all of the IMM’s Market Design Objectives in PJM’s Separate Fast-Start Compliance Proceeding Should Not Impact the Commission’s Just and Reasonable Analysis in this Docket.**

As noted in PJM’s July 31 Filing, the Tariff and Operating Agreement¹⁰ revisions proposed in this proceeding were approved overwhelmingly by the PJM Markets and Reliability Committee (“MRC”) on July 23, 2020 through a sector-weighted vote of 5.0 out of a possible 5.0—a rare total alignment among all five sectors of the PJM Stakeholder body: Transmission Owners, Generation Owners, Electric Distributors, End-Use Customers, and Other Suppliers. Input from both PJM stakeholders and the IMM was extremely valuable in achieving this consensus.

The IMM nonetheless urges the Commission to reject the July 31 Filing in its entirety, arguing that it does not immediately address all of the market design objectives that—in the IMM’s

⁶ See, e.g., *Entergy Servs. Inc.*, 126 FERC ¶ 61,227 (2009).

⁷ See, e.g., *Pac. Interstate Transmission Co.*, 85 FERC ¶ 61,378 at P 62,443 (1998), *reh’g denied*, 89 FERC ¶ 61,246 (1999); *Morgan Stanley Capital Group, Inc. v. N.Y. Indep. Sys. Operator, Inc.*, 93 FERC ¶ 61,017, 61,036 (2000) (accepting an answer that was “helpful in the development of the record . . .”).

⁸ See, e.g., *CNG Transmission Corp.*, 89 FERC ¶ 61,100, 61,287, n.11 (1999).

⁹ See, e.g., *PJM Interconnection, L.L.C.*, 84 FERC ¶ 61,224, 62,078 (1998); *New Energy Ventures, Inc. v. S. Cal. Edison Co.*, 82 FERC ¶ 61,335, 62,323, n.1 (1998).

¹⁰ The PJM Open Access Transmission Tariff (“Tariff”) and the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. (“Operating Agreement”), are currently located under PJM’s “Intra-PJM Tariffs” eTariff title, available here: <https://etariff.ferc.gov/TariffBrowser.aspx?tid=1731>. Terms not otherwise defined herein shall have the same meaning as set forth in the Tariff, Operating Agreement, and the Reliability Assurance Agreement Among Load-Serving Entities in the PJM Region (the “RAA”).

view—are needed to sufficiently satisfy the narrow “pricing and dispatch misalignment” issue identified in the Commission’s separate January 23, 2020 order¹¹ holding PJM’s fast-start compliance proceeding in Docket No. ER19-2722 in abeyance.¹²

As the Commission correctly stated less than three months ago when dismissing similar requests from the IMM regarding another PJM Federal Power Act (“FPA”) section 205¹³ filing, “[t]he issue before us is not whether, as the IMM suggests, the IMM’s alternative proposal is just and reasonable, or whether the IMM’s proposal is preferable to PJM’s, but whether PJM’s proposal, as filed, is just and reasonable.”¹⁴ The legal standard applied in an FPA section 205 proceeding is whether or not the proposal submitted by the applicable public utility is just and reasonable. As Federal courts have continuously emphasized, “FERC has interpreted its authority to review rates under [the FPA] as limited to an inquiry into whether the rates proposed by a utility are reasonable—and not to extend to determining whether a proposed rate schedule is more or less reasonable than alternative rate designs.”¹⁵ The Commission “is not required to choose the best solution, only a reasonable one.”¹⁶ The fact that the proposal submitted by PJM and its stakeholders in this proceeding (ER20-2573) does not by itself immediately implement everything the IMM desires in another (ER19-2722) is not a legally cognizable basis for rejecting PJM’s FPA 205 filing.

11 *PJM Interconnection, L.L.C.*, 170 FERC ¶ 61,018 (2020) (the “January 23 Order”).

12 *Id.* at P 30.

13 16 U.S.C. § 824d (2018).

14 *PJM Interconnection, L.L.C.*, 171 FERC ¶ 61,210 at P 29 (2020)

15 *Cities of Bethany v. FERC*, 727 F.2d 1131, 1136 (D.C. Cir. 1984).

16 *Petal Gas Storage, L.L.C. v. FERC*, 496 F.3d 695, 703 (D.C. Cir. 2007).

B. Outside of the Specific Context of this FPA Section 205 Proceeding, PJM’s Proposal Directly Addresses the Narrow “Pricing and Dispatch Misalignment” Issue Identified by the Commission in the January 23 Order.

In the January 23 Order, the Commission held PJM’s pending fast-start pricing compliance proceeding in abeyance until July 31, 2020. In a three-paragraph discussion, the Commission first identified what it described as the “pricing and dispatch misalignment” in Paragraph 30:

In response to PJM’s compliance filing, commenters identified that PJM currently computes dispatch instructions using a different market interval than it uses to calculate prices. Based on these comments, it appears that resources in PJM may be compensated with prices that do not correspond to their dispatch instructions, a pricing and dispatch misalignment. This pricing and dispatch misalignment may occur because PJM uses different input data for calculating dispatch and pricing in a given interval. PJM appears to dispatch resources for a target interval that is roughly 10 minutes in the future, but immediately assign the prices associated with that future dispatch interval to the *current* interval.¹⁷

In Paragraph 31, the Commission then described the potential complications that the pricing and dispatch misalignment problem *identified in Paragraph 30* could cause with respect to PJM’s implementation of fast-start pricing:

In the Order on Paper Hearing, the Commission directed PJM to alter its real-time energy market clearing process to consider fast-start resources in a way that is consistent with minimizing production costs. As part of this directive, the Commission required PJM to first execute a cost-minimizing dispatch run, followed by a pricing run where integer relaxation for fast-start resources allows them to set price. However, PJM may not be able to implement these separate dispatch and pricing runs in a way that is just and reasonable without first resolving the pricing and dispatch misalignment problem. If fast-start resources dispatched in a given market interval could be compensated with a price from a different market interval, prices may not accurately reflect the marginal cost of serving load. Moreover, implementing fast-start pricing as directed in the Order on Paper Hearing could exacerbate the pricing and dispatch misalignment issue because the lost opportunity cost payments directed in the Order on Paper Hearing may be calculated

¹⁷ January 23 Order at P 30 (emphasis in original) (internal citations omitted).

based on inaccurate prices and therefore, may not correctly compensate opportunity costs. In addition, implementing fast-start pricing could cause lost opportunity cost payments to be ineffective because they may not provide correct incentives to follow dispatch.¹⁸

The IMM's Protest seizes on the expository discussion in Paragraph 31 as a justification to expand the Commission's plain language describing the actual "pricing and dispatch misalignment" in Paragraph 30, and attempts to read-in details and regulatory directives that do not exist, ranging from revised implementation of Order No. 825,¹⁹ comprehensive and immediate overhauls to PJM's Real-Time Security Constrained Economic Dispatch ("RT SCED") engine,²⁰ timelines for posting Locational Marginal Prices ("LMPs"),²¹ shortage pricing,²² and regulatory synchronicity with reserve price formation,²³ among others. Citing PJM's purported failure to satisfy all of these unwritten market design objectives simultaneously, the IMM concludes that "[c]ontrary to the directive in the Abeyance Order, the July 31st Filing does not resolve the pricing and dispatch misalignment problem."²⁴ There are three foundational reasons why this is an unreasonable interpretation of the January 23 Order.

First, there is no "directive" in the January 23 Order, as evidenced by the absence of any associated ordering paragraphs or compliance instructions. The Commission articulated a problem (Paragraph 30), explained the potential complications that problem could create if not addressed in the specific context of PJM's fast-start compliance proceeding (Paragraph 31), and then paused

18 *Id.* at P 31 (emphasis added).

19 IMM Protest at 15-22.

20 *Id.* at 34-36.

21 *Id.* at 33-34.

22 *Id.* at 20-23.

23 *Id.* at 31-33.

24 *Id.* at 2.

PJM’s fast-start compliance proceeding to allow PJM and its stakeholders time to address the problem it articulated (Paragraph 32).²⁵

Second, the Commission’s actual written description of the “pricing and dispatch misalignment” in the text of the January 23 Order—not the IMM’s inference as to what it believes the Commission was trying to say—is the best evidence of the Commission’s intent. This is because the Commission is required by law to articulate its findings of fact and reasoning, with meaningful specificity, *in the order itself*.²⁶ This foundational precept of administrative law is in place to: (i) ensure that federal courts respect the delegation of authority given to the Commission by Congress;²⁷ and (ii) ensure that a reviewing federal court is able to understand what the *Commission’s* findings of fact and reasoning actually are, so that the court can adjudicate whether

25 January 23 Order a P 32 (“Given this pricing and dispatch misalignment problem, as identified in the record, we will hold PJM’s fast-start pricing proceeding in abeyance for a limited time. As commenters note, PJM has a stakeholder process underway to resolve the pricing and dispatch misalignment problem. We understand that this stakeholder process is tentatively scheduled to conclude in May 2020. Therefore, we will hold PJM’s fast-start pricing compliance filing in abeyance until July 31, 2020, to allow PJM and its stakeholders the opportunity to fully consider necessary changes to address PJM’s pricing and dispatch misalignment issue in conjunction with the compliance directives of the Order on Paper Hearing.”).

26 *See, e.g., SEC v. Chenery Corp.*, 332 U.S. 194, 196 (1947) (“[A] simple but fundamental rule of administrative law . . . is . . . that a reviewing court, in dealing with a determination or judgment which an administrative agency alone is authorized to make, must judge the propriety of such action solely by the grounds invoked by the agency.”); *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto Ins. Co.*, 463 U.S. 29, 50 (1983) (“It is well-established that an agency’s action must be upheld, if at all, on the basis articulated by the agency itself.”); *Burlington Truck Lines, Inc. v. U.S.*, 371 U.S. 156, 168-169 (1962) (“The courts may not accept appellate counsel’s post hoc rationalizations for agency action; *Chenery* requires that an agency’s discretionary order be upheld, if at all, on the same basis articulated in the order by the agency itself.”); *ICC v. Bhd. of Locomotive Eng’rs.*, 482 U.S. 270, 283 (1987) (a reviewing court “may not affirm on a basis containing any element of discretion including discretion to find facts and interpret statutory ambiguities that is not the basis the agency used, since that would remove the discretionary judgment from the agency to the court.”); *Cent. Power & Light Co. v. FERC*, 575 F.2d 937, 938 (D.C. Cir. 1978) (“It is hornbook law that the court must appraise agency action not on grounds advanced by counsel but on those identified by the agency as reasons for its actions.”).

27 *See, e.g., Burlington Truck Lines, Inc. v. U.S.*, 371 U.S. 156, 169 (1962) (“For the courts to substitute their or counsel’s discretion for that of the Commission is incompatible with the orderly functioning of the process of judicial review. This is not to deprecate, but to vindicate, the administrative process, for the purpose of the rule is to avoid propelling the court into the domain which Congress has set aside exclusively for the administrative agency.”) (citing *SEC v. Chenery Corp.*, 332 U.S. 194, 196 (1947); *Phelps Dodge Corp. v. NLRB*, 313 U.S. 177, 197 (1941)).

or not the Commission acted lawfully.²⁸ Accordingly, it is not reasonable to infer that the Commission intended for the IMM, or any other party, to articulate hidden details and directives beyond the Commission’s own written words, because the Commission may not legally designate another party to speak on its behalf.

Third, the January 23 Order was issued in the specific context of an FPA 206²⁹ proceeding. Having found that PJM’s fast-start pricing practices are unjust and unreasonable,³⁰ the Commission now has the statutory obligation to set the just and reasonable rate.³¹ By extension, the Commission had every incentive to speak as clearly as needed in the January 23 Order, as ambiguity would only frustrate the Commission’s fulfillment of its own legally-mandated objective—the fixing of just and reasonable fast-start pricing practices in PJM via an order on PJM’s fast-start compliance filing.

Accordingly, the Commission’s plain written language in the January 23 Order describing the “pricing and dispatch misalignment” is the best evidence of its intent, and that misalignment—as described by the Commission’s own words—is what the July 31 Filing from PJM and its stakeholders is designed to address.

28 See, e.g., *SEC v. Chenery Corp.*, 318 U.S. 80, 94 (1943) (“[T]he courts cannot exercise their duty of review unless they are advised of the considerations underlying the action under review.”).

29 16 U.S.C. § 824e (2018).

30 *PJM Interconnection, L.L.C.*, 167 FERC ¶ 61,058 (2019).

31 16 U.S.C. § 824e(a) (“Whenever the Commission, after a hearing held upon its own motion or upon complaint, shall find that any rate, charge, or classification, demanded, observed, charged, or collected by any public utility for any transmission or sale subject to the jurisdiction of the Commission, or that any rule, regulation, practice, or contract affecting such rate, charge, or classification is unjust, unreasonable, unduly discriminatory or preferential, the Commission shall determine the just and reasonable rate, charge, classification, rule, regulation, practice, or contract to be thereafter observed and in force, and shall fix the same by order.”).

C. The Long-Term Reforms May Yield Benefits, but PJM Must First Study Their Operational and Market Impacts Prior to Implementation.

As PJM described in its July 31 Filing, the “long-term” reforms consist of: (i) automatic RT SCED case approval; and (ii) adjustments to RT SCED’s ramping methodology.³² With respect to the first reform, PJM explained that a transition to automatic RT SCED case approval—and any requisite flexibility outside of this automatic approval process that PJM dispatchers would need to retain—must be thoroughly analyzed to ensure that PJM can continue to meet its mandatory requirements as a North American Electric Reliability Corporation (“NERC”)-registered Reliability Coordinator, Transmission Operator, and Balancing Authority.³³ Specifically, PJM explained that prior to making such a change, it must have confidence that it will be able to maintain operational compliance with BAL-002-3, BAL-003-1.1, IRO-006-5 and IRO-006-EAST-2, and PJM’s obligations to re-dispatch for coordinated flowgates under the Joint Operating Agreements with the Midcontinent Independent System Operator, Inc. (“MISO”) and the New York Independent System Operator, Inc. (“NYISO”).³⁴

With respect to the second reform, PJM explained that further examination is needed to determine when or if the previous RT SCED dispatch basepoint is accurate enough to be utilized as the initial MW in the RT SCED solution, to ensure that PJM does not run afoul of the operating and reporting requirements of BAL-001-2.³⁵

In its Protest, the IMM appears to agree with PJM’s approach to the first reform,³⁶ but disagrees with PJM’s approach to the second, and advocates for the immediate implementation of

³² July 31 Filing at 11-14.

³³ *Id.* (citing Carroll Affidavit at P 13-17).

³⁴ *Id.*

³⁵ *Id.* (citing Carroll Affidavit at P 19).

³⁶ IMM Protest at 34.

adjustments to RT SCED’s ramping methodology. In support of this, the IMM notes that “PJM reduced the RT SCED ramp time from 15 minutes to 10 minutes in 2017 without prolonged testing or training,” and states that “PJM has provided no reasons why a change of the ramp time from 10 minutes to five minutes would require testing for a long and apparently indeterminate period.”³⁷

In making these comments, the IMM significantly understates the complexity of this reform, as it has not simply requested that PJM move from ten minutes to five, but has advocated for PJM to adopt any entirely different dispatch logic and methodology—namely that of MISO.³⁸ This is no small task that can be easily and quickly implemented. Even assuming *arguendo* that MISO’s approach could be transplanted and applied directly to the PJM system without adverse reliability or market impacts—an issue PJM is currently examining—such a change requires significant design and development work, modifications to PJM dispatch tools, and operator training, in conjunction with evaluations of any necessary adjustments to settlements and reserve procurement in light of the new dispatch methodology. As PJM recently reported at the September 2, 2020 Market Implementation Committee (“MIC”),³⁹ PJM is currently investigating the methods of MISO, as well as other Regional Transmission Organizations and Independent System Operators (“RTOs/ISOs”), to determine which approach (or combination thereof) will provide the greatest benefit to PJM’s concurrent market and reliability responsibilities. In its status report, PJM detailed its evaluation and implementation timeline to stakeholders at the September 2, 2020 MIC as follows:

³⁷ *Id.* at 34.

³⁸ *See, e.g.,* http://www.monitoringanalytics.com/reports/Presentations/2019/IMM_MIC_Special_Session_Dispatch_and_Pricing_Issues_20191002.pdf

³⁹ *See* <https://www.pjm.com/-/media/committees-groups/committees/mic/2020/20200902/20200902-item-10-five-minute-dispatch-long-term-evaluation.ashx>



Long-Term Evaluation and Tentative Implementation Timeline



PJM is committed to closely studying and implementing reforms to RT SCED’s ramping methodology, but must do so in a manner that is based on evidence and analysis, in conjunction with ongoing assessments of PJM’s ability to maintain compliance with NERC reliability standards. Because the IMM to date has based its recommendations on economic theory, and has not provided any PJM-specific empirical evidence or engineering analysis regarding how MISO’s (or any other RTO/ISO’s) dispatch logic and methodology would impact PJM’s market outcomes and NERC-compliance, PJM must generate and examine this evidence itself in a thorough, thoughtful, and transparent manner, in coordination with its stakeholders.

In addition to understating the complexity of this reform, the IMM’s Protest also claims that PJM’s “concerns about compliance with reliability standard BAL-001-2 due to updating the resource ramp time and initial status are unclear,” and offers that “PJM operators continue to have regulation as a tool for time frames under five minutes, continue to have the ability to use load bias

to account for forecast errors, and continue to have the ability to manually execute and approve additional cases, if needed for reliability.”⁴⁰

Regarding its compliance concerns with BAL-001-2, PJM will provide additional clarity beyond what was already provided in the Affidavit of Rebecca Carroll, Director of PJM Dispatch, which accompanied the July 31 Filing.⁴¹ As a NERC-registered Balancing Authority, BAL-001-2 requires PJM to operate such that the Control Performance Standard 1 (“CPS1”), Reporting Area Control Error (“RACE”), and Balancing Authority ACE Limit (“BAAL”)⁴² are all controlled and reported, for the stated purpose of “controlling Interconnection frequency within defined limits.”⁴³ PJM represents approximately 27% of generation in the Eastern Interconnection, and 26% of load.⁴⁴ By extension, if use of the previous RT SCED dispatch basepoint as the initial MW instead of the State Estimator MW would result in increased difficulty for generators to accurately adhere to their control signals, the impact on Interconnection-wide frequency could be significant. In

40 IMM Protest at 35.

41 July 31 Filing, Carroll Affidavit at P 19 (“Utilizing the previous RT SCED dispatch basepoint as the initial MW instead of the State Estimator MW assumes generators operate exactly as their bid-in parameters indicate. However, while this is a valid assumption, it is not necessarily a precise assumption. Generators are physical machines that cannot and typically do not operate perfectly to their submitted parameters. Generators experience operating realities that require them to deviate from these parameters such as mill points, loading duct firing, feed water pump issues, increased river water temperatures, ambient air temperatures, or ice on wind turbine blades. More examination is needed to determine when or if the previous RT SCED dispatch basepoint is accurate enough to be utilized as the initial MW in the RT SCED solution. Implementing this foundational change to the RT SCED optimization could create issues with PJM meeting the operating and reporting requirements in NERC reliability standard BAL-001-2. BAL-001-2 is designed to control the interconnection frequency within defined limits, establishes performance criteria for the PJM Balancing Authority to evaluate the area’s frequency control, and is a function of ACE and how well generators are following PJM’s dispatch signals. PJM could have challenges with generators adhering precisely to their control signals, which could lead to violations of R1 and R2 of BAL-001-2 by PJM not meeting CPS1 and BAAL. Generators do not follow their control signal precisely and system operators need to have the ability to take actions to maintain the ACE and system frequency to respond to volatility and unplanned events. By using State Estimator MW, RT SCED is dispatching units based off of where they are presently operating, not where they are anticipated to be.”).

42 The Glossary of Terms used in NERC Reliability Standards can be found here:
https://www.nerc.com/pa/Stand/Glossary%20of%20Terms/Glossary_of_Terms.pdf

43 See NERC Reliability Standard BAL-001-2, Real Power Balancing Control Performance (July 1, 2016), available here:

<https://www.nerc.com/layouts/15/PrintStandard.aspx?standardnumber=BAL-001-2&title=Real%20Power%20Balancing%20Control%20Performance&jurisdiction=United%20States>

44 See <https://www.in.gov/iurc/files/Asim%20IURC%20PPT%208.21%20FINAL.pdf>

light of this, PJM must first verify that adverse reliability outcomes will not occur prior to implementation.

Regarding the IMM's recommendation that PJM immediately implement the adjustments to RT SCED's ramping methodology, and instead rely on regulation, operator load biasing, and manual RT SCED case execution to make up the corresponding difference in addressing any BAL-001-2 compliance concerns, there are several complications with this proposal. First, when compared with peak load, PJM's regulation requirements are relatively low, and would need to be reassessed and potentially expanded in the event that RT SCED's ramping methodology was adjusted. Second, PJM has been working to *reduce* reliance on load biasing. This was one of the primary reasons why PJM filed comprehensive reforms to its reserve market in Docket Nos. EL19-58 and ER19-1486. This objective is shared by the Commission, which in its May 21, 2020 order largely approving those reforms found that "PJM's proposed ORDCs will directly address the cited shortcoming that is leading to extensive operator biasing and other out-of-market actions."⁴⁵ PJM has always understood the IMM to similarly be in favor of reducing reliance on load biasing, and in the same vein, reducing the use of manual case execution and multiple case approval.⁴⁶

⁴⁵ *PJM Interconnection, L.L.C.*, 171 FERC ¶ 61,153 at P 220 (2020).

⁴⁶ *See, e.g.*, IMM Protest at 26 ("Manual actions taken by PJM operators such as load bias or not approving RT SCED cases, and transmission limits bias have a direct impact on pricing. If these actions are taken because of inconsistencies created by having RT SCED set to a 10 minute ramp rate and a five minute dispatch period, and not to correct an inaccurate load forecast or unit nonperformance, then the resulting prices are inaccurate."); IMM Protest at 20 ("Given that each RT SCED case produces three solutions, and RT SCED may be executed more than once every five minutes, there are, by definition, more RT SCED solutions than there are five minute intervals for any period. Since PJM operators approve RT SCED solutions at their discretion, there is no defined process to ensure that an RT SCED solution that accurately indicates a shortage of reserves is reflected in pricing."); IMM Protest at 22-23 ("PJM should have a defined, transparent, rule based approach to approving RT SCED solutions so that reserve shortages signaled by the RT SCED tool are reflected in LPC and therefore in prices to ensure compliance with Order No. 825. This requires that PJM approve RT SCED cases at a five minute dispatch frequency, creating a five minute dispatch period consistent with the objective of aligning dispatch with pricing and settlements.").

D. The IMM Protest Confuses the Alignment of Dispatch and Pricing with “Overlapping” Dispatch Signals.

The IMM’s Protest states that “[u]nder the short term proposal, PJM would settle each five minute interval using prices based on the dispatch instructions that were effective for the preceding five minute interval, which are no longer effective during the interval being priced and settled.”⁴⁷ This statement and others confuse what the IMM terms “overlapping” ramping signals with alignment between pricing and dispatch. To be clear, upon implementation of the “short-term” changes submitted in this proceeding, the dispatch instructions will target an interval ten minutes in the future, and actual pricing and settlements will use the information *from that exact same interval*. This is separate and distinct from the fact that dispatch signals may change via instructions to ramp-up or ramp-down based on system conditions. Since many resources in PJM are continually dispatched up or down to account for dynamic operating conditions, it is unclear how an “overlapping” signal is distinguishable from a signal that builds off of a prior dispatch instruction.

⁴⁷ IMM protest at 3.

III. CONCLUSION

In accordance with the foregoing, PJM respectfully requests that the Commission accept this answer and the July 31 Filing.

Respectfully submitted,

Craig Glazer
Vice President – Federal Government Policy
PJM Interconnection, L.L.C.
1200 G Street, N.W.
Suite 600
Washington, D.C. 20005
(202) 202-423-4743
Craig.Glazer@pjm.com

/s/ Thomas DeVita
Thomas DeVita
Senior Counsel
PJM Interconnection, L.L.C.
2750 Monroe Boulevard
Audubon, PA 19403
(610) 635-3042
Thomas.DeVita@pjm.com

On behalf of
PJM Interconnection, L.L.C.

September 10, 2020

CERTIFICATE OF SERVICE

I hereby certify that I have this 10th day of September, 2020 caused a copy of the foregoing document to be served upon each person designated on the official service list compiled by the Secretary in this proceeding.

/s/ Taylor Martin

Taylor Martin

Sr. Paralegal

PJM Interconnection, L.L.C.

2750 Monroe Boulevard

Audubon, PA 19403

(610) 666-4756

Taylor.Martin@pjm.com