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The Honorable Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Re: *PJM Interconnection, L.L.C.*, Docket No. ER231038-000
Proposed Amendment to the Billing of Non-Performance Charges

Dear Secretary Bose:

PJM Interconnection, L.L.C. (“PJM”), pursuant to section 205 of the Federal Power Act (“FPA”), 16 U.S.C. § 824d, and section 35.13 of the regulations of the Federal Energy Regulatory Commission (“FERC” or the “Commission”), 18 C.F.R. part 35, hereby proposes to amend PJM Open Access Transmission Tariff (“Tariff”), Attachment DD, section 10A so that (1) for any future Performance Assessment Intervals,¹ if there are fewer than six monthly bills remaining in a Delivery Year for which Non-Performance Charges associated with such Performance Assessment Intervals have not been invoiced, PJM would have the ability to allocate the Non-Performance Charges up to a maximum of nine monthly bills, and (2) for Non-Performance Charges stemming from the recent Performance Assessment Intervals associated with Winter Storm Elliott,² PJM Members will be able to elect to have Non-Performance Charges be invoiced and divided in nine

¹ Terms not otherwise defined herein shall have the same meaning as set forth in the Tariff and Amended and Restated Operating Agreement of PJM Interconnection, L.L.C.

² For purposes of this filing, references to Winter Storm Elliott refer to a large winter storm, nicknamed Winter Storm Elliott by the media, passed through the PJM Region between December 23, 2022 and December 24, 2022. *See* Weather Underground: Intensified Winter Storm Elliott Intensified Into Bomb Cyclone With High Winds, Blizzard Conditions, Flooding, <https://www.wunderground.com/article/storms/winter/news/2022-12-23-winter-storm-elliott-bomb-cyclone-midwest-northeast-winds-snow>.

monthly bills, subject to interest. The proposed revisions represent a proactive and prudent measure to mitigate against the potential risk of Member defaults due to large Non-Performance Charges that may be billed over a short period of time that may arise from future Performance Assessment Intervals, as well as those charges stemming from Winter Storm Elliott.

Equally important, these reforms will help to address the significant timing anomalies associated with payment of Non-Performance Charges based solely on when the event which gave rise to the Non-Performance Charges occurred. For example, should Performance Assessment Intervals be declared in June, under-performing unit owners would have nine months to pay their Non-Performance Charges, while that same unit owner would have only a few months (or even only one month in some circumstances) to pay Non-Performance Charges, should the event occur in the winter months. Depending on the magnitude of Non-Performance Charges, this can raise major liquidity challenges for some unit owners. This narrow and targeted filing will avoid exacerbating cash flow concerns caused by the timing anomalies outlined above.

As further described in this filing below, the proposed amendments will help to reduce cash-flow and liquidity issues for certain PJM Members in the event large Non-Performance Charges are invoiced near the end of a Delivery Year. These proposed revisions were prompted by the potentially unprecedented magnitude of Non-Performance Charges arising from the recent Performance Assessment Intervals declared during Winter Storm Elliott and should be applied beginning with the first monthly bill that includes Non-Performance Charges associated with this recent event. Additionally, the proposed

amendments represent a prudent and reasonable means to mitigate against the risk of Member defaults from future Performance Assessment Intervals.

PJM requests the proposed Tariff revision become effective sixty-one days after the date of this filing (*i.e.*, April 4, 2023) and Commission action by no later than April 4, 2023. A timely Commission order accepting the proposed change prior to the issuance of the first monthly bill that will include Non-Performance Charges associated with the Winter Storm Elliott Performance Assessment Intervals (March bill issued on April 7, 2023) will allow PJM to invoice the Non-Performance Charges in accordance with the proposed amendments, if elected by an impacted PJM Member. This will work to address the significant liquidity issues and their potential to drive the premature retirement of units prior to the next capacity auction, which is scheduled to commence on June 14, 2023.

PJM did not seek stakeholder endorsement of the proposed revisions herein given the limited time before the issuance of the March bill. Instead, as further discussed in section IV below, PJM is submitting this filing pursuant to Tariff, section 9.2(b) and the Consolidated Transmission Owners Agreement (“CTOA”), section 7.5.1(ii). PJM provided the requisite seven day notice and consultation to the PJM Members and Transmission Owners prior to the submittal of this filing.

I. BACKGROUND

One of PJM’s primary responsibilities as a regional transmission organization is to procure a sufficient amount of electrical capacity within its region to provide reliable electricity to its consumers during periods of peak demand. PJM accomplishes this objective through its capacity market by conducting auctions, referred to as the RPM

Auctions,³ typically conducted three years in the future, in which resource owners submit offers that would commit such resources to be available to provide capacity at any point in a given Delivery Year.

Capacity Resources or Price Responsive Demand that clear the RPM Auctions receive a capacity commitment, for which credits are billed on a weekly basis throughout the relevant Delivery Year. In exchange for receiving these capacity revenues, the Capacity Resources with capacity commitments are expected, with certain limited exceptions, to be available to perform up to their committed capacity amount during an Emergency Action declared by PJM.⁴ To that end, “each Capacity Market Seller that commits a Capacity Resource [or Price Responsive Demand] for a Delivery Year . . . shall be charged to the extent the performance of each of its committed Capacity Resources or Price Responsive Demand during all or any part of a clock-hour when an Emergency Action is in effect falls short of the expected performance of such resources.”⁵

The Non-Performance Charge rate is equal to the “Net Cost of New Entry (stated in terms of installed capacity) for the [Locational Deliverability Area] and Delivery Year for which such calculation is performed * (the number of days in the Delivery Year / 30) / (the number of Real-Time Settlement Intervals in an hour).”⁶ The final Non-Performance Charge for committed Capacity Resources or Price Responsive Demand is equal to the performance shortfall of such resource times the relevant Non-Performance Charge rate in

³ As defined in the Tariff, RPM Auctions include a BRA, and typically three Incremental Auctions, associated with each Delivery Year.

⁴ It is noted that Capacity Resources may also be subject to Non-Performance Charges through bilateral capacity transactions made in accordance with Tariff, Attachment DD, section 4.6.

⁵ Tariff Attachment DD, section 10A(a).

⁶ Tariff, Attachment DD, section 10A(e).

the associated Locational Deliverability Area. Non-Performance Charges that are collected are credited as bonus performance payments to owners of Energy Only or Capacity Resources whose actual performance is greater than their expected performance during a Performance Assessment Interval.⁷

Under the existing rules, Tariff, Attachment DD, section 10A(j) states that:

For any Non-Performance Charge, the amount shall be divided by the number of months remaining in the Delivery Year for which no invoice has been issued, and the resulting amount shall be invoiced each such remaining month in the Delivery Year or during the first month of the next Delivery Year if three months do not remain in the current Delivery Year.⁸

In other words, any Non-Performance Charges that a PJM Member may incur are to be invoiced and divided by the number of months remaining in the Delivery Year. If there are less than three months remaining in the Delivery Year, the Tariff requires the Non-Performance Charge to be invoiced “during the first month of the next Delivery Year.”⁹

When this provision was first adopted, PJM and its stakeholders expected the risk of Performance Assessment Intervals would most likely occur in the summer periods. For instance, if there were Performance Assessment Intervals in June, the Non-Performance Charges would first be invoiced starting with the September monthly bill and divided into

⁷ Tariff, Attachment DD, section 10A(g) (“Revenues *collected* from assessment of Non-Performance Charges for a Performance Assessment Interval shall be distributed to each Market Participant . . . that provided energy or load reductions above the levels expected for such resource during such interval.”). Because the Tariff states that the bonus performance payments are only based on the revenues that are collected from the assessment of Non-Performance Charges, PJM is not required to credit bonus performance payments in the same monthly bill. However, for the Winter Storm Elliott Performance Assessment Intervals, PJM intends to offset Non-Performance Charges with a partial credit of the bonus performance payments in the same monthly bills which contain Non-Performance Charges to help mitigate against the risk of Member defaults.

⁸ Tariff, Attachment DD, section 10A(j).

⁹ *Id.*

equal charges through the following May monthly bill. Such a Performance Assessment Interval would mean that PJM Members who are assessed Non-Performance Charges would have those charges invoiced over a nine month period.

However, when the Performance Assessment Interval occurs in December, as was the case and further discussed below with recent Performance Assessment Intervals associated with Winter Storm Elliott, Non-Performance Charges will be invoiced beginning with the March, 2023 monthly bill,¹⁰ which is scheduled to issue on April 7, 2023.¹¹ This effectively means that, absent a prospective Tariff change, all Non-Performance Charges associated with the December Performance Assessment Interval will be invoiced in only three monthly bills (March, April, and May). This represents an anomaly as to the timing of the billing and collection period that is solely a function of when the event that gives rise to the Non-Performance Charge occurs. However, Performance Assessment Intervals (which up to this point have been rare) are themselves a function of weather conditions and other extreme events that can occur at any point during the Delivery Year.

Further exacerbating the liquidity issues, if a Performance Assessment Interval were to occur in March, the Tariff would require PJM to invoice the entire Non-Performance Charge “during the first month of the next Delivery Year.”¹² In other words, all Non-Performance Charges under such an event would be billed in one monthly bill.

¹⁰ Tariff, Attachment DD, section 10A(j) specifies that PJM “shall bill charges and credits for performance during Performance Assessment Intervals within three calendar months after the calendar month that included such Performance Assessment Intervals.”

¹¹ PJMSettlement is required to issue monthly bills by the fifth Business Day of each month “for monthly activity and detailing the charges and credits for all services furnished under the Tariff during the preceding month.” Tariff, section 7.1(a) and Operating Agreement, section 14B.1(a).

¹² Tariff, Attachment DD, section 10A(j).

Even more unworkable, it is unclear how the Tariff applies in a situation where Performance Assessment Interval is declared in May given that PJM would not have all of the necessary information to invoice Non-Performance Charges in the following June monthly bill. This is because load reduction meter data is submitted to PJM within 60 days of a Load Management Event.¹³ As further described below, PJM's proposal will also remedy this currently unworkable provision.

To be clear, because Non-Performance Charges are fully allocated to pay for bonus performance payments, any potential defaults stemming from the non-payment of Non-Performance Charges would not be socialized across the PJM Membership body. It would, however, decrease the overall pool of bonus performance payments that would be allocated to PJM Members that over-performed during the Performance Assessment Interval.¹⁴ Additionally, and more importantly, a default of a Member triggered by the non-payment of Non-Performance Charges creates a reliability risk for the PJM load. This is because it is possible that a defaulting PJM Member may no longer honor prior capacity commitments for the previously committed Capacity Resource. As a result, PJM may not be able to rely on such previously committed Capacity Resources as capacity for the remainder of the Delivery Year. Consequently, such Member defaults increase the risk that PJM may not have sufficient capacity to meet peak load conditions for the remainder of the Delivery Year. In addition, exacerbating the liquidity issues caused by the timing of the underlying event can potentially drive premature retirements, which then translates into potentially higher capacity costs for customers in the next capacity auction. As a result, it is in the

¹³ Tariff, Attachment K-Appendix, section 8.7.

¹⁴ Capacity Resources and Energy Resources that performed above their expected performance are entitled to receive bonus performance payments for the actual performance during a Performance Assessment Interval. *See* Tariff, Attachment DD, section 10A(g).

best interest of both suppliers and load interests to allow Non-Performance Charges to be invoiced over a longer period of time to minimize the risk of Member defaults.

II. PJM SHOULD HAVE THE ABILITY TO EXTEND NON-PERFORMANCE CHARGES ASSOCIATED WITH ANY FUTURE PERFORMANCE ASSESSMENT INTERVAL IN UP TO NINE MONTHLY BILLS TO MITIGATE AGAINST THE RISK OF MEMBER DEFAULTS.

To proactively address the issues raised above and to reduce the risk of potential Capacity Market Seller defaults, PJM proposes to amend the Tariff so that, for any future Performance Assessment Intervals, if there are fewer than six monthly bills remaining in a Delivery Year for which Non-Performance Charges associated with such Performance Assessment Interval have not been invoiced, PJM would have the ability, with prior notice to the PJM Members, to divide the Non-Performance Charges in the remaining monthly bills for the relevant Delivery Year, plus up to six additional monthly bills into the following Delivery Year.¹⁵ Such an approach is reasonable, because it means that Non-Performance Charges could be invoiced in a minimum of six monthly bills to help mitigate against the risk of Member defaults. Additionally, issuing Non-Performance Charges in up to six additional monthly bills into the following Delivery Year would still mean all invoices for Non-Performance Charges would be issued by the end of the calendar year (December), which corresponds with many Members' year-end financial statements.

To set an upper bound for when all Non-Performance Charges have to be invoiced, PJM also proposes to specify that Non-Performance Charge can be allocated up to a maximum of nine months. This cap is consistent with the maximum period that Non-Performance Charges can be invoiced under the existing rules (*i.e.*, Non-Performance Charges arising from a Performance Assessment Interval at the beginning of a Delivery

¹⁵ Proposed Tariff, Attachment DD, section 10A(j).

Year in June would be divided into nine monthly bills) and would have the effect of allowing PJM to bill Non-Performance Charges up to a maximum of nine monthly bills. The ability to effectively extend the payment schedule for Non-Performance Charges by dividing the charges into additional monthly bills would alleviate cash-flow concerns for Members where potential future Non-Performance Charges are significant enough to increase the risk of Member defaults.

It is noted that under this proposal, PJM would not automatically be required to extend the period to invoice Non-Performance Charge arising out of every Performance Assessment Interval. Instead, PJM would have the ability to extend the charges upon prior notice to the PJM Members. This ability to exercise judgment is reasonable, because depending on the performance of resources during a Performance Assessment Interval, future Non-Performance Charges may or may not be as significant as those from the recent Winter Storm Elliott event and they may not present a risk of Capacity Market Seller defaults high enough to warrant the need to divide Non-Performance Charges into additional monthly bills in every circumstance. To that end, in making a determination of whether to extend the Non-Performance Charge and the duration of such an extension, PJM would, among other things, compare the projected Non-Performance Charge amount with the expected weekly capacity revenues. This approach also avoids having to define an arbitrary threshold for when Non-Performance Charges may be divided into additional monthly bills. Further, any such arbitrary threshold that would be established in the Tariff would need to be adjusted over time and simply does not provide the flexibility to act quickly in circumstances that warrant an exception. This flexibility is appropriate, and it would be impractical to specify dollar amounts or enumerate all of the examples that may require extending the Non-Performance Charge. As the Commission previously

recognized, doing so “may unnecessarily limit when [PJM] can act to protect its wholesale markets and Market Participants to only those specified instances enumerated in the tariff.”¹⁶ In the event PJM extends the invoicing of Non-Performance Charges over a longer period of time, PJM would provide prior notice to the PJM Members so that every Member will know in advance exactly when the invoices for the full Non-Performance Charge amount will be issued and completed.¹⁷

In developing this proposal, PJM carefully considered the appropriateness of charging interest for any amount of Non-Performance Charge that is extended beyond the current Delivery Year. However, charging interest for the carrying cost of extending the Non-Performance Charge undermines the underlying goal of this proposal, which is to maximize the collection of Non-Performance Charges and to minimize the risk of Member defaults. Thus, as the Commission previously held, “[w]hile PJM’s proposal to delay payment without interest may reduce the value of over-performance payments by not accounting for the time-value of such funds,” the Commission found it appropriate because “not assessing interest reduces the liquidity risk for resources that may be subject to Non-Performance Charges and increases the probability of full recovery of Performance Bonus Payments by the over-performer.”¹⁸ The Commission’s prior rationale for declining to

¹⁶ *PJM Interconnection, L.L.C.*, 171 FERC ¶ 61,173, at P 36 (2020).

¹⁷ To be clear, in the event PJM determines that an extension of the Non-Performance Charges is merited, the extension would apply to all resources that are subject to Non-Performance Charges rather than extended on a unit-by-unit basis.

¹⁸ *PJM Interconnection, L.L.C.*, 151 FERC ¶ 61,208, at P 184 (2015).

charge interest in extending invoices for Non-Performance Charge remains on point and should continue to apply to this portion of PJM's proposal.

To be clear, the proposal described in this section would be applied prospectively to any Non-Performance Charges derived from a future Performance Assessment Interval. As further described in section III below, while the same underlying goal of reducing the risk of potential PJM Member defaults applies, PJM proposes a transitional rule that would allow PJM Members to elect to have their Non-Performance Charges associated with the Performance Assessment Interval from Winter Storm Elliott be divided into nine monthly bills subject to interest payments.

III. PJM MEMBERS SHOULD HAVE THE OPTION TO ELECT THEIR NON-PERFORMANCE CHARGES TO BE INVOICED IN NINE MONTHLY BILLS, SUBJECT TO INTEREST ONLY FOR THE PERIOD THAT EXTENDS INTO THE NEXT DELIVERY YEAR AND ONLY FOR THE WINTER STORM ELLIOTT EVENT, TO MITIGATE AGAINST THE RISK OF MEMBER DEFAULTS.

On December 23, 2022, Winter Storm Elliott caused temperatures across the PJM footprint to plummet, with record low temperatures as well as record temperature drops in certain areas. This unusually drastic temperature decrease, along with a confluence of other factors, ultimately prompted PJM to declare a Maximum Generation Emergency for the entire PJM Region between 5:30pm and 11:00pm on December 23, 2022, and between 4:25am and 10:00pm on December 24, 2022.¹⁹ In total, there were 277 Real-time Settlement Intervals where a Maximum Generation Emergency was in effect.

Because the declaration of a Maximum Generation Emergency triggers a Performance Assessment Interval, Capacity Market Sellers will be assessed a Non-

¹⁹ PJM Market Implementation Committee Slides on Winter Storm Elliott, <https://www.pjm.com/-/media/committees-groups/committees/mic/2023/20230111/item-0x---winter-storm-elliott-overview.ashx>.

Performance Charge “to the extent the performance of each of its committed Capacity Resources or Price Responsive Demand during all or any part of a clock-hour when an Emergency Action is in effect falls short of the expected performance of such resources.”²⁰

This means that committed Capacity Resources will be assessed for potential Non-Performance Charges for a total of 277 Real-time Settlement Intervals.

For reference, the Non-Performance Charge rate, along with the Net Cost of New Entry) for the 2022/2023 Delivery Year is shown in the table below:

Locational Deliverability Area	Net CONE (\$/MW-Day, ICAP Price)	Non-Performance Charge Rate (\$/MW-interval)
ATSI	218.79	221.83
ATSI-CLEVELAND	218.79	221.83
BGE	214.87	217.85
COMED	235.27	238.54
DAY	214.82	217.80
DEOK	212.27	215.22
DPL-SOUTH	224.18	227.29
EMAAC	246.18	249.60
MAAC	232.67	235.90
PEPCO	246.34	249.76
PPL	237.69	240.99
PS-NORTH	254.8	258.34
PSEG	254.8	258.34
RTO	247.26	250.69
SWMAAC	230.61	233.81

Based on preliminary generator performance data during the Winter Storm Elliott Performance Assessment Intervals, PJM estimates that the aggregate Non-Performance Charge will be between one to two billion dollars.²¹ The potentially unprecedented

²⁰ Tariff, Attachment DD, section 10A(a).

²¹ PJM has not yet calculated final Non-Performance Charges at this time because, among other things, performance data for Demand Resources are not due to be reported to PJM until 60 days after the event. Thus, the Balancing Ratio is subject to change based on the Demand Resource performance.

magnitude of Non-Performance Charge presents significant cash-flow and liquidity concerns for many PJM Members who will owe Non-Performance Charges. Specifically, invoicing the full amount of such charges in only three monthly bills may present cash-flow and other liquidity challenges for certain PJM Members,²² which ultimately increases the risk of Members defaulting if the full charges for each monthly bill cannot be paid within one week of the invoiced charges.²³

To proactively reduce the risk of potential Capacity Market Seller defaults while providing a transition to the rule proposed in section II above,²⁴ PJM proposes to include a provision in the Tariff so that for Non-Performance Charges stemming from the Winter Storm Elliott Performance Assessment Intervals, any impacted PJM Member will have the ability to elect to have PJM divide the Non-Performance Charges in the remaining monthly bills for the relevant Delivery Year plus six additional monthly bills into the following Delivery Year. PJM Members that elect this option would thus be able to reduce the Non-Performance Charges that would otherwise be invoiced in the remaining monthly bills in the current Delivery Year. Allowing the charges to be paid over a longer period of time

²² Under the existing rules, Tariff, Attachment DD, section 10A(j) requires:

[F]or any Non-Performance Charge, the amount shall be divided by the number of months remaining in the Delivery Year for which no invoice has been issued, and the resulting amount shall be invoiced each such remaining month in the Delivery Year or during the first month of the next Delivery Year if three months do not remain in the current Delivery Year.

For Performance Assessment Intervals associated with Winter Storm Elliott, Non-Performance Charges will be invoiced beginning with the March, 2023 monthly bill, which is scheduled to be issued on April 7, 2023.

²³ Net amounts from a monthly bill are due by no later than noon on the following Friday. *See* Tariff, section 7.1A and Operating Agreement, section 14B.2.

²⁴ As further explained below, it would not be appropriate to apply the proposal discussed in section II above to the Non-Performance Charges stemming from the Winter Storm Elliott Performance Assessment Intervals given that Market Participants, who are entitled to receive bonus performance payments, expected to collect all such credits by the June bill. As a result, this limited and narrow rule acts as a transitional rule before the approach proposed in section II becomes effective.

would lessen the liquidity risk of such a PJM Member, and would thus increase the probability of full recovery of the Non-Performance Charge.

Under this transitional rule, if elected by an impacted PJM Member, PJM would invoice Non-Performance Charges associated with the December 2022 Performance Assessment Interval in nine equal monthly bills (beginning with March 2023 bill and ending with the November 2023 bill). To be clear, an election under this provision would extend the billing of all of Non-Performance Charges that particular Member would be assessed for its entire portfolio (*i.e.*, not on a unit-by-unit basis). This would reduce the size of the Member's Non-Performance Charges by approximately two thirds on each monthly bill for Non-Performance Charges stemming from the Winter Storm Elliott Performance Assessment Intervals and could significantly help to alleviate cash flow or liquidity concerns for some PJM Members that need it.

PJM acknowledges, however, that the Non-Performance Charges derived from the Winter Storm Elliott Performance Assessment Intervals already occurred. As a result, certain PJM Members that own resources whose actual performance exceeded their expected performance on December 23, 2022 and December 24, 2022 may have an expectation that all bonus performance payments from the recent Performance Assessment Intervals would be issued in the June monthly bill based on the existing Tariff prescribed billing schedule (*i.e.*, final Non-Performance Charges invoiced in the May monthly bill and any final bonus performance payments based on the collected Non-Performance Charges issued in the June monthly bill). In balancing the underlying objective of mitigating potential risks of Member defaults with any expectations that all bonus performance payments would be realized by the June monthly bill under the existing Tariff provisions, PJM proposes to charge interest on any Non-Performance Charges stemming from the

Winter Storm Elliott Performance Assessment Intervals that are elected by a PJM Member to be extended beyond the May monthly bill.²⁵

As a result, for any Non-Performance Charges stemming from Winter Storm Elliott that are extended beyond the current Delivery Year, interest would be assessed on any outstanding balance of the full Non-Performance Charge not incurred by the May monthly bill, and it is this remaining principal which would be subject to interest. The interest rate that would be applied to the outstanding balance would be set equal to the average prime rate published in the Federal Reserve Bulletin, or in the Federal Reserve's "Selected Interest Rates" at the time of election. Given that the Commission already calculates quarterly electric interest rates based on "the arithmetic mean, to the nearest one-hundredth of one percent, of the prime rate values published in the Federal Reserve Bulletin, or in the Federal Reserve's 'Selected Interest Rates,'" ²⁶ it is appropriate to simply rely on the quarterly rate published by the Commission effective at the time of such election.²⁷ While the interest would only be assessed on any principal that is not invoiced through the May monthly bill, PJM would issue the invoices on a levelized basis in all nine monthly bills, so the total invoiced amount of Non-Performance Charges and interest charges in each monthly bill is equal for each of the nine monthly bills. To be sure, only PJM Members that elect this option would be assessed interest payments for the amount of Non-Performance Charges that are extended beyond the May monthly bill. PJM Members that owe Non-Performance Charges who do not elect this option will continue to have their

²⁵ Proposed Tariff, Attachment DD, section 10A(j).

²⁶ 18 C.F.R. § 35.19a(a)(2)(A).

²⁷ FERC Interest Calculation: Rates and Methodology, <https://www.ferc.gov/interest-calculation-rates-and-methodology>.

Non-Performance Charges stemming from Winter Storm Elliott invoiced without any interest in three monthly bills ending with the May monthly bill. Given that the underlying goal of this proposal is to mitigate against the risk of Member defaults, it is appropriate that the election to extend Non-Performance Charges originate from the individual Members who may owe Non-Performance Charges as they are the best situated to make individual cash-flow decisions.

This deliberate delineation to charge interest only to any Non-Performance Charges that are invoiced beyond the May monthly bill and not to charge any interest to any sums that are invoiced through the May monthly bill recognizes that the current Tariff rules do not require interest payments for Non-Performance Charges that are invoiced by the end of the Delivery Year. Indeed, PJM's proposal described in section II above continues to not assess interest for Non-Performance Charges stemming from any future Performance Assessment Intervals given that adding interest payments will increase the liquidity risk of certain PJM Members. That said, in the limited instance where the Performance Assessment Interval already occurred and resource performance was conducted in accordance with expectations under the existing Tariff billing schedule, PJM members that are owed bonus performance payments would reasonably expect all such payments to be credited by the June monthly bill. Thus, an election to extend the Non-Performance Charges beyond the May monthly bill means that Members who are entitled to bonus performance payments would have their payments delayed. To appropriately compensate any Members who may be entitled to bonus performance payments for the delayed credits, the interest that is charged and collected will be allocated to the total bonus performance

payment pool and distributed in accordance with the existing tariff rules specified in Tariff, Attachment DD, section 10A(g).²⁸

PJM submits that this carefully designed transitional rule strikes the appropriate balance of alleviating cash flow concerns for certain PJM Members that may otherwise be at risk of default, while making other PJM Members whole through interest payments for any bonus performance payments that are credited after the currently expected timeline (*i.e.*, June 2023 monthly bill). PJM acknowledges that assessing interest for extending Non-Performance Charges may, to some extent, increase the liquidity risk of certain PJM Members. However, the option to extend the Non-Performance Charge from three monthly bills to nine monthly bills would effectively reduce a Member's amount due to PJM as of the May monthly bill by approximately 67%. By contrast, the Commission's current annual interest rate is 6.31% (equivalent monthly rate of 0.53%).²⁹ As a result, even with the interest charge, the liquidity concerns are still significantly alleviated by extending the Non-Performance Charges over six additional monthly bills. In short, this limited and narrow proposal acts as a transitional rule before the approach proposed in section II is applied to any Performance Assessment Intervals that may occur in the future.

A. PJM Proposes March 17, 2023 as the Deadline for Members to Elect to Extend Non-Performance Charges.

To provide sufficient time for PJM to properly and accurately prepare the monthly bills for any Member that elects to have their Non-Performance Charges extended from three monthly bills to nine monthly bills, PJM is proposing that such election must be made prior to March 17, 2023 (three weeks prior to the issuance of the first monthly bill that will

²⁸ Proposed Tariff, Attachment DD, section 10A(j).

²⁹ FERC Interest Calculation: Rates and Methodology, First Quarter 2023, <https://www.ferc.gov/interest-calculation-rates-and-methodology>.

include such charges). PJM acknowledges that this necessary deadline is before an expected order on this filing. However, any Members that seek to elect this option can notify PJM by the proposed deadline subject to the Commission's acceptance of this filing. In the event the Commission rejects this filing, the elections would become void, and PJM would invoice all Non-Performance Charges in three monthly bills ending with the May bill.

To be clear, this proposal represents just one of the proactive steps that PJM is taking to mitigate against the risk of Member defaults arising from Winter Storm Elliott. Nothing in this filing impacts or otherwise limits PJM's existing ability to take other actions in an effort to maximize the collection of Non-Performance Charges. This includes, but is not limited to making Unreasonable Credit Risk determinations, which may require additional Collateral for any Members deemed to have low creditworthiness pursuant to Tariff, Attachment Q, section II(D).

In accordance with the foregoing, PJM proposes to revise Tariff, Attachment DD, section 10A(j), as shown in blackline below:

j) The Office of the Interconnection shall bill charges and credits for performance during Performance Assessment Intervals within three calendar months after the calendar month that included such Performance Assessment Intervals, provided, for any Non-Performance Charge, the amount shall be divided by the number of months remaining in the Delivery Year for which no invoice has been issued, and the resulting amount shall be invoiced each such remaining month in the Delivery Year. Notwithstanding, or during the first month of the next Delivery Year if ~~three~~ there are less than six months ~~do not~~ remaining in the current Delivery Year for which no invoice has been issued, the Office of the Interconnection may, with prior notice to PJM Members, allocate in equal amounts any Non-Performance Charge in the remaining monthly bills for the current Delivery Year plus up to six monthly bills into the following Delivery Year (but in no event shall the total Non-Performance Charge be divided in more than nine monthly bills). Provided, for any Non-Performance Charges associated with Performance Assessment Intervals from December 23, 2022 and December 24, 2022, a Capacity Market Seller

may elect, by providing notice to the Office of Interconnection by March 17, 2023, to divide the total amount of Non-Performance Charges by either (i) the number of remaining monthly bills in the current Delivery Year (i.e., 3 bills) or (ii) the number of remaining monthly bills in the current Delivery Year plus six additional monthly bills into the following Delivery Year (i.e., 9 bills); provided further, however, that for an election under subsection (ii) above, the monthly Non-Performance Charge shall be levelized to include interest for the six month period following the current Delivery Year, such interest amount being determined at the electric interest rate established by the Federal Energy Regulatory Commission at the time of such election. All interest collected in accordance with this provision shall be allocated to the total pool of bonus performance payments and distributed in accordance with Tariff, Attachment DD, section 10A(g).

B. PJM’s Proposed Remedy Can Prospectively Be Applied to Non-Performance Charges for Which No Monthly Bills Have Been Issued.

The filed rate doctrine generally “forbids a regulated entity to charge rates for its services other than those properly filed with the appropriate federal regulatory authority.”³⁰

Derived from the filed rate doctrine is the “rule against retroactive ratemaking,” which focuses on how the current rate is determined. Specifically, under the rule against retroactive ratemaking, “a utility may not set rates to recoup past losses, nor may the Commission prescribe rates on that principle.”³¹

Here, PJM’s proposed revision is prospective and does not violate either the filed rate doctrine or the rule against retroactive ratemaking when applied to any Non-Performance Charges that have not already been invoiced. This includes the Non-Performance Charges derived from the Winter Storm Elliott Performance Assessment Intervals because the first charges are not expected to be invoiced until the March monthly bill, which will be issued on April 7, 2023 (after the requested April 4, 2023 effective date for the proposed revision herein). It is acknowledged that the Winter Storm Elliott

³⁰ *Arkansas Louisiana Gas Co. v. Hall*, 453 U.S. 571, 577, 101 S. Ct. 2925, 2930, 69 L. Ed.2d 856 (1981).

³¹ *City of Piqua, Ohio v. FERC*, 610 F.2d 950, 954 (D.C. Cir. 1979) (internal quotation marks omitted).

Performance Assessment Intervals occurred last December, but PJM is not proposing any changes to the overall calculation of Non-Performance Charges and bonus performance payments. Accordingly, the Non-Performance Charge rate and how the expected performance and actual performance are calculated remain the same, so the total sum of Non-Performance Charges derived from any Performance Assessment Interval would not change under this proposed amendment.

Rather, this proposal is limited to allowing Members to elect to have their Non-Performance Charges divided into nine monthly bills. While billing requirements are part of the filed rate, there is simply nothing retroactive about how future invoices should be issued, especially when no monthly bill associated with the Winter Storm Elliott Performance Assessment Interval will be issued until after the requested effective date. In other words, this proposal only prospectively allows PJM Members to divide the total Non-Performance Charges in nine monthly bills, so Members can incrementally absorb the charges and ultimately diminish the risk of Member defaults. As a result, PJM's proposal does not run afoul of the filed rate doctrine or the rule against retroactive ratemaking.

It is acknowledged that the Commission previously explained that “[t]here is a difference between upsetting the expectations of market participants . . . and retroactive ratemaking.”³² In prior cases where proposed Tariff revisions would disrupt settled expectations mid-course and harm market participants who relied on the existing Tariff in calculating prices and entering into contracts, the Commission has considered a “balancing of interests” or “balancing of equities” in determining the appropriate outcome.³³

³² See, e.g., *ISO New England Inc.*, 148 FERC ¶ 61,185, at P 29 (2014)

³³ See *id.* (explaining that the Commission accepted proposed tariff revisions after conducting a balancing of interests and determining that proposal's benefits, which included preventing consumers from paying “for

Here, the benefits of PJM’s proposal (*i.e.*, reducing the risk of Member defaults and maximizing the collection of Non-Performance Charges) more than balances any settled expectations, particularly, because PJM is proposing to charge interest on any Non-Performance Charges that are not assessed under the existing Tariff schedule. As a result, any Market Participants who otherwise may have expected to receive all bonus performance payments by the June monthly bill would be compensated for any delayed payments. Therefore, there is simply no harmful disruption to any settled expectations under PJM’s proposal.

IV. STAKEHOLDER PROCESS

As noted, *supra*, absent acceptance of this filing, there is a high likelihood of Member defaults as a result of significantly large Non-Performance Charges associated with the Winter Storm Elliott Performance Assessment Intervals. Given this risk and the limited time to obtain a prospective Commission order, PJM did not seek stakeholder endorsement prior to submitting this proposed revision and is instead submitting this filing pursuant to Tariff, section 9.2(b) and the Consolidated Transmission Owners Agreement (“CTOA”), section 7.5.1(ii). Consistent with those provisions, PJM provided seven days prior notice to the Members Committee and the Transmission Owners Committee of the proposed revisions on January 25, 2023 and January 26, 2023, respectively.³⁴ Accordingly,

non-existent capacity or [the possibility of] fac[ing] a multi-year capacity shortfall” outweighed “market participants’ reliance upon the existing FCM rules.”); *see also ISO New England Inc.*, 145 FERC ¶ 61,095, at P 29 (2013) (noting the Commission has used this balancing test to accept or reject proposed tariff revisions).

³⁴ *See* PJM, Members Committee Agenda, Item No. 3 (January 25, 2023), <https://www.pjm.com/-/media/committees-groups/committees/mc/2023/20230125/agenda.ashx>; *see also* PJM TOA-AC Open Session Agenda, Item No. 2 (Jan. 26, 2023), <https://www.pjm.com/-/media/committees-groups/committees/toa-ac/2023/20230126/agenda.ashx>.

PJM fulfilled its consultation obligations under the Tariff and CTOA prior to the submission of this section 205 filing.

V. CORRESPONDENCE

The following individuals are designated for inclusion on the official service list in this proceeding and for receipt of any communications regarding this filing:

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VI. DOCUMENTS ENCLOSED

This filing consists of the following:

1. This transmittal letter; and
2. Revisions to the Tariff (in redlined and clean format (as Attachments A and B, respectively) and in electronic tariff filing format as required by Order No. 714).³⁵

³⁵ *Electronic Tariff Filings*, Order No. 714, 124 FERC ¶ 61,270 (2008), *final rule*, Order No. 714-A, 147 FERC ¶ 61,115 (2014).

VII. SERVICE

PJM has served a copy of this filing on all PJM members, the PJM Independent Market Monitor, and on all state utility regulatory commissions in the PJM Region by posting this filing electronically. In accordance with the Commission's regulations,³⁶ PJM will post a copy of this filing to the FERC filings section of its internet site, located at the following link: <http://www.pjm.com/documents/ferc-manuals/ferc-filings.aspx> with a specific link to the newly filed document, and will send an email on the same date as this filing to all PJM members and all state utility regulatory commissions in the PJM Region³⁷ alerting them that this filing has been made by PJM and is available by following such link. PJM also serves the parties listed on the Commission's official service list for this docket. If the document is not immediately available by using the referenced link, the document will be available through the referenced link within 24 hours of the filing. Also, a copy of this filing will be available on FERC's eLibrary website located at the following link: <http://www.ferc.gov/docs-filing/elibrary.asp> in accordance with the Commission's regulations and Order No. 714.

³⁶ See 18 C.F.R. §§ 35.2(e), 385.2010(f)(3).

³⁷ PJM already maintains, updates, and regularly uses email lists for all PJM members and affected state commissions.

VIII. CONCLUSION

In conclusion, PJM's proposal not only benefits load interests as PJM would be able to continue to rely on committed Capacity Resources for the remainder of any Delivery Year, but also benefit owners of resources that exceeded their expected performance during a Performance Assessment Interval by maximizing the pool of total bonus performance payments. This is because the total bonus performance payment pool is comprised of the total revenues collected from Non-Performance Charges.³⁸ For the reasons set forth herein, PJM respectfully requests that the Commission accept PJM's proposed amendment, effective April 4, 2023.

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February 2, 2023

³⁸ Tariff, Attachment DD, section 10A(g).

Attachment A

Revisions to the PJM Open Access Transmission Tariff

(Marked / Redline Format)

10A. CHARGES FOR NON-PERFORMANCE AND CREDITS FOR PERFORMANCE

(a) For the 2018/2019 Delivery Year and any subsequent Delivery Year (and for certain purposes for the 2016/2017 and 2017/2018 Delivery Years as provided in subsections (h) and (i) hereof), each Capacity Market Seller that commits a Capacity Resource for a Delivery Year (whether through an RPM Auction, a bilateral transaction, or as Locational UCAP), each Locational UCAP Seller that sells Locational UCAP from a Capacity Resource for a Delivery Year, and for the 2022/2023 Delivery Year and subsequent Delivery Years each PRD Provider that commits Price Responsive Demand for a Delivery Year, shall be charged to the extent the performance of each of its committed Capacity Resources or Price Responsive Demand during all or any part of a clock-hour when an Emergency Action is in effect falls short of the expected performance of such resources (as determined herein) and the revenue from such charges shall be provided to Market Participants with generation, demand response resources, or Price Responsive Demand that perform during such hour in excess of the level expected based on commitments (if any) of such resources.

(b) Performance shall be measured for purposes of this assessment during each Performance Assessment Interval.

(c) For each Performance Assessment Interval, the Office of the Interconnection shall determine whether, and the extent to which, the actual performance of each Capacity Resource and Locational UCAP has fallen short of the performance expected of such committed Capacity Resource, and the magnitude of any such shortfall, based on the following formula:

Performance Shortfall = Expected Performance - Actual Performance

Where the result of such formula is a positive number and where:
Expected Performance =

for Generation Capacity Resources (including external Generation Capacity Resources for any Performance Assessment Interval for which performance by such external resource would have helped resolve a declared Emergency Action; provided, however, that for any Delivery Year up to and including the 2019/2020 Delivery Year, performance of external Generation Capacity Resources shall be assessed only during Performance Assessment Hours for Emergency Actions declared for the entire PJM Region) and Capacity Storage Resources: [(Resource Committed Capacity * the Balancing Ratio)];

where

Resource Committed Capacity = the total megawatts of Unforced Capacity of the Capacity Resource committed by such Capacity Market Seller or Locational UCAP Seller; and

The Balancing Ratio = (All Actual Generation Performance, Storage Resource Performance, Net Energy Imports, Price Responsive Demand Bonus Performance

effective with the 2022/2023 Delivery Year, and Demand Response Bonus Performance) / (All Committed Generation and Storage Capacity); provided, however, that Net Energy Imports shall be included in the calculation of the Balancing Ratio only for any Performance Assessment Interval for which performance by any external Generation Capacity Resource would have helped resolve the Emergency Action that was the subject to the Performance Assessment Hour; and provided further that for any Delivery Year up to and including the 2019/2020 Delivery Year, Net Energy Imports shall be included in the calculation of the Balancing Ratio only for any Performance Assessment Hour for which the Emergency Action was declared for the entire PJM Region; and provided further that the Balancing Ratio shall not exceed a value of 1.0.

for purposes of which

All Committed Generation and Storage Capacity = the total megawatts of Unforced Capacity of all Generation Capacity Resources (including external Generation Capacity Resources for any Performance Assessment Interval for which performance by such external resource would have helped resolve the declared Emergency Action that was the subject to the Performance Assessment Hour; provided, however, that for any Delivery Year up to and including the 2019/2020 Delivery Year, performance of external Generation Capacity Resources shall be assessed only during Performance Assessment Hours for Emergency Actions declared for the entire PJM Region) and all Capacity Storage Resources committed by all Capacity Market Sellers, FRR Entities, Locational UCAP Sellers;

All Actual Generation Performance and Storage Resource Performance = the total amount of Actual Performance for all generation resources (including external Generation Capacity Resources for any Performance Assessment Interval for which performance by such external resource would have helped resolve the declared Emergency Action that was the subject to the Performance Assessment Hour; provided, however, that for any Delivery Year up to and including the 2019/2020 Delivery Year, performance of external Generation Capacity Resources shall be assessed only during Performance Assessment Hours for Emergency Actions declared for the entire PJM Region) and storage resources during the interval;

Net Energy Imports = the sum of interchange transactions importing energy into PJM (not including those associated with external Generation Capacity Resources and therefore included in All Actual Generation Performance) minus the sum of interchange transactions exporting energy out of PJM, but not less than zero;

Demand Response Bonus Performance = the sum of Bonus performance provided by Demand Response resources as calculated in (g) below;

Price Responsive Demand Bonus Performance = the sum of Bonus performance

provided by Price Responsive Demand as calculated in (g) below;

and for Demand Resources, Energy Efficiency Resources, and Qualifying Transmission Upgrades: Resource Committed Capacity;

where

Resource Committed Capacity = the total megawatts of capacity committed from such Capacity Resource committed capacity without making any adjustment for the Forecast Pool Requirement

and for PRD Provider: Price Responsive Demand Committed

where

Price Responsive Demand Committed = the Nominal PRD Value committed by the PRD Provider in the area defined by the Performance Assessment Interval, adjusted to account for any PRD registrations in such area that were not subject to compliance measurement.

and

Actual Performance =

for each generation resource, the metered output of energy delivered to PJM by such resource plus the resource's real-time reserve or regulation assignment, if any, during the Performance Assessment Interval;

for each storage resource, the metered output of energy delivered to PJM by such resource plus the resource's real-time reserve or regulation assignment, if any, during the Performance Assessment Interval;

for each Demand Resource, the demand response provided to PJM by such resource, plus such resource's real-time reserve or regulation assignment, if any, during the Performance Assessment Interval, as established through the PJM demand response settlement procedure consistent with the standards specified in RAA, Schedule 6;

for each PRD Provider, the actual load reduction provided by the PRD Provider during a Performance Assessment Interval, determined in accordance with RAA, Schedule 6.1.N and the PJM Manuals;

for each Energy Efficiency Resource, the load reduction quantity approved by PJM subsequent to the pre-delivery year submittal of a post-installation measurement and verification report; and

for each Qualified Transmission Upgrade, the megawatt quantity cleared by such Qualified Transmission Upgrade if it is in service during the Performance Assessment Interval, and zero if it is not in service during such Performance Assessment Interval.

Such calculation shall encompass all resources and Price Responsive Demand located in the area defined by the Emergency Action; provided, however, that Performance Shortfall shall be calculated for external Generation Capacity Resources for any Performance Assessment Interval for which performance by such external resource would have helped resolve the declared Emergency Action that was the subject to the Performance Assessment Hour; provided, however, that for any Delivery Year up to and including the 2019/2020 Delivery Year, Performance Shortfall shall be calculated for external Generation Capacity Resources only during Performance Assessment Hours which the Emergency Action was declared for the entire PJM Region. At the start of the Delivery Year, PJM will inform the Capacity Market Seller of an external resource as to which Locational Deliverability Area it has been assigned. For purposes of this provision, Qualifying Transmission Upgrades shall be deemed to be located in the Locational Deliverability Area into which such upgrade increased the Capacity Emergency Transfer Limit, and a Qualifying Transmission Upgrade shall be included in calculations of Expected Performance and Actual Performance only if, and to the extent that, the declared Emergency Action encompasses the Locational Deliverability Area into which such upgrade increased the Capacity Emergency Transfer Limit. The Performance Shortfall shall be calculated for each Performance Assessment Interval, and any committed Capacity Resource for which the above calculation produces a negative number for a Performance Assessment Interval shall not have a Performance Shortfall for such Performance Assessment Interval. For any resource that is partially committed as a Capacity Performance Resource and partially committed as a Base Capacity Resource, the performance of such resource during a Performance Assessment Interval shall first be attributed to the resource's Capacity Performance Resource obligation; any performance by such resource in excess of the Capacity Performance Resource's Expected Performance shall be attributed to the resource's Base Capacity Resource obligation.

(d) Notwithstanding subsection (c) above, a Capacity Resource or Locational UCAP of a Capacity Market Seller or Locational UCAP Seller shall not be considered in the calculation of a Performance Shortfall for a Performance Assessment Interval to the extent such Capacity Resource or Locational UCAP was unavailable during such Performance Assessment Interval solely because the resource on which such Capacity Resource or Locational UCAP is based was on a Generator Planned Outage or Generator Maintenance Outage approved by the Office of the Interconnection, or was not scheduled to operate by the Office of the Interconnection, or was online but was scheduled down, by the Office of the Interconnection, based on a determination by the Office of the Interconnection that such scheduling action was appropriate to the security-constrained economic dispatch of the PJM Region. Such a resource shall be considered in the calculation of a Performance Shortfall if it otherwise was needed and would have been scheduled by the Office of the Interconnection to perform, but was not scheduled to operate, or was scheduled down, solely due to: (i) any operating parameter limitations submitted in the resource's offer, or (ii) the seller's submission of a market-based offer higher than its cost-based. In addition, notwithstanding subsection (c) above, a Price Responsive Demand registration shall not be considered in the calculation of a Performance Shortfall or Bonus Performance for a

Performance Assessment Interval when the PRD Curve associated with such registration in the PJM Real-time Energy Market indicates a price point where no demand reduction is expected at the real-time LMP recorded during the Performance Assessment Interval.

(e) Subject to the Non-Performance Charge Limit specified in subsection (f) hereof, each Capacity Market Seller and Locational UCAP Seller shall be assessed a Non-Performance Charge for each of its Capacity Resources or Locational UCAP that has a Performance Shortfall for a Performance Assessment Interval based on the following formula, applied to each such resource:

$$\text{Non-Performance Charge} = \text{Performance Shortfall} * \text{Non-Performance Charge Rate}$$

Where

For Capacity Performance Resources and Seasonal Capacity Performance Resources, the Non-Performance Charge Rate = (Net Cost of New Entry (stated in terms of installed capacity) for the LDA and Delivery Year for which such calculation is performed * (the number of days in the Delivery Year / 30) / (the number of Real-Time Settlement Intervals in an hour).

and for Base Capacity Resources the Non-Performance Charge Rate = (Weighted Average Resource Clearing Price applicable to the resource * (the number of days in the Delivery Year / 30) (the number of Real-Time Settlement Intervals in an hour)

(f) The Non-Performance Charges for each Capacity Performance Resource (including Locational UCAP from such a resource) and each PRD Provider for a Delivery Year shall not exceed a Non-Performance Charge Limit equal to 1.5 times the Net Cost of New Entry times the megawatts of Unforced Capacity committed by such resource or such PRD Provider times the number of days in the Delivery Year. All references to Net Cost of New Entry in this section 10A shall be to the Net Cost of New Entry for the LDA and Delivery Year for which the calculation is performed. The total Non-Performance Charges for each Base Capacity Resource (including Locational UCAP from such a resource) for a Delivery Year shall not exceed a Non-Performance Charge Limit equal to the total payments due such Capacity Resource or Locational UCAP under Tariff, Attachment DD, section 5.14 for such Delivery Year. The Non-Performance Charges for each Seasonal Capacity Performance Resource for a Delivery Year shall not exceed a Non-Performance Charge Limit equal to 1.5 times the Net Cost of New Entry times the megawatts of Unforced Capacity committed by such resource times the number of days in the season applicable to such resource.

(g) Revenues collected from assessment of Non-Performance Charges for a Performance Assessment Interval shall be distributed to each Market Participant, whether or not such Market Participant committed a Capacity Resource or Locational UCAP for a Performance Assessment Interval, that provided energy or load reductions above the levels expected for such resource during such interval. For purposes of this provision, the performance expected of a resource, and the revenue distribution payment, if any, for a resource, shall be determined in accordance with the following formulae:

Formula 1: Market Participant Bonus Performance = Actual Performance – Expected Performance

and

Formula 2: Performance Payment = (Market Participant Bonus Performance / All Market Participants Bonus Performance) * Non-Performance Charge Revenues.

Where the result of Formula 1 is a positive number and where:

Actual Performance is as defined in subsection (c), provided, however, that Actual Performance for purposes of this calculation shall not exceed the megawatt level at which such resource was scheduled by the Office of the Interconnection during the Performance Assessment Intervals; and provided further that Actual Performance for a Market Participant that imports energy into the PJM Region during such Performance Assessment Interval shall be the net import, if any, from all interchange transactions scheduled by such Market Participant during such Performance Assessment Interval;

Expected Performance is as defined in subsection (c), provided, however, that for purposes of this calculation, Expected Performance shall be zero for any resource that is not a Capacity Resource or Locational UCAP, or that is a Capacity Resource or Locational UCAP, but for which the Performance Assessment Interval occurs outside the resource's capacity obligation period, including, without limitation, a Base Capacity Demand Resource providing demand response during non-summer months; and

All Market Participants Bonus Performance is the sum of the results of calculating Formula 1 of this subsection (g) for all Market Participants that have Bonus Performance during such Performance Assessment Interval.

(h) The provisions of this section 10A shall apply during the 2016/2017 Delivery Year, provided that:

- (i) Non-Performance Charges shall be determined solely for and assessed solely on, Capacity Performance Resources committed for such Delivery Year;
- (ii) The Non-Performance Charge shall be 0.5 times the Non-Performance Charge calculated under subsection (e) hereof; and
- (iii) The Non-Performance Charge Limit for a Delivery Year shall be 0.75 times Net Cost of New Entry times the megawatts of Unforced Capacity committed by such resource times 365.

(i) The provisions of this section 10A shall apply during the 2017/2018 Delivery Year, provided that:

- (i) Non-Performance Charges shall be determined solely for, and assessed solely on, Capacity Performance Resources committed for such Delivery Year;
- (ii) The Non-Performance Charge shall be 0.6 times the Non-Performance Charge calculated under subsection (e) hereof; and
- (iii) The Non-Performance Charge Limit for a Delivery Year shall be 0.9 times Net Cost of New Entry times the megawatts of Unforced Capacity committed by such resource times 365.

(j) The Office of the Interconnection shall bill charges and credits for performance during Performance Assessment Intervals within three calendar months after the calendar month that included such Performance Assessment Intervals, provided, for any Non-Performance Charge, the amount shall be divided by the number of months remaining in the Delivery Year for which no invoice has been issued, and the resulting amount shall be invoiced each such remaining month in the Delivery Year. ~~Notwithstanding, or during the first month of the next Delivery Year if there are less than six months do not remaining in the current Delivery Year for which no invoice has been issued, the Office of the Interconnection may, with prior notice to PJM Members, allocate in equal amounts any Non-Performance Charge in the remaining monthly bills for the current Delivery Year plus up to six monthly bills into the following Delivery Year (but in no event shall the total Non-Performance Charge be divided in more than nine monthly bills). Provided, for any Non-Performance Charges associated with Performance Assessment Intervals from December 23, 2022 and December 24, 2022, a Capacity Market Seller may elect, by providing notice to the Office of Interconnection by March 17, 2023, to divide the total amount of Non-Performance Charges by either (i) the number of remaining monthly bills in the current Delivery Year (i.e., 3 bills) or (ii) the number of remaining monthly bills in the current Delivery Year plus six additional monthly bills into the following Delivery Year (i.e., 9 bills); provided further, however, that for an election under subsection (ii) above, the monthly Non-Performance Charge shall be levelized to include interest for the six month period following the current Delivery Year, such interest amount being determined at the electric interest rate established by the Federal Energy Regulatory Commission at the time of such election. All interest collected in accordance with this provision shall be allocated to the total pool of bonus performance payments and distributed in accordance with Tariff, Attachment DD, section 10A(g).~~

Attachment B

Revisions to the
PJM Open Access Transmission Tariff

(Clean Format)

10A. CHARGES FOR NON-PERFORMANCE AND CREDITS FOR PERFORMANCE

(a) For the 2018/2019 Delivery Year and any subsequent Delivery Year (and for certain purposes for the 2016/2017 and 2017/2018 Delivery Years as provided in subsections (h) and (i) hereof), each Capacity Market Seller that commits a Capacity Resource for a Delivery Year (whether through an RPM Auction, a bilateral transaction, or as Locational UCAP), each Locational UCAP Seller that sells Locational UCAP from a Capacity Resource for a Delivery Year, and for the 2022/2023 Delivery Year and subsequent Delivery Years each PRD Provider that commits Price Responsive Demand for a Delivery Year, shall be charged to the extent the performance of each of its committed Capacity Resources or Price Responsive Demand during all or any part of a clock-hour when an Emergency Action is in effect falls short of the expected performance of such resources (as determined herein) and the revenue from such charges shall be provided to Market Participants with generation, demand response resources, or Price Responsive Demand that perform during such hour in excess of the level expected based on commitments (if any) of such resources.

(b) Performance shall be measured for purposes of this assessment during each Performance Assessment Interval.

(c) For each Performance Assessment Interval, the Office of the Interconnection shall determine whether, and the extent to which, the actual performance of each Capacity Resource and Locational UCAP has fallen short of the performance expected of such committed Capacity Resource, and the magnitude of any such shortfall, based on the following formula:

$$\text{Performance Shortfall} = \text{Expected Performance} - \text{Actual Performance}$$

Where the result of such formula is a positive number and where:
Expected Performance =

for Generation Capacity Resources (including external Generation Capacity Resources for any Performance Assessment Interval for which performance by such external resource would have helped resolve a declared Emergency Action; provided, however, that for any Delivery Year up to and including the 2019/2020 Delivery Year, performance of external Generation Capacity Resources shall be assessed only during Performance Assessment Hours for Emergency Actions declared for the entire PJM Region) and Capacity Storage Resources: [(Resource Committed Capacity * the Balancing Ratio)];

where

Resource Committed Capacity = the total megawatts of Unforced Capacity of the Capacity Resource committed by such Capacity Market Seller or Locational UCAP Seller; and

The Balancing Ratio = (All Actual Generation Performance, Storage Resource Performance, Net Energy Imports, Price Responsive Demand Bonus Performance

effective with the 2022/2023 Delivery Year, and Demand Response Bonus Performance) / (All Committed Generation and Storage Capacity); provided, however, that Net Energy Imports shall be included in the calculation of the Balancing Ratio only for any Performance Assessment Interval for which performance by any external Generation Capacity Resource would have helped resolve the Emergency Action that was the subject to the Performance Assessment Hour; and provided further that for any Delivery Year up to and including the 2019/2020 Delivery Year, Net Energy Imports shall be included in the calculation of the Balancing Ratio only for any Performance Assessment Hour for which the Emergency Action was declared for the entire PJM Region; and provided further that the Balancing Ratio shall not exceed a value of 1.0.

for purposes of which

All Committed Generation and Storage Capacity = the total megawatts of Unforced Capacity of all Generation Capacity Resources (including external Generation Capacity Resources for any Performance Assessment Interval for which performance by such external resource would have helped resolve the declared Emergency Action that was the subject to the Performance Assessment Hour; provided, however, that for any Delivery Year up to and including the 2019/2020 Delivery Year, performance of external Generation Capacity Resources shall be assessed only during Performance Assessment Hours for Emergency Actions declared for the entire PJM Region) and all Capacity Storage Resources committed by all Capacity Market Sellers, FRR Entities, Locational UCAP Sellers;

All Actual Generation Performance and Storage Resource Performance = the total amount of Actual Performance for all generation resources (including external Generation Capacity Resources for any Performance Assessment Interval for which performance by such external resource would have helped resolve the declared Emergency Action that was the subject to the Performance Assessment Hour; provided, however, that for any Delivery Year up to and including the 2019/2020 Delivery Year, performance of external Generation Capacity Resources shall be assessed only during Performance Assessment Hours for Emergency Actions declared for the entire PJM Region) and storage resources during the interval;

Net Energy Imports = the sum of interchange transactions importing energy into PJM (not including those associated with external Generation Capacity Resources and therefore included in All Actual Generation Performance) minus the sum of interchange transactions exporting energy out of PJM, but not less than zero;

Demand Response Bonus Performance = the sum of Bonus performance provided by Demand Response resources as calculated in (g) below;

Price Responsive Demand Bonus Performance = the sum of Bonus performance

provided by Price Responsive Demand as calculated in (g) below;

and for Demand Resources, Energy Efficiency Resources, and Qualifying Transmission Upgrades: Resource Committed Capacity;

where

Resource Committed Capacity = the total megawatts of capacity committed from such Capacity Resource committed capacity without making any adjustment for the Forecast Pool Requirement

and for PRD Provider: Price Responsive Demand Committed

where

Price Responsive Demand Committed = the Nominal PRD Value committed by the PRD Provider in the area defined by the Performance Assessment Interval, adjusted to account for any PRD registrations in such area that were not subject to compliance measurement.

and

Actual Performance =

for each generation resource, the metered output of energy delivered to PJM by such resource plus the resource's real-time reserve or regulation assignment, if any, during the Performance Assessment Interval;

for each storage resource, the metered output of energy delivered to PJM by such resource plus the resource's real-time reserve or regulation assignment, if any, during the Performance Assessment Interval;

for each Demand Resource, the demand response provided to PJM by such resource, plus such resource's real-time reserve or regulation assignment, if any, during the Performance Assessment Interval, as established through the PJM demand response settlement procedure consistent with the standards specified in RAA, Schedule 6;

for each PRD Provider, the actual load reduction provided by the PRD Provider during a Performance Assessment Interval, determined in accordance with RAA, Schedule 6.1.N and the PJM Manuals;

for each Energy Efficiency Resource, the load reduction quantity approved by PJM subsequent to the pre-delivery year submittal of a post-installation measurement and verification report; and

for each Qualified Transmission Upgrade, the megawatt quantity cleared by such Qualified Transmission Upgrade if it is in service during the Performance Assessment Interval, and zero if it is not in service during such Performance Assessment Interval.

Such calculation shall encompass all resources and Price Responsive Demand located in the area defined by the Emergency Action; provided, however, that Performance Shortfall shall be calculated for external Generation Capacity Resources for any Performance Assessment Interval for which performance by such external resource would have helped resolve the declared Emergency Action that was the subject to the Performance Assessment Hour; provided, however, that for any Delivery Year up to and including the 2019/2020 Delivery Year, Performance Shortfall shall be calculated for external Generation Capacity Resources only during Performance Assessment Hours which the Emergency Action was declared for the entire PJM Region. At the start of the Delivery Year, PJM will inform the Capacity Market Seller of an external resource as to which Locational Deliverability Area it has been assigned. For purposes of this provision, Qualifying Transmission Upgrades shall be deemed to be located in the Locational Deliverability Area into which such upgrade increased the Capacity Emergency Transfer Limit, and a Qualifying Transmission Upgrade shall be included in calculations of Expected Performance and Actual Performance only if, and to the extent that, the declared Emergency Action encompasses the Locational Deliverability Area into which such upgrade increased the Capacity Emergency Transfer Limit. The Performance Shortfall shall be calculated for each Performance Assessment Interval, and any committed Capacity Resource for which the above calculation produces a negative number for a Performance Assessment Interval shall not have a Performance Shortfall for such Performance Assessment Interval. For any resource that is partially committed as a Capacity Performance Resource and partially committed as a Base Capacity Resource, the performance of such resource during a Performance Assessment Interval shall first be attributed to the resource's Capacity Performance Resource obligation; any performance by such resource in excess of the Capacity Performance Resource's Expected Performance shall be attributed to the resource's Base Capacity Resource obligation.

(d) Notwithstanding subsection (c) above, a Capacity Resource or Locational UCAP of a Capacity Market Seller or Locational UCAP Seller shall not be considered in the calculation of a Performance Shortfall for a Performance Assessment Interval to the extent such Capacity Resource or Locational UCAP was unavailable during such Performance Assessment Interval solely because the resource on which such Capacity Resource or Locational UCAP is based was on a Generator Planned Outage or Generator Maintenance Outage approved by the Office of the Interconnection, or was not scheduled to operate by the Office of the Interconnection, or was online but was scheduled down, by the Office of the Interconnection, based on a determination by the Office of the Interconnection that such scheduling action was appropriate to the security-constrained economic dispatch of the PJM Region. Such a resource shall be considered in the calculation of a Performance Shortfall if it otherwise was needed and would have been scheduled by the Office of the Interconnection to perform, but was not scheduled to operate, or was scheduled down, solely due to: (i) any operating parameter limitations submitted in the resource's offer, or (ii) the seller's submission of a market-based offer higher than its cost-based. In addition, notwithstanding subsection (c) above, a Price Responsive Demand registration shall not be considered in the calculation of a Performance Shortfall or Bonus Performance for a

Performance Assessment Interval when the PRD Curve associated with such registration in the PJM Real-time Energy Market indicates a price point where no demand reduction is expected at the real-time LMP recorded during the Performance Assessment Interval.

(e) Subject to the Non-Performance Charge Limit specified in subsection (f) hereof, each Capacity Market Seller and Locational UCAP Seller shall be assessed a Non-Performance Charge for each of its Capacity Resources or Locational UCAP that has a Performance Shortfall for a Performance Assessment Interval based on the following formula, applied to each such resource:

$$\text{Non-Performance Charge} = \text{Performance Shortfall} * \text{Non-Performance Charge Rate}$$

Where

For Capacity Performance Resources and Seasonal Capacity Performance Resources, the Non-Performance Charge Rate = (Net Cost of New Entry (stated in terms of installed capacity) for the LDA and Delivery Year for which such calculation is performed * (the number of days in the Delivery Year / 30) / (the number of Real-Time Settlement Intervals in an hour).

and for Base Capacity Resources the Non-Performance Charge Rate = (Weighted Average Resource Clearing Price applicable to the resource * (the number of days in the Delivery Year / 30) (the number of Real-Time Settlement Intervals in an hour)

(f) The Non-Performance Charges for each Capacity Performance Resource (including Locational UCAP from such a resource) and each PRD Provider for a Delivery Year shall not exceed a Non-Performance Charge Limit equal to 1.5 times the Net Cost of New Entry times the megawatts of Unforced Capacity committed by such resource or such PRD Provider times the number of days in the Delivery Year. All references to Net Cost of New Entry in this section 10A shall be to the Net Cost of New Entry for the LDA and Delivery Year for which the calculation is performed. The total Non-Performance Charges for each Base Capacity Resource (including Locational UCAP from such a resource) for a Delivery Year shall not exceed a Non-Performance Charge Limit equal to the total payments due such Capacity Resource or Locational UCAP under Tariff, Attachment DD, section 5.14 for such Delivery Year. The Non-Performance Charges for each Seasonal Capacity Performance Resource for a Delivery Year shall not exceed a Non-Performance Charge Limit equal to 1.5 times the Net Cost of New Entry times the megawatts of Unforced Capacity committed by such resource times the number of days in the season applicable to such resource.

(g) Revenues collected from assessment of Non-Performance Charges for a Performance Assessment Interval shall be distributed to each Market Participant, whether or not such Market Participant committed a Capacity Resource or Locational UCAP for a Performance Assessment Interval, that provided energy or load reductions above the levels expected for such resource during such interval. For purposes of this provision, the performance expected of a resource, and the revenue distribution payment, if any, for a resource, shall be determined in accordance with the following formulae:

Formula 1: Market Participant Bonus Performance = Actual Performance – Expected Performance

and

Formula 2: Performance Payment = (Market Participant Bonus Performance / All Market Participants Bonus Performance) * Non-Performance Charge Revenues.

Where the result of Formula 1 is a positive number and where:

Actual Performance is as defined in subsection (c), provided, however, that Actual Performance for purposes of this calculation shall not exceed the megawatt level at which such resource was scheduled by the Office of the Interconnection during the Performance Assessment Intervals; and provided further that Actual Performance for a Market Participant that imports energy into the PJM Region during such Performance Assessment Interval shall be the net import, if any, from all interchange transactions scheduled by such Market Participant during such Performance Assessment Interval;

Expected Performance is as defined in subsection (c), provided, however, that for purposes of this calculation, Expected Performance shall be zero for any resource that is not a Capacity Resource or Locational UCAP, or that is a Capacity Resource or Locational UCAP, but for which the Performance Assessment Interval occurs outside the resource's capacity obligation period, including, without limitation, a Base Capacity Demand Resource providing demand response during non-summer months; and

All Market Participants Bonus Performance is the sum of the results of calculating Formula 1 of this subsection (g) for all Market Participants that have Bonus Performance during such Performance Assessment Interval.

(h) The provisions of this section 10A shall apply during the 2016/2017 Delivery Year, provided that:

- (i) Non-Performance Charges shall be determined solely for and assessed solely on, Capacity Performance Resources committed for such Delivery Year;
- (ii) The Non-Performance Charge shall be 0.5 times the Non-Performance Charge calculated under subsection (e) hereof; and
- (iii) The Non-Performance Charge Limit for a Delivery Year shall be 0.75 times Net Cost of New Entry times the megawatts of Unforced Capacity committed by such resource times 365.

(i) The provisions of this section 10A shall apply during the 2017/2018 Delivery Year, provided that:

- (i) Non-Performance Charges shall be determined solely for, and assessed solely on, Capacity Performance Resources committed for such Delivery Year;
- (ii) The Non-Performance Charge shall be 0.6 times the Non-Performance Charge calculated under subsection (e) hereof; and
- (iii) The Non-Performance Charge Limit for a Delivery Year shall be 0.9 times Net Cost of New Entry times the megawatts of Unforced Capacity committed by such resource times 365.

(j) The Office of the Interconnection shall bill charges and credits for performance during Performance Assessment Intervals within three calendar months after the calendar month that included such Performance Assessment Intervals, provided, for any Non-Performance Charge, the amount shall be divided by the number of months remaining in the Delivery Year for which no invoice has been issued, and the resulting amount shall be invoiced each such remaining month in the Delivery Year. Notwithstanding, if there are less than six months remaining in the current Delivery Year for which no invoice has been issued, the Office of the Interconnection may, with prior notice to PJM Members, allocate in equal amounts any Non-Performance Charge in the remaining monthly bills for the current Delivery Year plus up to six monthly bills into the following Delivery Year (but in no event shall the total Non-Performance Charge be divided in more than nine monthly bills). Provided, for any Non-Performance Charges associated with Performance Assessment Intervals from December 23, 2022 and December 24, 2022, a Capacity Market Seller may elect, by providing notice to the Office of Interconnection by March 17, 2023, to divide the total amount of Non-Performance Charges by either (i) the number of remaining monthly bills in the current Delivery Year (i.e., 3 bills) or (ii) the number of remaining monthly bills in the current Delivery Year plus six additional monthly bills into the following Delivery Year (i.e., 9 bills); provided further, however, that for an election under subsection (ii) above, the monthly Non-Performance Charge shall be levelized to include interest for the six month period following the current Delivery Year, such interest amount being determined at the electric interest rate established by the Federal Energy Regulatory Commission at the time of such election. All interest collected in accordance with this provision shall be allocated to the total pool of bonus performance payments and distributed in accordance with Tariff, Attachment DD, section 10A(g).