

Attachment A

PJM Interconnection, L.L.C. Order Nos. 2023 and 2023-A Compliance Filing Summary Table

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III.A. Reforms to Implement a First-Ready, First-Served Cluster Study Process			
	Reforms	Proposed Deviation Standard	Justification
1.	Interconnection Information Access	Independent entity variation ¹	<p>In conjunction with the planning models PJM makes publicly available and the study reports available on the PJM website, Queue Scope permits Project Developers to identify favorable locations to interconnect, run their own studies using the models, and estimate costs of the facilities required to enable the potential interconnection. This degree of functionality substantially complies with Final Rule’s requirement for transmission providers to provide a “heatmap.”</p> <p>Queue Scope provides users with two interfaces, tabular and geospatial, and allows Project Developers to screen potential points of interconnection and assess grid impacts based on a given amount of megawatt (“MW”) injection or withdrawal at a given Point of Interconnection.</p> <p>Queue Scope’s dataset results are created using a high-level DC flowgate Generator Deliverability Analysis across the PJM Region.</p> <ul style="list-style-type: none"> • Includes a selection of over 6,000 to 7,000 Point of Interconnection buses at 100 kilovolts and above on the PJM Transmission System. • Provides users with feedback on worst-case flowgate loading on the PJM Transmission System in the vicinity of those points of interconnection.

¹ Application of the independent entity standard requires a showing that variations from a Commission order or final rule are “(1) . . . just, reasonable, and not unduly discriminatory or preferential; and (2) accomplish[] the purposes of the order from which a variation is sought.” *PJM Interconnection, L.L.C.*, 181 FERC ¶ 61,162, at P 2 (2022), *reh’g denied*, 184 FERC ¶ 61,006 (2023), *appeals pending*, Petition for Review, *Hecate Energy LLC v. FERC*, Nos. 23-1089, et al. (D.C. Cir. Mar. 31, 2023); *see also Midcontinent Indep. Sys. Operator, Inc.*, 185 FERC ¶ 61,231, at P 9 (2023); *ISO New England, Inc.*, 170 FERC ¶ 61,218, at P 26 (2020).

			<ul style="list-style-type: none"> • Users can select different case types (“RTEP vs. Queue/Cycle”) and different case years to compare results. • Provides the available MW on the Transmission System for the facility based on the applicable facility rating and loading and will provide planning case information intended to be indicative of expected operating conditions under certain conditions. <p>PJM makes publicly available its planning models and study reports on the PJM website.</p> <p>PJM will update the Cycle study datasets reflected in Queue Scope on a routine basis as Phases I and II of each Cycle are completed, and will replace previous results with updated case results.</p> <p>PJM began developing its Queue Scope tool before the Commission issued the Final Rule and has already implemented the tool; thus offering advantages over the Final Rule’s requirements.</p>
2.	Cluster Study Process		
a.	Need for reform and interconnection study procedures	Compliant	PJM has already adopted a cluster/Cycle study process. The PJM Tariff complies with this aspect of the Final Rule.
b.	Defined terms in the <i>pro forma</i> LGIP and LGIA	Independent entity variation	<p>The definition of Stand Alone Network Upgrade in the IPRTF Tariff substantially complies with the Final Rule as modified by Order No. 2023-A, as it indicates that a Stand Alone Network Upgrade is an upgrade that can be constructed without affecting the Transmission System’s day-to-day operations, and that PJM and Project Developer must agree as to what constitutes a Stand Alone Network Upgrade.</p> <p>PJM’s <i>pro forma</i> Generator Interconnection Agreement (“GIA”), Schedule L, section 11.2.3.6, provides that if more than one Project Developer has been assigned cost responsibility for a Stand Alone Network Upgrade and desires to exercise the Option to Build, PJM will determine how to allocate among them unless the Project Developers reach agreement among themselves on how to proceed.</p>

			<p>Consistent with the Final Rule, this avoids litigation about construction responsibility and obligations.</p> <p>PJM does not need to revise its definition of Material Modification. PJM’s IPRTF Tariff does not permit for Material Modifications that would affect Interconnection Requests within the same Cycle. The IPRTF Tariff only permits limited changes to an Interconnection Request at Decision Points I and II, which are not expected to have a material adverse impact on Interconnection Requests within the same cluster; thus, consistent with the Final Rule’s intent.</p>
c.	Definitive Points of Interconnection	Independent entity variation	<p>PJM’s Tariff substantially complies with the requirement that an interconnection customer select a definitive Point of Interconnection to be studied when executing a cluster study agreement with variances that are appropriate for the PJM Region and PJM’s Cycle study process.</p> <p>The IPRTF Tariff requires designation of the Point of Interconnection by the Project Developer at the same time as required by Final Rule.</p> <p>IPRTF Tariff permits flexibility for Project Developers to make limited revisions to its Point of Interconnection at Decision Point I, consistent with the goals of the Final Rule.</p>
d.	Cluster Request Window and Customer Engagement Window	Independent entity variation	<p>The IPRTF Tariff has a rolling application period for Interconnection Requests.</p> <p>The time periods in PJM’s process resulted from the IPRTF stakeholder process and was overwhelmingly approved by stakeholders and was part of the package of reforms accepted by the Commission.</p> <p>PJM announces the deadline for a Cycle 180 days prior to closing the application period, which provides Project Developers with sufficient time to develop and check the accuracy of their applications. The approach is consistent with and even superior to the Final Rule, as it allows greater time for the submission of an Interconnection Request.</p> <p>During the subsequent 90-day period, PJM reviews submissions and identifies deficiencies in Interconnection Requests to allow Project Developers to address any deficiencies.</p>

			<p>The IPRTF Tariff establishes a gate between Cycles such that the application deadline for a new Cycle is not announced until the start of Phase II of the previous Cycle. This gating mechanism provides greater cost certainty than use of annual cluster window, and better meets the Final Rule’s goals of providing an efficient, transparent and non-discriminatory interconnection process.</p> <p>The IPRTF Tariff substantially complies with and even exceeds the requirements to allow Project Developers 10 Business Days to correct identified deficiencies in their Interconnection Requests.</p> <p>PJM will use Reasonable Efforts to inform a Project Developer of any deficiencies in its Interconnection Request within 15 Business Days after the Application Deadline, with Project Developer then having 10 Business Days to respond and correct deficiencies.</p> <p>PJM will then use Reasonable Efforts to review responses within 15 Business Days, and then will either validate or reject the application.</p> <p>PJM seeks an independent entity variation to retain its deficiency review period-as noted above, the 180-day notice period provides Project Developers with ample time to develop and submit a valid Interconnection Request, and an extended deficiency review period is not necessary.</p>
e.	Scoping Meetings	Independent entity variation	<p>The IPRTF Tariff provides that PJM may hold scoping meetings for projects in each Transmission Owner zone, which can be waived by Applicants or Transmission Owners.</p> <p>This approach generally complies with, and improves, the Final Rule’s requirements, at least in PJM. Holding meetings on a Regional Transmission Organization (“RTO”)-wide basis would be unwieldy, whereas the PJM approach allows scoping meetings to be held and Project Developers to direct questions to PJM and the relevant Transmission Owners efficiently. Further, it is appropriate to permit meetings to be waived where all information needed for the initial study has been obtained through the initial application or email communications.</p> <p>The IPRTF Tariff contains comprehensive confidentiality provisions that cover information related to Interconnection</p>

			Requests equivalent to the protections that would be provided by the non-disclosure agreements required by the Final Rule. Given the number of Project Developers that are expected to submit requests in a given Cycle, it would be burdensome for PJM to have to process hundreds of superfluous non-disclosure agreements for the sole purpose of scoping meetings.
f.	Posting of Metrics for Cluster Study Processing Time and Restudy Processing Time	Independent entity variation	Tariff, Part VIII, Subpart E, section 431 substantially complies with the requirements to post metrics for cluster study and cluster restudy processing times, but uses different timeframes and terminology than set forth in the Final Rule.
g.	Interconnection Request Evaluation Process	Independent entity variation	<p>Consistent with the Final Rule, Project Developers within a given Cycle have the same priority, and Project Developers in an earlier-in-time Cycle have a higher priority than Project Developers in a later-in-time Cycle.</p> <p>The IPRTF Tariff generally complies with the requirement that transmission providers adopt language providing that moving a Point of Interconnection will result in a loss of queue position if it is deemed a Material Modification by the transmission provider. While it allows limited changes to the Point of Interconnection at Phase I, consistent with the Final Rule, the IPRTF Tariff provides Project Developers with clear guidance as to what types of Point of Interconnection changes are permissible as opposed to what types require a new Interconnection Request and when such changes may be made. These provisions promote a more efficient use of limited engineering resources and provide a timelier study process, consistent with the Final Rule’s objectives.</p>
h.	Fewer than Three Year Extension to Commercial Operating Date	Independent entity variation	<p>Under the IPRTF Tariff, upon executing a GIA, Project Developers have a unilateral right to extend milestone dates by one year for any reason, and still may extend milestone dates in the event of delays it did not cause or could not have remedies through the exercise of due diligence.</p> <p>The Commission authorized the elimination of suspension in the IPRTF Order under the independent entity variation standard and recognized the “specific conditions” PJM faced in permitting Project Developers to extend their</p>

			<p>deadlines for up to three years, potentially causing delay and uncertainty for lower-queued generators.</p> <p>The Commission should again grant PJM an independent entity variation and permit PJM to maintain the IPRTF Tariff's unilateral one-year extension of milestones and elimination of three-year suspension period.</p>
i.	Cluster Study Provisions	Independent entity variation	<p>PJM's Commission-approved three-stage System Impact Study process under which Phase I is to be completed within 120 days of the start of Phase I, the Phase II System Impact Study is to be completed within 180 days of the start of Phase II, and Phase III System Impact Study is to be completed within 180 days of the start of Phase III.</p> <p>Although PJM's three-part study phase structure differs from the Final Rule's 150-day schedule, it is a sequenced study process that is generally consistent with the Final Rule. Further, PJM's study phase structure facilitates the efficient use of PJM's resources and better allows Project Developers to assess the viability of their projects at set stages, and make go or no go decisions at those times.</p> <p>PJM's sequencing of study types as projects move through the phases allows for the efficient use of scarce engineering resources to screen large numbers of projects and advance the projects most likely to succeed. The IPRTF Tariff's study and phase timeframes reflect the expected time to complete each phase based on PJM's experience and the particular circumstances it faces.</p>
j.	Restudies Triggered by Higher - or Equally Queued Generating Facility	Independent entity variation	<p>The IPRTF Tariff substantially complies with the Final Rule's directive that transmission providers revise their tariff to state that restudies can be triggered by higher or equally queued projects withdrawing from the queue or a permissible modification to a higher or equally queued project.</p> <p>PJM's three phase study process, coupled with three Decision Points, accounts for withdrawals and allows certain permissible modifications to occur on a structured basis.</p>
k.	Timing of LGIA Tender, Execution, and Filing	Independent entity variation	<p>The IPRTF Tariff generally complies with the Final Rule's requirements for transmission providers to allow an interconnection customer to invoke a 60-day negotiation period for the execution of a Large Generator</p>

			<p>Interconnection Agreement (“LGIA”), demonstrated Site Control and provide Security.</p> <p>The IPRTF Tariff’s 60-day Final Agreement Negotiation Phase runs concurrently with Decision Point III.</p> <p>The IPRTF Tariff permits Project Developers to direct that GIAs be filed on an unexecuted basis if the parties reach an impasse in negotiations.</p> <p>Similar to the Final Rule’s provisions, the IPRTF Tariff requires Project Developers to meet milestones, such as fuel supply contracts, within 60 days of PJM providing the Phase III System Impact Study.</p>
3.	Allocation of Cluster Study Costs	Independent entity variation	<p>PJM currently allocates study costs solely on a per capita basis, which is appropriate for large RTOs and should be permitted as an independent entity variation.</p> <p>Significant initialization efforts and steps are required to study any project, which makes a per capita allocation just and reasonable. Per capita cost allocation does not lead to unfair, unreasonable or unduly discriminatory cost allocations, and as the Commission has recognized, there is not necessarily a linear relationship between the size of a project and the time and costs associated with studying a project. Moreover, allocating costs on a per-MW basis will require additional administration for little benefit.</p>
4.	Allocation of Cluster Study Network Upgrade Costs	Independent entity variation	<p>The IPRTF Tariff substantially complies with the Final Order’s requirements. Project Developers are required to pay 100 percent of the Network Upgrade costs of the Interconnection Facilities necessary to accommodate its Interconnection Request. The IPRTF Tariff includes a form of Network Upgrade Cost Responsibility Agreement, which allows for the allocation of Common Use Upgrade costs among Project Developers.</p> <p>Under the IPRTF Tariff, PJM will use the proportional impact method to determine whether one or more Project Developers are subject to cost allocation for a Network Upgrade. Only one Project Developer can construct a Stand Alone Network Upgrade pursuant to the Option to Build.</p> <p>If the Commission were to require PJM to provide the detailed mechanics (contained in PJM Manuals) of how costs will be allocated, PJM would need to submit a Federal</p>

			Power Act section 205 filing every time the implementation details changed, which would be inefficient and burdensome.
5.	Increased Financial Commitments and Readiness Requirements		
a.	Increased Study Deposits	Independent entity variation	<p>The IPRTF Tariff’s study provisions substantially comply with the Final Rule. While the study deposit amounts differ from that set forth in the Final Rule, like the Final Rule, PJM’s process consists of a tiered study deposit amount based on the MW-size of an Interconnection Request. This process represents a reasonable proxy for the cost of all three studies and the specific tiers and dollar amounts were part of the comprehensive stakeholder negotiated solutions package.</p> <p>The study deposit is a tiered, one-time deposit to be provided upon entry to the cluster, subject to true up to actual study costs, which protects all parties from any under- or over-recovery of costs.</p> <p>PJM requires that study deposits be paid by wire transfer, and the Readiness Deposits to be paid by wire transfer (cash) or letter of credit. This approach has proven workable, and provides Project Developers with clear instructions and sufficient opportunity to submit deposits within the require timeframes.</p>
b.	Demonstration of Site Control	Independent entity variation	<p>The IPRTF Tariff substantially complies with and achieves the same goal as the Final Rule.</p> <p>The IPRTF Tariff contains detailed Site Control provisions and were negotiated through the IPRTF stakeholder process and accepted in the IPRTF Order. Like the Final Rule, the IPRTF Tariff’s Site Control provisions require a strong showing of exclusive access to and control of land that can be met through a deed, lease, option or other document demonstrating the Project Developer’s right to possess, occupy and control the Site. The IPRTF Tariff also dictates that when there are multiple Project Developers on the same site behind the same Point of Interconnection, Project Developers must control adequate land for all their Generating Facilities. The IPRTF Tariff includes specific provisions for Project Developers using Sites owned or physically controlled by a federal or state entity.</p> <p>Strong Site Control requirements ensure Project Developers have proved their readiness to construct and simplify the</p>

			<p>study process and PJM has implemented Site Control requirements that apply to sites needed for the Interconnection Facilities required to support an Interconnection Request. These requirements are consistent with the Final Rule’s goals because they ensure projects have sufficient Site Control to move forward to completion.</p> <p>PJM’s Site Control provisions also provide Project Developers with an appropriate degree of flexibility when faced with permitting constraints. While different from the Final Rule, these provisions are consistent with the Final Rule’s goals and allow a reasonable amount of flexibility to Project Developers. This includes the option of including a milestone in the Project Developer’s GIA allowing it 180 days after execution of such agreement to satisfy the Site Control requirements.</p>
c.	Commercial Readiness	Independent entity variation	<p>As with the IPRTF Tariff’s study deposits, the Readiness Deposit structure contained in the IPRTF Tariff substantially aligns with the Final Rule and will accomplish the same goal, with differences appropriate for the PJM Region.</p> <p>Consistent with the Final Rule, the Readiness Deposits will help reduce the number of speculative Interconnection Requests. PJM’s Readiness Deposit structure is in line with the Final Rule requirement that the initial deposit be based on the project’s size, with the remaining deposits based on the project’s Network Upgrade costs, set at a level that will deter speculative projects without being too high as to discourage viable projects from smaller developers and other from entering a Cycle.</p>
d.	LGIA Deposit	Independent entity variation	<p>The IPRTF Tariff approach ties the Security amount to the estimated costs of the required Network Upgrades, which sends an accurate cost signal to Project Developers, and aligns the Security that is provided with its function of ensuring that the necessary Network Upgrades are paid for and constructed. It also ensure that funds will be available to construct upgrades if a Project Developer withdraws or its project is terminated. This process properly aligns with the intent and goals of the Final Rule, and should be permissible under the independent entity variation standard. It also recognizes that a Project Developer’s ability to provide a Security amount based on the projected costs of its Network Upgrades is indicative of a project’s viability.</p>

e.	Withdrawal Penalties	Independent entity variation	<p>Rather than the term “withdrawal penalties,” the IPRTF Tariff used the term “Readiness Deposits,” which are subject to forfeiture to offset the cost of underfunded Network Upgrades if a project is terminated or withdrawn.</p> <p>These provisions are in accordance with, and serve the same function as, the withdrawal penalties imposed in the Final Rule. When all New Service Requests in a Cycle have either entered into final agreements and the Decision Point III Site Control requirements have been met, or have been withdrawn, PJM will undertake a retooled study to provide a final determination of the Network Upgrades that are required for the Cycle.</p> <p>The forfeiture of Readiness Deposits applies when the Project Developer actively decides to withdraw its project, or its project is terminated or otherwise does not achieve commercial operation. However, there will be no forfeiture in the event of certain adverse study results, consistent with the Final Rule.</p> <p>The determination of the Readiness Deposit amounts to be refunded or forfeited is appropriately made after Decision Point III and after all Project Developers have entered into final interconnection-related agreements.</p> <p>Thus, aligns with the Final Rule, which states that the transmission provider is to hold all withdrawal penalty funds in a cluster until all Interconnection Requests have been terminated or withdrawn or all interconnection customers have executed an LGIA or requested that one be filed unexecuted.</p> <p>PJM does not apply a materiality test to withdrawals but instead counts all withdrawals as equivalent.</p> <p>This standard should reduce disputes and uncertainty as to whether a withdrawal has a material impact on other projects, and consistently accomplishes the Final Rule’s goal of preventing disruptive late-stage withdrawals.</p>
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III.B. Reforms to Increase the Speed of Interconnection Queue Processing²

III.C. Reforms to Incorporate Technology Advancements into the Interconnection Process

	Reforms	Proposed Deviation Standard	Justification
1.	Increasing Flexibility in the Generator Interconnection Process		
a.	Co-Located Generating Flexibility in the Generator Interconnection Process	Compliant	The IPRTF Tariff is fully compliant with the Final Rule’s co-location requirement as it allows for co-location of multiple resources behind a single Point of Interconnection. The IPRTF Tariff also allows for multiple fuel types behind the same Point of Interconnection and, for Interconnection Requests that involve multiple fuel types, permits removal of a fuel type through a permissible reduction in a project’s Maximum Facility Output.
b.	Revisions to the Modification Process to Require Consideration of Generating Facility Additions	Compliant	The IPRTF Tariff appropriately limits Material Modifications to changes that can adversely affect other developers. The Final Rule states that this requirement does not apply to transmission providers that use fuel-based dispatch assumption in its interconnection studies. PJM uses fuel-based dispatch assumptions in its interconnection studies and thus no revisions to its Tariff are required.
c.	Availability of Surplus Interconnection Service		PJM will make revisions related to Surplus Interconnection Service in a compliance filing to be submitted at a later date.
d.	Operating Assumptions for Interconnection Studies	Independent entity variation	PJM requests that the Commission grant PJM an independent entity variation to allow PJM to deviate from this aspect of the Final Rule to find that PJM’s modeling assumption requirements are not required to change. The use of customer-provided operating assumptions is not consistent with how PJM performs its planning studies for its annual regional transmission planning process and the manner in which PJM operates the system in real time. Moreover, PJM’s interconnection process is, and has been

² PJM will address issues related to the elimination of the Reasonable Efforts Standard and Affected System issues in a compliance filing to be submitted at a later date.

			historically, resource-neutral, and if PJM modifies its process for one specific type of resource, the resulting administrative burdens and additional studies will slow down interconnection studies for all Project Developers. Additionally, strict adherence to the Final Rule would require PJM to include a special interconnection study with the larger cluster study for each project whose owner submits operating parameters.
2.	Incorporating the Enumerated Alternative Transmission Technologies into the Generator Interconnection Process	Independent entity variation	<p>PJM seeks an independent entity variation with respect to the Final Rule’s requirement that transmission providers include in interconnection study reports the results of their evaluation of the feasibility, cost, and time savings of grid enhancing technologies (“GETs”) as an alternative to traditional transmission technologies. The IPRTF Tariff already accounts for alternative transmission technologies in the interconnection process, as all of the enumerated GETs already are considered and studied, as necessary in the course of interconnection studies in the PJM Region. There is nothing about GETs that requires special study protocols or separate reporting.</p> <p>PJM also plans to provide additional transparency on the utilization of GETs in PJM by the end of 2024. By that time, the Technical Reference Guide that PJM Applied Innovations is developing for alternative transmission technologies and GETS which will catalog those technologies and describe the conditions under which certain technologies may be considered as a reinforcement solution, will be publicly available through posting on PJM’s website.</p>
3.	Modeling and Ride-Through Requirements for Non-Synchronous Generating Facilities		
a.	Modeling Requirements	Compliant	PJM’s Dynamic Model Development Guidelines, which are publicly available to all Developers seeking to interconnect, fully comply with this requirement.
b.	Ride Through Requirements	Compliant	The IPRTF Tariff includes ride-through requirements for abnormal frequency conditions and voltage conditions that satisfy the requirements of the Final Rule to establish ride through requirements for abnormal frequency conditions and voltage conditions within the “no trip zone” defined by NERC Reliability Standards.
c.	Applicability of Ride	Compliant	The Final Rule requires that all newly interconnecting large Generating Facilities provide frequency and voltage ride through capability consistent with any standards and

	Through Requirements		guidelines that are applied to other Generating Facilities in the balancing authority area on a comparable basis. PJM's GIA already complies with this requirement.
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