UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Large Loads Co-Located at Generating Facilities	**Docket No. EL25-49-000 et al.**

SUPPLEMENTAL AFFIDAVIT OF ANDREW LEVITT AND ANIRUDDH MOHAN

ON BEHALF OF
EOLIAN, L.P.

April 24, 2026

I. QUALIFICATIONS

Our names are Andrew Levitt and Aniruddh Mohan. We have previously submitted the Affidavit dated March 25, 2026, in this Docket EL25-49-000 et al.

II. ASSIGNMENT

We were asked by Eolian, L.P. to supplement our Affidavit dated March 25, 2026, to offer additional perspectives on the reliability and timeline implications of the proposed new transmission services in PJM's Initial Brief in Docket No. EL25-49-000 et al.

III. BACKGROUND

As part of its compliance filing to FERC in Docket EL25-49-000, in February 2026, in an accompanying Initial Brief, PJM set out illustrative tariff language and supporting positions for three new service categories for generators serving co-located load: Non-Firm Contract Demand Transmission Service ("Non-Firm CDS" or "NFCDS"), Interim Network Integration Transmission Service ("Interim NITS"), and Firm Contract Demand Service ("Firm CDS").[1] PJM also submitted supporting affidavits addressing planning, operations, market design, and implementation timing.

Since then, a number of stakeholders have submitted responses to PJM's Initial Brief. We submit this Supplemental Affidavit in response to the timing and transmission reliability issues PJM and other stakeholders have raised before the Commission regarding the impact of non-firm services.

IV. SUMMARY

Since PJM has taken steps in its Initial Brief and compliance filing to create new transmission services for co-located loads, a minority of stakeholders have raised concerns that provision of these new transmission services would be inconsistent with the safe and reliable operation of the

[1] *PJM Interconnection, LLC*, 193 FERC ¶ 61,217 (2025) (Co-Location Order).

transmission system.[2] In this Supplemental Affidavit, we find that the concerns raised do not provide evidence that provision of NFCDS or Interim NITS would be inconsistent with reliable system operations. To the contrary, we point to similar non-firm services developed in other regional transmission organizations ("RTOs") as evidence that such services can be offered and implemented reliably. We also note that non-firm services being developed in other RTOs have many of the enhancements we previously proposed to PJM in our prior Affidavit dated March 25, 2026. We then note that these services in other RTOs are being implemented on a faster timeline than that proposed by PJM. Moreover, PJM has long provided non-firm point-to-point transmission service without causing the reliability concerns voiced by these stakeholders.

We also find that PJM's Initial Brief and its Supporting Affidavits have made unclear and often conceptually inconsistent arguments regarding the reliability implications of Interim NITS and NFCDS that have led to comments citing potential risks from provision of non-firm service.[3] PJM suggests that its requirement to use protection systems to limit withdrawals at facilities taking CDS implies complexity that warrants narrow limitations on scheduling of NFCDS. The PJM Independent Market Monitor has asserted that, due to complexity, extensive deployment of NFCDS could become "unmanageable."[4] However, we show that PJM's argumentation is flawed, that NFCDS scheduling therefore could be allowed at any time without increasing complexity from protection systems (and potentially reducing it), and that the use of the required protection systems does not imply any reliability issues due to widescale adoption of CDS.

In particular, PJM's Initial Brief does not sufficiently distinguish between types of protection systems. For facilities taking CDS, the protection system required by PJM monitors and controls conditions *internal* to those facilities in order to limit withdrawals at all times. By contrast, a standard Remedial Action Scheme (RAS) monitors and controls disparate parts of the bulk transmission system to avoid overloads there. Even though standard RAS is not required for a

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[2] PJM Independent Market Monitor ("IMM") Reply Brief at p.2 claims *the December 18th Order represents a set of dramatic changes in the nature of transmission service in PJM, not all of which are workable consistent with maintaining the reliable operation of the PJM system."*

[3] PJM IMM Reply Brief at p.6 claims "*Interim NITS is not a preferred path forward because it is not consistent with PJM's normal transmission planning process and imposes potentially significant risks on the PJM system.*" As evidence, it cites PJM's Initial Brief at p. 60, stating that "*the complexity introduced by the necessary control technology and protection systems (e.g. RAS) introduces significant risks*."

[4] PJM IMM, Reply Brief at p.6.

facility taking non-firm transmission, PJM repeatedly cites limitations on the feasible scale of RAS installations as a rationale to limit the scope of NFCDS and to justify the interim nature of Interim NITS.[5] We address these conceptual issues as they relate to reliability risk to provide clarity to the Commission in the implementation of its order in Dockets EL25-49-000 et al.

V. ASSESSMENT OF RELIABILITY IMPLICATIONS AND IMPLEMENTATION TIMELINE OF PJM'S PROPOSED NEW TRANSMISSION SERVICES

PJM's Independent Market Monitor ("IMM") claims that the "*Commission's defined transmission services cannot work given the potentially very large load additions that could request service, given the critical importance of maintaining a reliable transmission grid….*"[6] They also claim that the Commission's "*December 18th Order represents a set of dramatic changes in the nature of transmission service in PJM, not all of which are workable consistent with maintaining the reliable operation of the PJM system. In particular, non-firm CDS and Interim NITS create significant reliability risks for the transmission system*."[7]

We assess these claims and find no evidence that new transmission services ordered by the Commission and proposed by PJM, especially non-firm transmission services, are unworkable and create significant reliability concerns. We also find further evidence to support the assertion in our prior affidavit that NFCDS scheduling eligibility can be extended to all hours.

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5 For example, PJM's Initial Brief, pp. 10–11 says that NFCDS should be a standby product only used "*under limited circumstances*." As evidence for this it cites the complexity associated with provisions of NFCDS due to permanent protection systems such as a RAS on the PJM transmission system. PJM's Initial Brief, pp. 34–35 says: "*The control technologies and protection systems necessary to provide Non-Firm Contract Demand Transmission Service (and Interim NITS) is emblematic of the complexity associated with Non-Firm Contract Demand Transmission Service from an operations and planning perspective.*"

6 PJM IMM Reply Brief, p.2.

7 PJM IMM Reply Brief, p.2.

V.A. SPP CHILLS shows non-firm service is workable and does not create significant reliability concerns

Southwest Power Pool ("SPP") recently filed with FERC, in Docket No. ER26-1323-000, tariff revisions to offer a new non-firm transmission service called Conditional High Impact Large Load Service ("CHILLS").[8] Similar to PJM's proposed NFCDS and Interim NITS, load that is served under CHILLS does not have firm access to the transmission system, and SPP has no obligation to serve the load if insufficient transmission capacity exists. In SPP's filing to FERC, Part VII § 44.4 states that: "*The Transmission Provider and Transmission Owners undertake no obligation under the Tariff to plan the Transmission System in order to have sufficient capacity for CHILLS*";[9] CHILLS "*is subject to availability and to Curtailment or Interruption*"; *"[t]he Transmission Customer or the Network Customer must not withdraw energy from the Transmission System at the CHILL delivery point that exceeds its CHILLS Reserved Capacity*"; and "*The Transmission Customer or the Network Customer must fully respond to a load shed or curtailment for the CHILL delivery point directive by the Transmission Provider.*"[10] In both grid planning and operations this is broadly similar to PJM's proposed design of NFCDS and Interim NITS: for example PJM states in its illustrative tariff that both NFCDS and Interim NITS are "non-firm" and "interruptible."[11] In a supporting affidavit, Dr. Abdulsalam notes that the transmission system is not planned for NFCDS: *"this load is neither planned for (i.e., PJM's transmission planning does not consider this load and so the system is not designed to accommodate it)*" showing consistency with SPP's CHILLS.[12]

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8 SPP, Submission of Tariff Revisions to Add Conditional High Impact Large Load Service, Docket No. ER26-1323-000, Part VII § 44.4 (filed Feb. 10, 2026). ("SPP CHILLS Filing").

9 Note that, to be eligible for CHILLS, the customer must request a firm transmission service, and a CHILLS customer must transition to firm transmission service within seven years.

10 SPP CHILLS Filing, Part VII § 44.4.

11 PJM Attachment A, Illustrative Language for New Tariff, Part XI § 709.2(b). PJM says "*Non-Firm Contract Demand Transmission Service is a transmission service that allows an Eligible Customer taking service on behalf of Co-Located Loads to obtain non-firm, interruptible transmission service...."* On Interim NITS, Part XI, § 701.1 says Interim NITS lets an Eligible Customer "*receive transmission service on behalf of a Co-Located Load on a non-firm, interruptible basis.*"

12 PJM Initial Brief, Attachment B (Affidavit of Dr. Sami Abdulsalam), ¶ 12.

The SPP market monitor has assessed CHILLS as just and reasonable.[13] The Transmission Owners Group has asserted that "*CHILLS has numerous guardrails, including curtailability, that would ensure SPP's continued ability to maintain grid reliability*."[14] The imminent implementation of CHILLS in SPP directly contradicts the PJM IMM's claim that implementation of non-firm service would be unworkable and create significant reliability risks. The PJM IMM does not point to specific planning or operational reasons why PJM offering NFCDS and Interim NITS, as directed by the Commission's Co-Location Order, would create reliability concerns, even though SPP can reliably implement such a service.[15]

We also note that SPP does not limit the reservation of CHILLS to periods in which an associated generation resource is on outage, unlike PJM's proposed implementation of NFCDS. Rather, SPP plans to make CHILLS broadly available during all hours. In addition, in contrast to PJM's description of its Interim NITS offering to stakeholders,[16] SPP does not restrict customers taking CHILLS from relying on co-located capacity or energy during periods of system tightness and supply adequacy shortfalls.[17] All of this suggests that PJM's Interim NITS and NFCDS service is not only workable and able to be reliably implemented, but can in fact be further enhanced for broader uptake and commercial viability. We detail these enhancements in our previous Affidavit in this docket, dated March 25, 2026.[18]

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[13] Southwest Power Pool Market Monitoring Unit, Comments of the Southwest Power Pool Market Monitoring Unit, Docket No. ER26-1323-000, at p.1 (filed Mar. 3, 2026).

[14] Southwest Power Pool Transmission Owner Group ("SPP TO Group"), Comments of the Southwest Power Pool Transmission Owner Group, Docket No. ER26-1323-000, at p.2 (filed Mar. 3, 2026)

[15] PJM IMM, Reply Brief

[16] *See, e.g.* Reply Brief and Protest of Enchanted Rock, at p. 2 (March 25, 2026) ("*[A]s described by PJM to stakeholders—but not set forth in its Initial Brief, Illustrative Tariff or the February 23 Compliance Filing—PJM intends to prohibit Co-Located Load from receiving any capacity or energy from a Co-Located Generating Facility while the Co-Located Load is taking Interim NITS*".)

[17] SPP CHILLS Filing, p.26 ("*In general, the co-located generation may be used by the customer to displace its CHILL amount, including compliance with any Curtailment directives.*").

[18] Affidavit of Andrew Levitt & Aniruddh Mohan (filed March 25, 2026).

V.B. ERCOT's Provisional Controllable Load Resource proposal shows non-firm service is workable, does not create significant reliability concerns, and can be implemented quickly

Similar to SPP, developments at the Electric Reliability Council of Texas ("ERCOT") evince the workability of non-firm transmission services. As part of their ongoing "Batch Zero" reforms to interconnect large loads, ERCOT staff have developed a proposal by which a Provisional Controllable Load Resource ("P-CLR") can withdraw power from the transmission network on a non-firm basis by being subject to curtailment.[19] The proposal is in final stages, and ERCOT is targeting a June 1, 2026, Board vote to finalize the design.

ERCOT's existing CLR construct enables curtailment of loads on a nodal basis via security constrained economic dispatch ("SCED") for resolving constraints. The P-CLR proposal builds on this construct with new offer rules, and by using CLR curtailment capability as a tool to accelerate connection to the transmission grid for new large loads. That is, a load signing up as P-CLR can use the transmission system on an as-available basis and curtail to resolve constraints as necessary.[20]

V.B.1. ERCOT's proposed P-CLR shows non-firm service is workable and does not create significant reliability concerns, even without the additional reliability screening of NFCDS

As with SPP's CHILLS and PJM's proposed non-firm services, ERCOT under its proposed construct has no obligation to serve a P-CLR load, which is obligated to comply with dispatch instructions and is prohibited from withdrawing more than its authorized amount, with the non-firm amount managed through SCED.[21]

Operationally, curtailing P-CLR load in ERCOT's SCED is similar to what PJM has envisaged for NFCDS and Interim NITS, except that PJM's NFCDS would have an added step of screening

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[19] ERCOT, Batch Study Update, Board of Directors Meeting (April 20–21, 2026) at p.4.

[20] ERCOT, Batch Study Update, p.4.

[21] ERCOT, Batch Study Update, p.4.

non-firm reservations ahead of time (unlike both ERCOT's CLRs and PJM's Interim NITS). As PJM notes, NFCDS reservation requests would be evaluated and "*requests for non-firm service shall only be granted when PJM has determined there is available transmission capacity.*"[22] Compared with ERCOT's P-CLR construct, the need to reserve PJM's NFCDS on a forward basis provides yet another opportunity to ensure that NFCDS can be provided reliably. Similar to SPP's CHILLS detailed above, ERCOT's P-CLR product once again runs contrary to the claim from PJM's IMM that non-firm service is unworkable and inconsistent with reliable operations. We also note again that unlike PJM's proposed NFCDS product which restricts NFCDS reservations to hours where the co-located resource is on outage, ERCOT's P-CLR allows loads to take service during all hours, subject to SCED curtailment.[23]

V.B.2. SCED curtailment of ERCOT P-CLRs will be developed by 2027 showing that faster implementation than PJM's 2029 proposal is feasible

PJM has proposed implementation of its new transmission services by 2029. The affidavit of PJM's Timothy Horger says that changes to SCED for dispatching load in market operations will require significant updates that necessitate delaying implementation until 2029.[24] However, it is unclear why this must be delayed until 2029 given that ERCOT has committed to implementation of P-CLRs in its Batch Zero process, proposed for implementation as soon as 2027.[25] While building out such tools warrants careful design and rigorous testing, PJM has provided no reasons why PJM's system uniquely requires a longer implementation process compared to other RTOs. Further, as pointed out in our previous affidavit, PJM is well placed to implement changes to SCED given the existing capability of its nodal Price Responsive Demand ("PRD") implementation in SCED. The PRD construct, similar to CLR, allows nodal, real-time curtailment of loads via SCED. PJM can directly use or build on its PRD tools in SCED to execute needed reliability-related curtailments of non-firm transmission services in order to maintain transmission security in real-time in response to changing system conditions.

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22 PJM Initial Brief, pp. 32–33.

23 ERCOT, Batch Study Update, p.4

24 PJM Initial Brief, Attachment D (Affidavit of Timothy Horger), pp. 4–5.

25 ERCOT, Large Load Interconnection Batch Study Workshop #7 (April 9, 2026) at p.25.

V.C. Non-firm transmission service is workable at scale even when enhanced with simple protection systems

Citing complexity associated with over-reliance on RAS, the IMM suggests that NFCDS cannot scale, while PJM proposes that NFCDS may only be scheduled during a very limited number of hours. Below, we describe what a RAS is and why offering NFCDS during all normal operating conditions would not cause an over-reliance on RAS. In summary, our position rests on the following points:

1. There is an important distinction between standard RAS and the simple withdrawal-limiting protection systems PJM proposes to require. Unlike standard RASs, which monitor and control components across the broader transmission grid, withdrawal-limiting protection systems monitor and control only facility-internal components. Because these systems are far narrower in scope and operationally simpler, they can be relied upon more extensively without creating the same system complexities and interdependencies associated with standard RAS.

2. That simplicity is reinforced by the PJM Transmission Owners'("TOs"') proposal to implement protection systems in a redundant manner that guards against the possibility of protection system failure.[26]

3. Allowing NFCDS to be scheduled more frequently rather than limiting it to periods of generator outage *reduces* reliance on withdrawal-limiting protection systems, because when NFCDS is scheduled, that protection system is disabled to allow those scheduled withdrawals that are not curtailed by SCED. PJM's proposal to reduce the extent to which NFCDS can be used will therefore tend to *increase* the extent to which withdrawal-limiting protection systems are relied upon.

4. Standard RASs can provide important system benefits but also have recognized limits. Even so, a customer need not install a standard RAS in order to take non-firm transmission service, even if PJM requires a withdrawal-limiting protection system for that customer's facility.

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[26] The PJM TOs recommend, and we agree, that "*All SPS and RAS should be fully redundant*." PJM TOs Initial Brief at p.23.

V.C.1. IMM and PJM are concerned with the complexity of non-firm service due to protection systems and RASs

The IMM in its comments asserts that *"[g]iven the scale of potential data center users of non-firm CDS, the system would become unmanageable if all or a significant part of the data center users wanted to use non-firm CDS…,"*[27] and, commenting on its reliability concerns with non-firm services generally, cites to PJM's statement that "*the complexity introduced by the necessary control technology and protection systems (e.g., RAS) introduces significant risks.*"[28] We expand and comment on the nature of that complexity to help clarify where scale may or may not introduce issues.

In the following statements, PJM explains the complexity associated with protection systems, and that it warrants limiting scheduling eligibility for NFCDS to a very narrow window:

> …PJM will offer and manage pre-scheduled Non-Firm Contract Demand Transmission Service "'operationally' and ensure that permanent monitoring and aggressive, fast-acting protections are in place if conditions arise that may compromise reliable system operations." This approach, as Dr. Abdulsalam explains, "allows for more reliable system operation, reduces the number of permanent protection systems on the system," such as a RAS, on the PJM Transmission System, and thus "reduc[es] the likelihood of unintended protection system misoperation that could lead to cascading events."
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> In addition, as explained further below, and by Dr. Abdulsalam, from an operations and planning perspective, the complexities associated with the provision of Non-Firm Contract Demand Transmission Service call for relying on such service as a standby product only *"under limited circumstances."*[29] [emphasis added]

In the relevant section "further below," PJM goes on to state that:

> The control technologies and protection systems necessary to provide Non-Firm Contract Demand Transmission Service (and Interim NITS) is emblematic of the complexity associated with Non-Firm Contract Demand Transmission Service from an operations and planning perspective.[30]

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[27] PJM IMM Reply Brief, p.6.

[28] PJM Initial Brief, p.60.

[29] PJM Initial Brief, p.10

[30] PJM Initial Brief, pp. 34-35.

The IMM reasons that NFCDS cannot be installed at scale and cites these complexity concerns raised by PJM. According to PJM, those concerns arise because complex control technologies and protection systems are necessary for providing NFCDS, the protection systems may misoperate and lead to cascading events, and therefore NFCDS can only be relied on as a standby product (i.e., when a co-located generator at a CDS facility is on outage). In the following sections, we show that this reasoning is flawed.

V.C.2. Simple withdrawal-limiting protection systems are distinct from standard RAS

PJM describes a protection system at a co-located facility that disconnects a co-located load when there is a sudden failure of one of its co-located generation units, and states that all co-located facilities will have such a protection system.[31] PJM describes this type of protection system as "*overwhelmingly beneficial*."[32] PJM states that the protection system will be "*set to ensure such load does not withdraw energy in excess of the megawatt level permitted under its effective service agreement.*"[33] In order to prevent withdrawals from exceeding the permissible level, such a protection system: monitors flows into the co-located facility; monitors the status of components internal to the facility; and takes action to either adjust consumption or generation of components in the facility, or to disconnect the facility from the grid. Therefore, all of the monitoring and control of this type of protection system is *internal* to the co-located facility. We call this a "withdrawal-limiting protection system."[34]

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[31] PJM Initial Brief, Attachment C (Affidavit of Matthew Wharton), ¶ 25, and Abdulsalam Affidavit, ¶ 9. Following Dr. Abdulsalam's naming convention, we refer to this device broadly as a protection system, noting that Mr. Wharton has classified it as a RAS. We further note that, in the ERCOT Batch Zero process, a device with the equivalent functionality that is required for a Self-Limited Facility is not referred to as a RAS but rather as a "*reverse power relay or equivalent protection.*" See ERCOT, Large Load Batch Study Update, presented to PUCT Open Meeting, April 2, 2026, p.7.

[32] PJM Initial Brief, Attachment C (Affidavit of Matthew Wharton), ¶ 25.

[33] PJM Initial Brief, Attachment B (Affidavit of Dr. Sami Abdulsalam), ¶ 9.

[34] It does not appear to be necessary to have a withdrawal-limiting protection system in order to enable non-firm transmission service, and indeed such systems are not required for conventional point-to-point non-firm service, nor are they proposed for use in SPP CHILLS nor ERCOT P-CLR (both of which are suitable for load-only sites that would not make sense with a withdrawal limiter). However, we concur with PJM that a withdrawal-limiting protection system is beneficial and therefore expect efficiencies in PJM's proposal to install them widely, noting that some customers may prefer not to use them and instead curtail as necessary to ensure reliable operations in case of a contingency internal to their facility.

Unlike a withdrawal-limiting protection system (which monitors and controls only facility-internal components), a standard RAS monitors and controls components across the grid. When it detects a triggering condition on one element on the transmission system, it takes action to control or disconnect a distinct, often remote element on the transmission system.[35]

Both a withdrawal-limiting protection system and a standard RAS are beneficial because they allow a non-firm large load to withdraw power from a constrained transmission network with less (or no) curtailment relative to the constraint, as follows. With the higher consumption, a contingency would ordinarily overload the constrained element. However, the protection system monitors for the contingency and, if it occurs, reacts immediately (e.g., by curtailing load) to protect the constrained element.[36] This allows curtailment *after* a contingency happens, rather than proactively curtailing *before* the contingency (which is the ordinary practice in absence of a withdrawal-limiting protection system or RAS).

However, a standard RAS is not necessary to accommodate a non-firm load, precisely because the alternative (pre-contingency curtailment) is always an option due to the non-firm nature of the load. As we have pointed out, the extent of standard RAS installation must be carefully considered, and a standard RAS is not suitable in all applications due to complexity. As Dr. Abdulsalam notes, with increasing adoption, RAS may interact under abnormal operating conditions, leading to unintended consequences and potential cascading failures.[37] This interaction is indeed a hallmark of standard RAS, since the facilities they monitor and control are "apparently unrelated" and can span across a wide area that overlaps with other standard RASs.[38]

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[35] PJM Initial Brief, Attachment C (Affidavit of Matthew Wharton), ¶ 15.

[36] A withdrawal-limiting protection system directly or indirectly monitors loss of a generation unit internal to the co-located facility, while a standard RAS would monitor one or more transmission elements or generation units elsewhere on the bulk electric system.

[37] PJM Initial Brief, Attachment B (Affidavit of Dr. Sami Abdulsalam), ¶ 10.

[38] PJM Initial Brief, Attachment C (Affidavit of Matthew Wharton), ¶ 15; CAISO, Planning Guide, p. 11 ("*With the increased transmission system utilization that comes with application of RAS, there can be increased exposure to not meeting system performance criteria if the RAS fails or inadvertently operates…If there are a large number of RAS, it may become difficult to assess the interdependency of these various schemes on system reliability. In addition, as RAS has become progressively increasing in complexity, it is necessary to consider the level of logic complexity through combining multiple features that were acceptable individually but that could compound to a level that cannot be integrated into market operation*.")

However, PJM has not explained how a simple withdrawal-limiting protection system, which is restricted to monitoring and controlling elements internal to a single facility, would exhibit the interdependencies and complexities that characterize typical RAS. Because of its simplicity and localized scope, it would appear on first principles that extensive installation of withdrawal-limiting protection systems would not introduce the complexity that is associated with standard RASs.

Further, PJM has asserted that a protection system must be temporary because it will need to adapt to changing system conditions.[39] However, if the nature of the protection system is simply to limit withdrawals consistent with transmission service limits, it is unclear why such a simple system would need to evolve with system conditions.

Finally, the robustness associated with the simplicity of withdrawal-limiting protection systems is reinforced by the PJM TOs' proposal to implement protection systems in a redundant manner that guards against the possibility of protection system failure.[40]

V.C.3. Narrow eligibility for scheduling NFCDS does not reduce any complexity from withdrawal-limiting protection systems

According to PJM, any facility taking Contract Demand Service must have a withdrawal-limiting protection system.[41] When there is zero or partial NFCDS scheduled, this protection system serves to ensure there are no withdrawals above the authorized Firm CDS level. When NFCDS may be reliably scheduled, the protection system obviously must be adjusted or disabled in order to allow the corresponding higher withdrawals. That is: under PJM's proposal, all co-located facilities will have a withdrawal-limiting protection system active at all times they are taking

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[39] PJM Initial Brief, Attachment B (Affidavit of Dr. Sami Abdulsalam), ¶ 10 ("*The temporary nature of such a protection system for this type of firm service is necessary to ensure the integrity and reliable operation of the transmission system as a whole since protection systems are designed based on system conditions anticipated at that time and will continue to change as system conditions evolve.*")

[40] PJM TOs Initial Brief at p.23.

[41] PJM Initial Brief at p.34 ("*PJM is requiring Eligible Customers taking Non-Firm Contract Demand Transmission Service to work with PJM and affected Transmission Owners to 'establish necessary control technologies and protection systems, . . . which may include a [RAS], for each Service Agreement for Non-Firm Contract Demand Transmission Service*.")

Firm + Non-Firm CDS for less than their load level. It therefore follows that narrowing eligibility for NFCDS scheduling does not decrease complexity associated with such protection systems. And, to the extent that the withdrawal-limiting protection system is disabled due to the scheduling of Firm + Non-Firm CDS to cover the full load, any corresponding complexity is removed. Thus, PJM has not effectively demonstrated that its proposal to limit NFCDS scheduling eligibility to generator outage periods is reasonable for maintaining reliability, since NFCDS scheduling does not exacerbate complexity due to protection systems, and in many cases mitigates it.

V.C.4. NFCDS can be scaled reliably, notwithstanding limits to installation of standard RAS

In addition to a withdrawal-limiting protection system, a standard RAS that monitors transmission system elements and controls the co-located facility in response can be beneficial for further accelerating load interconnections ahead of or instead of transmission upgrades. A standard RAS allows non-firm large loads to be curtailed instantaneously *after* a grid contingency (such as loss of a nearby transmission line) to prevent overload of a constrained element, rather than pre-curtailing it *before* the contingency (which would be the typical operating practice in absence of a RAS). The result is that, with a standard RAS, such a load would face curtailment due to that constraint with far lower frequency—possibly never—compared to the alternative of pre-contingency curtailment. Standard RAS can and should therefore be installed at as many facilities as practical within the limits that PJM has identified. That said, notwithstanding its benefits, the complexity of standard RAS means there will likely be a limit on the number of load facilities at which it can be installed, even if that limit is beyond the current usage of standard RAS in PJM.

The IMM has asserted that, due to complexity, extensive deployment of NFCDS could become "unmanageable."[42] However, it would be incorrect to conclude that scale constraints due to complexity of standard RAS mean widescale installation of NFCDS is "unmanageable." This is because standard RAS is not required for NFCDS, even if PJM requires a withdrawal-limiting

[42] PJM IMM Reply Brief at p.6.

protection system at each site. Instead of standard RAS, NFCDS can be curtailed pre-contingency. PJM can and should only install standard RAS for NFCDS facilities to the extent it is manageable. Beyond that threshold, PJM can instead rely on pre-contingency curtailment of NFCDS without installing standard RAS, similar to how ERCOT and SPP envisage curtailment of non-firm load under the proposed P-CLR and CHILLS constructs. In this way, PJM avoids suffering a reliability degradation from too much standard RAS while granting NFCDS service at scale. The non-firm nature of NFCDS provides this operational flexibility—precisely because pre-contingency curtailment is always an option for non-firm load.

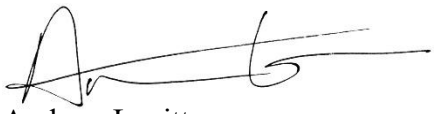
V.D. NFCDS is consistent with a reliable and efficient PJM transmission system

The IMM asserts that "*there can be no such service as non-firm CDS that is fully consistent with maintaining a reliable PJM transmission system*."[43] As we point out in our prior affidavit, the CDS construct (including NFCDS scheduled whenever it is available and desired) provides the unique benefit of a reliable system that can permanently avoid the need for high-cost and unnecessary transmission upgrades and allow for efficient exchanges with the grid when the transmission network is available to support them. By taking advantage of flexibility in grid withdrawals inherent in a site and PJM's direct control of how much a facility withdraws via SCED, depending on system conditions, a large load customer can be connected reliably more quickly and at lower cost. As we point out above, neither IMM nor PJM have shown any cause for reliability concern associated with the CDS construct.

[43] PJM IMM Reply Brief at p.6.

Affidavit of Andrew Levitt

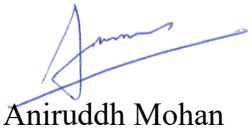
I, Andrew Levitt, do hereby swear that I have co-authored this Supplemental Affidavit of Andrew Levitt and Aniruddh Mohan and the statements contained therein are true and accurate to the best of my knowledge and belief.



Andrew Levitt Date: April 24, 2026

Affidavit of Aniruddh Mohan

I, Aniruddh Mohan, do hereby swear that I have co-authored this Supplemental Affidavit of Andrew Levitt and Aniruddh Mohan and the statements contained therein are true and accurate to the best of my knowledge and belief.



Aniruddh Mohan Date: April 24, 2026