UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

PJM Interconnection, L.L.C.	))))	Docket No. EL16-6-001, ER16-121-000

REQUEST FOR REHEARING OF THE
INDEPENDENT MARKET MONITOR FOR PJM

Pursuant to Section 313(a) of the Federal Power Act ("FPA"),[1] and Rule 713 of the Commission's Rules and Regulations,[2] Monitoring Analytics, LLC, acting in its capacity as the Independent Market Monitor for PJM[3] ("Market Monitor"), submits this request for rehearing of the order issued in this proceeding on September 15, 2016 ("September 15th Order").[4] PJM's rules have always had a goal to provide that total congestion revenues be returned to load serving entities through instruments designed for that purpose, although that goal has not been met in practice since the introduction of ARRs. Congestion revenues are excess payments received from load that are not paid to the lower cost generation that is delivered into load pockets using the transmission system. Load pays for the transmission system that permits the delivery of the lower cost power. The goal of the market design

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1 16 USC § 825l(a) (2012).

2 18 CFR § 385.713 (2016).

3 Capitalized terms used herein and not otherwise defined have the meaning used in the PJM Open Access Transmission Tariff ("OATT"), the PJM Operating Agreement ("OA") or the PJM Reliability Assurance Agreement ("RAA").

4 *PJM Interconnection, L.L.C.*, 156 FERC ¶ 61,180.

related to congestion is to return congestion revenues to load. The Market Monitor refers to this rule as the Total Congestion Revenues Rule.

A consistent theme of the September 15th Order is the unsupported view that load must provide guaranteed and risk free funding of FTRs as a hedge against day-ahead congestion, and that this is somehow in the interest of load. This approach, favored by the financial participants who own most FTRs, is not consistent with the reason that FTRs exist and has no basis in market logic. This approach directly and explicitly contradicts all the key findings in the *FirstEnergy* complaint proceedings, which were correctly based on the fundamentals of FTR/ARR market design.[5] The September 15th Order fails to explain why it is consistent with market principles to require load to guarantee FTR payments to financial participants.

The September 15th Order is flawed because it directs the elimination of the Total Congestion Revenues Rule, rejects the proposed Portfolio Netting Rule,[6] and directs implementation of the flawed Stage 1A Allocations Holding Rule.[7] Each of these holdings is arbitrary and capricious, contradicts the fundamental purpose of returning congestion revenues to load, does not reflect reasoned decision making and is unsupported by substantial record evidence. The September 15th Order fails to explain its departure from precedent, and ignores record evidence. The Market Monitor respectfully requests that Commission grant rehearing and reverse these holdings.

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5 *FirstEnergy Solutions Corp. v. PJM*, 143 FERC ¶ 61,209 (2013) (*FirstEnergy*), *reh'g denied*, 151 FERC ¶ 61,205 (*FirstEnergy II*);

6 The "Portfolio Netting Rule" refers to the PJM's proposal that eliminates the ablility to net negatively valued FTRs against positively value FTRs. PJM filing, ER16-121-000 et al. (Oct. 19, 2016) at 18–22.

7 The "Stage 1A Allocations Holding Rule" refers to a rule that PJM "modify the Stage 1A ARR allocation process in its tariff to model only actively used paths," which the September 15th Order requires (at P 45).

I. STATEMENT OF ISSUES AND SPECIFICATION OF ERRORS

Rule 713 requires identification of each issue for which rehearing is sought and representative precedent in support of its position.[8] The explanations in the September 15th Order for eliminating the Total Congestion Revenues Rule, rejecting the proposed Portfolio Netting Rule, and directing implementation of the Stage 1A Allocations Holding Rule do not constitute reasoned decision making and are unsupported by substantial evidence.[9] Unlike the Commission's prior orders preserving the Total Congestion Revenues Rule, the

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[8] 18 CFR § 385.713(c)(2).

[9] *See*, *e.g.*, 5 USC § 706(2)(E) ("The reviewing court shall … hold unlawful and set aside … findings … found to be … unsupported by substantial evidence"); Motor Vehicle Mfrs. Ass'n. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983) (quoting Burlington Truck Lines, Inc. v. U.S., 371 U.S. 156, 168 (1962) ("Nevertheless, the agency must examine the relevant data and articulate a satisfactory explanation for its action including a 'rational connection between the facts found and the choice made.'"); Illinois Commerce Comm'n, 576 F.3d 470, 477 (7th Cir. 2009) (explaining that a reviewing court cannot "uphold a regulatory decision that is not supported by substantial evidence on the record as a whole"); Pacific Gas & Elec. Co. v. FERC, 373 F.3d 1315, 1319 (D.C. Cir. 2004) ("PG&E"); Missouri Pub. Serv. Comm'n v. FERC, 337 F.3d 1066, 1072–75 (D.C. Cir. 2003) (vacating and remanding Commission orders because it found, among other things, that the Commission had failed to articulate the actual reasons for its decision, and the reasons it did cite were "speculative," unsupported by record evidence, and did not support its decision). *See also* 5 USC § 557(c) (the Commission is charged with addressing "all the material issues of fact, law, or discretion presented on the record"); 5 US.C. § 706(2)(A). Nw. Envtl. Def. Ctr. v. Bonneville Power Admin., 477 F.3d 668, 687–88 (9th Cir. 2007) ("[A]n agency changing its course must supply a reasoned analysis indicating that prior policies and standards are being deliberately changed, not casually ignored, and if an agency glosses over or swerves from prior precedents without discussion it may cross the line from the tolerably terse to the intolerably mute.") (internal quotation marks and citation omitted); Atchison, Topeka & Santa Fe Ry. v. Wichita Bd. of Trade, 412 U.S. 800, 808, 93 S.Ct. 2367, 37 L.Ed.2d 350 (1973) ("Atchison") ("Whatever the ground for the [agency's] departure from prior norms, . . . it must be clearly set forth so that the reviewing court may understand the basis of the agency's action and so may judge the consistency of that action with the agency's mandate."); Ill. Commerce Comm'n v. FERC, 576 F.3d 470, 477 (7th Cir. 2009) (explaining that a reviewing court cannot "uphold a regulatory decision that is not supported by substantial evidence on the record as a whole"); Ass'n of Oil Pipelines v. FERC, 83 F.3d 1424, 1431 (D.C. Cir. 1996) (the Commission's orders must articulate "'a rational connection between the facts found and the choice made'") (citations omitted); Ne. Util. Serv. Co. v. FERC, 993 F.2d 937, 944 (1st Cir. 1993) (reasoned decision making requires "a reasoned explanation supported by a stated connection between the facts found and the choice made") (citation omitted).

September 15th Order relies on rationales and findings inconsistent with the applicable statutory mandates pertaining to ratemaking generally and the allocation of congestion revenues specifically.[10] The September 15th Order made a series of findings identified below that are incorrect, baseless and/or inconsistent with prior precedent. In each case, the request for rehearing should be granted and the finding reversed.

A. Total Congestion Revenues Rule

The September 15th Order departed from precedent, contradicting earlier orders that determined that the Total Congestion Revenues Rule had not been shown to be unjust and unreasonable.[11] Accordingly, the request for rehearing should be granted.

The September 15th Order found (at P 91) that the Total Congestion Revenues Rule "is unjust and unreasonable" and requires PJM to eliminate the Total Congestion Revenues Rule. The mechanism for eliminating the Total Congestion Revenues Rule (*id.*) is "to remove the term balancing congestion from its definition of an FTR and to allocate these costs, instead, to real-time load and exports." The September 15th Order does not provide any basis for allocating balancing costs to real-time load and exports.

The September 15th Order erred in finding (at P 94) that "the inclusion of balancing congestion in the settlement of FTRs contributes to a … cost shift between ARR holders and

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10 *See* Federal Power Act §§ 201, 205, 206 & 217, 16 USC §§ 824, 824d, 824e & 824q; American Rivers v. FERC, 201 F.3d 1186, 1194 (9th Cir. Or. 1999) ("Where, however, the petitioners call into question the Commission's understanding of its statutory mandate, our review is *de novo*.", citing Skokomish Indian Tribe v. FERC, 121 F.3d 1303, 1306 (9th Cir. 1997).

11 *See FirstEnergy*; *FirstEnergy II*; *see also FirstEnergy Solutions Corp. et al. v. PJM*, 138 FERC ¶ 61,158 (2012), reh'g denied, 140 FERC ¶ 61,051 (2012). See 5 USC § 706(2)(A) ("The reviewing court shall … hold unlawful and set aside … findings … found to be … arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law"); INS v. Yueh-Shaio Yang, 519 U.S. 26, 32 (1996) ("Though the agency's discretion is unfettered at the outset, if it announces and follows—by rule or by settled course of adjudication—a general policy by which its exercise of discretion will be governed, an irrational departure from that policy (as opposed to an avowed alteration of it) could constitute action that must be overturned as 'arbitrary, capricious, [or] an abuse of discretion' within the meaning of the Administrative Procedure Act.")

FTR holders." The Order suggests that payments to FTR holders were inappropriately including balancing congestion. This is the asserted cost shift. The September 15th Order thus requires load to pay balancing congestion. But there is no evidence to support the assertion. Balancing has been negative at times. Elimination of the Total Congestion Revenues Rule means that load serving entities will be forced to pay to make up the difference when congestion revenues paid to FTR holders are in excess of the total congestion revenues collected. This requires load to pay total congestion, including day-ahead and balancing, and then pay balancing again when it is negative. This is not consistent with the objective of the FTR/ARR design which is to return congestion revenues to load.

The September 15th Order erred in finding (at P 94) that the Total Congestion Revenue Rule "is inconsistent with cost causation principles." The finding contradicts, without explanation, earlier orders wherein the Commission correctly rejected arguments based on cost causation.[12] The finding necessitates an evidentiary basis for identifying who or what is responsible for causing congestion costs. There is no such evidence and cannot be such evidence because cost causation is a concept that is irrelevant to the allocation of congestion revenues. The September 15th Order states the point clearly (at P 98):

> The multi-faceted nature of balancing congestion does not easily permit a granular allocation to those parties causing and directly benefiting from balancing congestion. Additionally, limiting the allocation to any subset of market participants that are not fully responsible for the costs associated with balancing congestion would be inconsistent with cost causation principles. Finally, the costs incurred have system-wide benefits where individual beneficiaries cannot be identified.

The September 15th Order contradicts paragraph 98, when it states (at P 99):

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[12] *FirstEnergy* at P 43; *FirstEnergy II* at PP 7, 25.

> Accordingly, based on the discussion above and consistent with cost causation principles, we direct PJM to allocate balancing congestion costs on a pro-rata basis to real-time load and exports.

The September 15th Order fails to explain why this new approach is just and reasonable and why the prior approach was not just and reasonable.The September 15th Order erred in finding (at P 94) that "[t]he value of an FTR is determined by day-ahead energy market prices that reflect day-ahead congestion costs." This assertion confuses the target allocation, defined by day-ahead prices, with the value of an FTR, which is defined by the payments to FTR holders. The payments to FTR holders include total congestion, both day-ahead and balancing.

Moreover, the September 15th Order does not explain the jurisdictional basis for regulating FTRs if they are recharacterized and regulated as hedging instruments.[13] Hedging instruments are financial products, and they are traded in markets comprised of voluntary participants. FTRs are jurisdictional because they are instruments to allocate overpayments by load resulting from the mechanics of an LMP market design and are intended to serve as the equivalent of firm transmission service. The September 15th Order does not explain how FTRs can be reasonably recharacterized as hedging instruments and receive involuntary subsidies from load to guarantee payouts to FTR holders, many of whom are speculators, do not serve load and do not require hedges. The September 15th Order errs to the extent it relies on the theory that it is regulating hedging instruments.

The September 15th Order erred in failing to show that it considered arguments that the Market Monitor raised in support of the Total Congestion Rule, including that: the rule is necessary for consistency with the statutory recognized goal of allocating congestion revenues to load in recognition that the load pays for the grid and pays congestion revenues and sound market design requires that the rules provide to load the equivalent of

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[13] Federal Power Act §§ 201, 205 & 206, 16 USC §§ 824, 824d & 824e; *see also* Commodity Exchange Act § 2, 7 USC § 2.

firm transmission service;[14] that removing the Total Congestion Revenues Rule improperly requires load to pay twice for congestion and creates an unjustified cross subsidy between load and FTR holders; that removing the Total Congestion Revenues Rule unjustly, illogically and in direct contradiction to its prior orders, creates a property right to day-ahead congestion revenues; and that use of term "underfunding" with no logical or reasonable identification of a required level of funding is improper and misleading. [15] [16] [17]

B. Portfolio Netting

The September 15th Order erred in stating (at P68), "We find that portfolio netting does not result in cross-subsidies among parties holding prevailing flow and counterflow FTRs. We further find that PJM's proposal would only reallocate FTR revenue inadequacy among various market participants without actually addressing the fundamental issues associated with FTR revenue inadequacy." The basis for this finding is unexplained. The September 15th Order fails to address extensive arguments and examples that show the Portfolio Netting Rule does result in cross-subsidies.[18]

The September 15th Order erred (at P 69) when it rejected "the Market Monitor's contention that a market participant can somehow shield itself from potential FTR revenue inadequacy by holding counter flow FTRs for the purpose of shrinking its net positive target allocation, given that the value of these counter flow FTRs is reduced by the payout ratio in the same manner as the value of prevailing flow FTRs." Also, the September 15th Order erred (at P 69) in finding that "counter flow FTRs do not systematically result in their

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[14] *See*, *e.g.*, Comments of the Independent Market Monitor for PJM, ER16-121-000 et al. (March 15, 2016) at 25–27 ("IMM March 15th Comments"); *see* Federal Power Act § 217, 16 USC § 824q.

[15] *Id*. at 27–28.

[16] *Id*.

[17] *Id*. at 28.

[18] *Id*. at 9–10.

owners profiting from paying back less in congestion rents than they receive as up-front payment for counter flow FTRs in the auction." These statements are contradictory and neither is supported by evidence. The Market Monitor showed that the impact of the payout ratio on profits is opposite between counter flow FTRs and prevailing flow FTRs.[19] The finding in the September 15th Order ignores the evidence on this point.

The September 15th Order found (at P 65) that PJM did not support its proposed Portfolio Netting Rule. The Commission states, as a reason to continue portfolio netting (at P 69), that "…the current practice already guarantees that both positive and negative target allocations are treated in the same manner." The Market Monitor has shown that this finding is not correct; it is contradicted even by proponents of netting.[20] The September 15th Order ignores arguments showing that Portfolio Netting Rule does not treat positive and negative target allocations in the same manner.[21]

C. Stage 1A Allocations Holding Rule

The September 15th Order erred in stating (at P 45), that the Stage 1A Allocation Rule "is necessary to remedy the disconnect between Stage 1A ARR allocation and actual system usage." The September 15th Order directs PJM to update an antiquated system for ARR allocations, but avoids addressing the actual problem: the complete disconnect between the allocation of ARRs and actual system usage. The directive does not remove thedisconnect between Stage 1A allocations and actual system usage. The September 15th

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19 *See* "Answer of the Independent Market Monitor for PJM," Docket No. ER16-121-000 & EL16-6-000 (December 18, 2015), at 4–5.

20 *See* Post-Technical Conference Comments of DC Energy, LLC; Inertia Power, LP; Saracen Energy East LP; and Vitol Inc., Docket Nos., EL16-6-000 & ER16-121-000 (March 15, 2016), Attachment A: Post-Technical Conference Declaration, Roy D. Shanker Ph.D. at 8 n.4; Post-Technical Conference Comments of Elliott Bay Energy Trading, LLC, Docket Nos. ER16-121-000, EL16-6-000 & EL16-6-001 (March 15, 2016), Exhibit A: Affidavit of Dr. Susan L. Pope at 14.

21 *See* Reply Comments of the Independent Market Monitor for PJM, Docket No. EL16-6-001 & ER16-121-001 (March 29, 2016), at 5.

Order is arbitrary and capricious because while it correctly identifies the issue, its proposed solution is based on an incorrect assumption. The September 15th Order requires (at P 45) that PJM "modify the Stage 1A ARR allocation process in its tariff to model only actively used paths."

The September 15th Order requires PJM (at P 39) "to modify its tariff to remove the use of historical generation resources for requested ARRs in Stage 1A of the allocation process if those resources are no longer in service and develop a just and reasonable method of allocating Stage 1A ARRs based on source points that reflect actual system usage" ("Stage 1A Allocations Holding").

The Commission is correct that the use of long outdated generation to load paths is clearly the wrong way to assign ARRs. But the use of generation to load paths, even if they could be updated, does not and cannot reflect the actual network nature of the transmission system or the actual way in which congestion is paid. It is not only the generation to load paths that are outdated, the entire concept of generation to load paths is archaic, reflecting the contract path approach to physical transmission rights prior to the introduction of markets.

II. REQUEST FOR REHEARING

A. Total Congestion Revenue Rule Correctly Includes Balancing Congestion Revenues in the Allocation of Total Congestion Revenues.

1. The September 15th Order Overturns the Total Congestion Revenue Rule Without Adequate Explanation or Evidence.

The September 15th Order overturns the approach for determining and allocating total congestion revenues that has been in place since April 1, 1998. The approach was not challenged for over a decade, including when the Total Congestion Revenue Rule for calculating total revenues based on net day-ahead and balancing congestion revenues

became effective May 31, 2000, at the time the day-ahead market was introduced.[22] No reasonable explanation is provided for finding the approach unjust and unreasonable eighteen years later. In 2012, the rules were repeatedly and unsuccessfully challenged by a financially distressed market participant.[23] Financial marketers who hold significant FTR positions but do not serve load, also criticized the Total Congestion Revenue Rule.[24] The September 15th Order ignores this recent precedent, which rejected arguments that the Total Congestion Revenue Rule is not unjust and unreasonable.[25]

The September 15th Order attempts to explain the sudden reversal of its earlier decisions:

> While in the *FirstEnergy Solutions* complaint proceeding, the Commission held that the parties had not established that the current methodology is unjust and unreasonable, [footnote omitted] such a finding does not preclude the Commission from re-examining the issue when circumstances have changed or additional evidence has been presented. [footnote omitted]

The explanation relies on the unsupported assertion that a change of circumstances has occurred. No one disputes that the Commission can reverse a prior decision. Reversal, however, requires a reasoned analysis supported by substantial evidence.[26] The September

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22 *See* Letter Order, ER00-1849-000 (May 18, 2000).

23 See FirstEnergy, reh'g denied, FirstEnergy II; see also FirstEnergy Solutions Corp. et al. v. PJM, 138 FERC ¶ 61,158 (2012), reh'g denied, 140 FERC ¶ 61,051 (2012).

24 *See*, *e.g.*, Motion for Leave to Answer and Answer of the Financial Institutions Energy Group, Docket No. EL13-47 (April 22, 2013); Request for Rehearing of DC Energy , LLC and Vitol, LLC, EL13-47 (July 5, 2013); Request for Rehearing of J. Aron & Company, EL13-47 (July 5, 2013).

25 See FirstEnergy, reh'g denied, FirstEnergy II; see also FirstEnergy Solutions Corp. et al. v. PJM, 138 FERC ¶ 61,158 (2012), reh'g denied, 140 FERC ¶ 61,051 (2012).

26 Nw. Envtl. Def. Ctr. v. Bonneville Power Admin., 477 F.3d 668, 687–88 (9th Cir. 2007) ("[A]n agency changing its course must supply a reasoned analysis indicating that prior policies and standards are being deliberately changed, not casually ignored, and if an agency glosses over or swerves from prior precedents without discussion it may cross the line from the tolerably terse to the intolerably mute" [internal quotation marks and citation omitted]).

15th Order fails to provide either. The September 15th Order says nothing about why well supported specific findings in earlier orders, which reflect years of litigation and deliberation, are suddenly overturned.

The September 15th Order asserts (at P 93) that "[b]y the time of the PJM filing … circumstances had changed considerably." The cited change (*id*.) is PJM's decision to "'more conservatively model' transmission outages in the simultaneous feasibility review process." This was not a change in circumstances but only a change in PJM's approach to addressing longstanding Stage 1A allocation issues by dramatically reducing Stage 1B allocations. This change had nothing to do with the rationale provided in FirstEnergy for upholding the Total Congestion Revenues Rule. Moreover, the change in PJM's approach, and the reasons for that change, were addressed elsewhere in the September 15th Order. The September 15th Order requires PJM to address the issues that caused the Stage 1A allocation issues that led PJM to reduce Stage 1B allocations. Reversal of the FirstEnergy decision is unsupported based on any change in circumstances.

The September 15th Order also states (at P 94): "The record demonstrates that the pervasive problem associated with including balancing congestion in the definition of FTRs is either chronic under-funding or the unrealized value of ARRs for certain LSEs." The current record is not materially different from the record upon which the Commission reached the opposite and correct conclusions in prior decisions. Circumstances have not changed; the record includes no additional evidence and provides no support for any asserted change in circumstances.

In the *FirstEnergy II* decision, the Commission found that "allocation of real time balancing congestion to current FTRs has a reasonable basis, because FTR holders are in the best position to reflect the associated underfunding in the value of FTRs."[27]

The Commission determined in the *FirstEnergy II* decision (at P 24) that linking the day-ahead and real-time congestion contributed to creating and maintaining a good market design because "the allocation of real time balancing congestion to FTR holders is a practical way to capture the impacts of modeling issues and ensure that any differences will affect the funding for FTRs."

The September 15th Order states (at P 94) the following rationale for its determination:

> We find that the inclusion of balancing congestion in the settlement of FTRs is not just and reasonable as it contributes to the identified unjust and unreasonable cost shift between ARR holders and FTR holders, is inconsistent with cost causation principles, and reduces the efficacy of FTRs as a hedge. The value of an FTR is determined by day-ahead energy market prices that reflect day-ahead congestion costs. The FTR can serve as a hedge against day-ahead congestion. By contrast, balancing congestion, whether positive or negative, is a settlement based on costs incurred in the real-time market. As such, the inclusion of these real-time costs lowers the value of FTRs, thus limiting the efficacy of FTRs as a hedge against day-ahead congestion.

The Commission's rationale reveals misunderstandings regarding the applicability of the cost causation principle to the FTR market, the valuation of FTRs, and the cause of balancing congestion.

There is confusion about the significance of FTR target allocations, which are defined by day-ahead prices, and the actual payments to FTR holders. The value of FTRs is ultimately determined by the amount of total congestion revenue which includes balancing congestion. FTRs are a method used to return total congestion to those who purchased congestion rights through the ARR/FTR process. They are not a guaranteed revenue stream.

The Commission clearly stated this distinction in the *FirstEnergy* decisions.[28] The Commission has explicitly recognized that the tariff does not provide a guarantee to FTR holders that they will be paid their target allocations.[29] But the Commission changed course here and now provides that guarantee.

A finding that the current allocation methodology "is inconsistent with cost causation principles" necessitates an evidentiary basis for identifying who or what is responsible for causing congestion costs. There is no such evidence because cost causation, as invoked here, is a concept that is irrelevant to the allocation of congestion revenues. Congestion costs are equivalent to congestion revenues, which are revenues paid by load for energy in excess of the revenues paid the generators that produced the energy. The question is who has a right to that congestion rent, not who caused it. The FTR/ARR process is about assigning total congestion revenues. No costs are incurred, created, allocated, or shifted. Identifying one defined element of congestion revenue that is frequently negative (balancing congestion) and assigning that to load only is a reallocation of congestion revenues outside the FTR/ARR process. Assigning balancing congestion to load simply requires load to subsidize FTR target allocations.

The Commission found (at P 94) that, "the inclusion of balancing congestion in the settlement of FTRs … is inconsistent with cost causation principles." However, the Commission also stated (at P 98)"

> The multi-faceted nature of balancing congestion does not easily permit a granular allocation to those parties causing and directly benefiting from balancing congestion. Additionally, limiting the allocation to any subset of market participants that are not fully

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28 *See FirstEnergy* at P 41, citing *PPL EnergyPlus, LLC v. PJM Interconnection, L.L.C.*, 134 FERC ¶ 61,263, at P 46 (2011) (the Tariff (OA Schedule 1 § 5.2.5(c)) contemplates the possibility of underfunding FTRs in a planning period).; *FirstEnergy II* at P 23.

29 *See FirstEnergy* at P 3; 134 FERC ¶ 61,263 at P 46.

> responsible for the costs associated with balancing congestion would be inconsistent with cost causation principles. Finally, the costs incurred have system-wide benefits where individual beneficiaries cannot be identified.

The difficulty identified actually results from the irrelevance of cost causation to the issue of allocating congestion revenues. Congestion revenues, as a matter of fundamental market design, should be returned to load. The *FirstEnergy* decision correctly found (at P 43): "Neither FirstEnergy nor any of the commenters have identified the parties causing the underfunding. FirstEnergy also does not provide evidence demonstrating why all transmission customers, who already pay for transmission system access, should pay for the underfunding." The record has not changed from this decision, and there is no evidence to support any change in allocation.

The Commission got it right in *FirstEnergy II*, when it explained (at P 24 n.15): "For example, a general uplift to all PJM stakeholders or customers would not provide an incentive for any party to reduce the underfunding and would provide even less ability for parties to value FTRs based on the expected underfunding."[30] In *FirstEnergy II* (at P 23), the Commission found: "the underfunding of FTRs does not demonstrate that the current allocation method for the underfunding is unjust and unreasonable" or "unduly discriminatory." In the current market, that would be FTR holders who are free to discount their bid accordingly to account for any expected balancing congestion impacts. Assigning balancing congestion directly to load only serves to hand FTR holders a direct subsidy of the congestion risks they are undertaking at the expense of load.

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30 *Id*. at P 24 n.15. The Commission also observed (*id*. at P 24) that it finding was supported by record evidence: "Complainants' own expert witness recognized this fact, stating that the most obvious and direct consequence of the declining FTR revenue adequacy is the erosion of the value of holding FTRs as a congestion management tool for load-serving entities, [citation omitted] and that underfunding FTRs will result in lower auction prices for FTRs.[citation omitted]."

The *FirstEnergy* decision correctly determined (at P 42): "The amount paid by FTR holders should reflect the expected value of a given FTR. Thus, if the value of FTRs is reduced by underfunding, then the FTR holders should pay less for these instruments, and will receive the value for which they have paid."

In *FirstEnergy* (at P 41), the Commission rejected the contention that "FTRs are not funded to the levels that are necessary to provide the intended hedge against congestion," correctly observing: "In PJM, the right to financially firm transmission service is provided through the allocation of ARRs, which are directly allocated to loads to offset congestion. FTRs, in PJM, are awarded to bidders in an FTR auction." The Commission found: "full funding of FTRs is a goal, but the PJM Tariff does not ensure full funding.[31]

None of the findings included in the September 15th Order have a basis in fact, and are instead based on fundamental misunderstandings of the nature of congestion and the purpose of the ARR/FTR design. In contrast, the Commission reached the correct conclusions, based on the facts and based on the correct understanding of congestion charges and the purpose of FTRs, in its *FirstEnergy* decision issued June 5, 2013, and confirmed in its *FirstEnergy II* decision issued June 8, 2015. It is a mystery why after years of careful deliberation the September 15th Order suddenly accepts at face value the same self-serving and flawed arguments promoted by financial participants with substantial FTR positions.[32] The faulty, illogical and unsupported explanations offered in September 15th Order contrast sharply with earlier well reasoned and supported findings.

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[31] *FirstEnergy* at P 41; *see also FirstEnergy II* at P 23, citing *PJM Interconnection, L.L.C.*, 143 FERC ¶ 61,209 at P 41, citing *PPL EnergyPlus, L.L.C. v. PJM Interconnection, L.L.C.*, 134 FERC ¶ 61,263, at P 46 (2011) (the Tariff contemplates the possibility of underfunding FTRs in a planning period)); OA Schedule 1 § 5.2.5(c).

[32] In contrast, the Commission correctly determined in the *FirstEnergy* decision (at P 44): "While some parties, like FirstEnergy, may benefit from such a reallocation, FirstEnergy has not shown that such a reallocation will benefit the overall market structure in PJM nor allocate costs to those that cause the costs to be incurred or have the incentive to reduce those costs."

The September 15th Order is not consistent with Section 217(b) of the Federal Power Act and the Commission's implementing orders and decisions.[33] Section 217(b) provides that "[a]ny load serving entity … is entitled to use the firm transmission rights, or, equivalent tradable or financial transmission rights, in order to deliver the output or purchased energy … to the extent required to meet the service obligation of the load-serving entity." The concern is to protect load's firm transmission rights for delivered energy. The statutory protection applies to delivered energy; the protection is not limited to the results of the day-ahead market, which does not itself result in delivered energy.

2. The Total Congestion Revenue Rule Is Just and Reasonable and Consistent with Objective of Market Design.

The Commission states (at P 97) that "Requiring PJM to account for balancing congestion in its FTR modeling has resulted in inefficient ARR allocation to the detriment of load serving entities." This statement is factually incorrect. The ARR allocation has no impact on the level of balancing congestion. The inefficient allocation of ARRs results from PJM's unilateral decision, beginning in the 2014 to 2015 planning period, to reduce the allocation of Stage 1B and Stage 2 ARRs for the purpose of improving FTR funding. The FTR market was chronically revenue inadequate, and PJM could assure increased FTR payments by sharply reducing Stage 1B and Stage 2 ARR allocations at the expense of ARR holders. This was not a result of the inclusion of balancing congestion or market conditions. PJM's decision has nothing to do with how balancing congestion should be allocated, but it is consistent with PJM's long stated position that FTR holders should be guaranteed funding based on FTR target allocations and that the load should guarantee that funding. PJM has never explained how its position on guarantees for FTR target allocations, which principally benefits speculative trading in FTRs, can be reconciled with the fundamental purpose of FTRs to return to load the congestion revenues paid by load.

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[33] 16 USC § 824q.

No new evidence was introduced in this proceeding to support the claim that the removal of balancing congestion from the definition of total congestion would make load better off.

The Market Monitor has previously proposed several adjustments to the design of the FTR Market that would improve the design and improve the level of funding without requiring load to subsidize FTR holders via the assignment of balancing congestion. Balancing congestion is not the cause of revenue inadequacy. Revenue inadequacy is created when there are significant mismatches between the FTR model and the day-ahead model and the day-ahead model and the real-time model. Removal of balancing from the funding equation fails to address the underlying issues, does not solve the underlying issues, requires load to subsidize financial participants and unjustly shifts risk from FTR holders to load. Removal of balancing congestion from the funding equation does not eliminate balancing congestion but simply assigns all of it to load and none of it to FTR holders.

PJM stated "PJM believes this [Stage 1B and Stage 2 reductions] inequitable cost shift is unjust and unreasonable, and this cost shift can be significantly *reduced* with the proposed reforms to the ARR and FTR process."[34] PJM's statement is ironic given that PJM made this change unilaterally and therefore is responsible for the results. PJM's proposed reforms did not include assigning balancing congestion to load. PJM's filing asserted that the Stage 1B and Stage 2 reductions, and the associated cost shift, would be addressed by PJM's filed approaches which did not include the assignment of balancing congestion to load.

The Market Monitor agrees that the result of PJM's reduction in Stage 1B ARR allocations was unjust and unreasonable. The solution is for the Commission to direct PJM to stop its reduction in ARR allocations, not to assign balancing congestion to load and exports. Absent such direction from the Commission, there is no reason to believe that PJM

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[34] PJM filing, EL16-16-000 (Oct. 19, 2016) at 14 ("October 19th Filing").

will allocate 100 percent of Stage 1B and Stage 2 ARRs to load even if balancing congestion were assigned to load. In its October 19th Filing, PJM stated that the assignment of balancing congestion to load would only reduce, but not eliminate the PJM reductions in Stage 1B and Stage 2 allocations.[35] Thus, PJM indicates that they will continue this practice, but to a lesser extent, in order to guarantee revenue adequacy of FTRs at the expense of the full allocation of ARRs to load. This indicates that balancing congestion is not the root cause of revenue inadequacy, and that its assignment to load is inappropriate.

The sale of FTRs under the current construct, is equivalent to load selling the right to variable congestion rents in exchange for a steady stream of payments from the FTR purchaser. Requiring load to pay for balancing congestion requires load to inappropriately subsidize and assume risk from financial participants which they have voluntarily assumed by purchasing FTRs in an auction.

The Commission asserts "that the inclusion of balancing congestion in the settlement of FTRs…reduces the efficacy of FTRs as a hedge."[36] Contrary to the vague assertions of some FTR holders, there is no information on the proportion of financial participants who are speculators and financial participants who use FTRs to sell hedges to load. The assertions about the role of FTRs in providing a hedge are not supported by any evidence. But it would make no difference to the argument if all FTR holders provide hedges. FTR holders have voluntarily taken on a risk and there is no reason for load to absorb that risk. Moreover, the September 15th Order does not identify the statutory mandate and explain the jurisdictional basis for regulating FTRs if they are recharacterized and regulated as "hedging" instruments.[37]

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[35] *Id*.

[36] Order at 94

[37] Federal Power Act §§ 201, 205, 206 & 217, 16 USC §§ 824, 824d, 824e & 824q; *see also* Commodity Exchange Act § 2, 7 USC § 2.

Table 1 shows the ownership of FTRs in the 2016 to 2017 Annual FTR Auction.[38] Physical includes load serving entities and generation owners, and financial participants are those market participants that do not have physical positions. Financial participants own 65.6 percent of all 2016 to 2017 Annual FTRs.

Table 1 FTR Ownership in the 2016 to 2017 Annual FTR Auction

		FTR Direction		
Organization Type	Self-Scheduled FTRs	Prevailing Flow	Counter Flow	All
Physical	Yes	10.0%	0.4%	6.4%
	No	33.0%	19.9%	28.0%
	Total	43.1%	20.3%	34.4%
Financial	No	56.9%	79.7%	65.6%
Total		100.0%	100.0%	100.0%

B. The Portfolio Netting Rule Should Be Eliminated.

The practice of netting positive and negative target allocations within a portfolio, the Portfolio Netting Rule, is unjust and unreasonable and should be eliminated. The Portfolio Netting Rule contradicts the basis on which the Commission approved the rule in 2007.[39] A

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38 2016 Quarterly State of the Market Report for PJM: January through June, Volume 2, Section 13: FTRs and ARRs, Table 13-12.

39 The Portfolio Netting Rules is not consistent with the substance of the Commission's initial and correct directive in the 2007 proceeding where it originated. The record reveals confusion about how the rule was intended to operate. ODEC asked that the Commission "clarify that the full funding uplift allocation for each month's calculation must include all FTRs with a positive target value and that such allocation basis shall not be reduced by negative value or counter-flow FTRs in that month." Protest of Old Dominion Electric Cooperative, Docket No. ER06-1218-000 (Feb. 12, 2007) at 8. In ODEC's approach, positive target allocations should not be reduced by negative target allocations. ODEC opposed the Portfolio Netting Rule.

The initial order responded to ODEC's request, stating: "the uplift allocation for each month must include only positive value FTRs and that *such FTRs must not be reduced by negative value or counter-flow FTRs in that month. Old Dominion states that such negative or counterflow FTRs are fully funded in and of themselves* and, therefore, neither contribute to nor require an uplift mechanism in order to achieve full funding. *We agree. Negative FTRs function to ensure that positive FTRs (target allocations) are fully funded* [emphasis added]." PJM Interconnection, L.L.C., 119 FERC ¶ 61,144 at P 71 (2007). This directive clearly indicates that the Commission did not intend to implement portfolio netting,

practice implemented for no evident reason should be accorded no deference. Netting provides unjustified subsidies to participants holding FTRs with negative target allocations. PJM proposed to eliminate portfolio netting over five years ago, but was unable to overcome opposition from participants with a vested interest in the applying the wrong approach.[40]

The Commission states that it was not persuaded that the elimination of netting results in revenue inadequacy. There was no need for persuasion on this point as all commenters agreed that netting did not directly affect overall revenue, but did affect the allocation of the available revenue among participants with the net result that funding is varied across participants based on the composition of their portfolio.

The Commission states, as a reason to continue portfolio netting (at P 69), that "the current practice already guarantees that both positive and negative target allocations are

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recognizing that negative target allocations should pay 100 percent of their target allocation, and that their sole function is to provide a source of revenue for positive target allocation FTRs.

Because negative target allocations do not pay 100 percent of their target allocations under the current rules, the Commission's directive that "negative FTRs function to ensure that positive FTRs (target allocations) are fully funded," is not achieved. The directives from this order would be achieved if portfolio netting were eliminated.

In response to PJM's request for clarification, the Commission stated: "The Commission's intent in ruling as it did in the May 17 Order was to ensure that the share of any revenue shortfall allocated to an FTR holder through uplift reflects only its net positive target allocation; that is, the positive target allocation that may remain after subtracting the FTR holder's negative target allocation, if any." *PJM Interconnection, L.L.C.*, 121 FERC ¶ 61,073 at P 16 (Oct. 22, 2007). The Commission statement of its intent does not correspond to the rationale provided earlier. No alternative rationale is provided. The proposal rejected by the Commission in this proceeding attempted to correct the rules on portfolio netting in a manner consistent with the rationale provided Commission's initial directive. Neither the 2007 order on clarification nor the September 15th Order offer any substantive for reversing the initial and correct directive.

[40] *See* PJM, "FTR Task Force" (Sept. 1, 2011) at 28–30, which can accessed at: <*http://pjm.com/~/media/committees-groups/task-forces/ftrtf/20110901/20110901-item-02-pjm-presentation.ashx*>; *see also* Market Monitor, "Selected MMU Market Issues, Members Committee Webinar (Feb. 25, 2013).

treated in the same manner." However, this is contradicted even by proponents of netting. Both primary proponents of netting, DC Energy and Elliott Bay, concede that holders of net negative and net positive portfolios are treated differently.[41] This could not happen if the individual FTRs within the portfolio were actually treated in the same manner.[42] If individual FTRs were treated in the same manner, regardless of portfolio, the result would be that all portfolios would be treated in the same manner. The undisputed fact that all portfolios are not treated in the same manner means that FTRs are not treated equally, regardless of the nature of the participant's overall FTR portfolio. The treatment of FTRs depends on the characteristics of the portfolio they are in. The Commission's order ignores this undisputed fact at the expense of FTR holders with positive target allocations.

Threats that participants would leave the FTR market if portfolio netting were eliminated have no basis in fact or evidence. FTRs have been historically profitable, and without portfolio netting will remain profitable. Assertions that the elimination of portfolio netting would affect bid prices is an admission that participants are receiving better treatment as a result of existing subsidies for negative target allocations.[43]

This argument is further flawed by the false assumption that the FTR market consists of counter parties which buy and sell FTRs. There is no transfer of congestion risk between FTR buyers and sellers. In all transactions, PJM is the counter party that is both

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[41] *See* Post-Technical Conference Comments of DC Energy, LLC; Inertia Power, LP; Saracen Energy East LP; and Vitol Inc., Docket Nos., EL16-6-000 & ER16-121-000 (March 15, 2016), Attachment A: Post-Technical Conference Declaration, Roy D. Shanker Ph.D. at 8 n.4; Post-Technical Conference Comments of Elliott Bay Energy Trading, LLC, Docket Nos. ER16-121-000, EL16-6-000 & EL16-6-001 (March 15, 2016), Exhibit A: Affidavit of Dr. Susan L. Pope at 14.

[42] *See* Answer of the Independent Market Monitor for PJM, Docket No. EL16-6-000 (December 17, 2015) at 5, Table 1.

[43] *See* Post-technical Conference Comments of Elliott Bay Energy Trading, LLC. Docket No. EL16-6-000 (March 15, 2016), at 19.

buying and selling the system capacity at the price determined by received bids.[44] PJM is able to undertake these transactions with load's money. This is supported in Elliott Bay's own statements that "Secondary market operators would need to find a counter party willing to hold the other side of each FTR…", which clearly indicate that under the current system PJM is the counter party assuming the congestion risks with ratepayer money. (EB tech conference reply, page 27) PJM loads are the parties that are on the losing side of this transaction. Rather than fully refunding congestion to load, FTRs are funneling money to other parties with no congestion payments, as evidenced by the consistent profitability of FTRs.

The Commission's argument is further flawed by the assertion that counter flow FTRs do not contribute to revenue adequacy. The examples the Commission cites are based on a system that does not resemble the actual FTR market. The Commission asserts (at P 69) that "… given that the value of these counterflow FTRs is reduced by the payout ratio in the same manner as the value of the prevailing flow FTRs" as another reason to reject the PJM proposal. This assertion is not correct. A symmetric application of the payout ratio to prevailing and counter flow FTRs has very different meanings that result in subsidies among participants.

As all parties have conceded, and the Commission agrees, that under current rules the payout ratio is applied to both positive and negative target allocations. That is core to what is wrong with the current netting rule.[45] When the payout ratio is applied to

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44 PJM uses PJM Settlement to handle the mechanics. OA Schedule 1 § 7.11(a) ("PJM Settlement shall be the Counterparty with respect to the contractual rights and obligations of the holders of Auction Revenue Rights, and Financial Transmission Rights.")

45 September 15th Order at P 69 ("We agree with the Financial Marketers' and Elliott Bay's experts that portfolio netting does not result in a cross-subsidization of counterflow FTRs, as the current practice already guarantees that both positive and negative target allocations are treated in the same manner.[footnote omitted] Netting is the functional equivalent of applying the same payout ratio to *both* prevailing flow and counterflow FTR target allocations on an individual basis for net positive FTR portfolios" [emphasis in original].).

prevailing flow FTRs, the revenue received by the participant is reduced, reducing profits. When the payout ratio is applied to counter flow FTRs, the revenue paid back by the participant is reduced, increasing profits and reducing available revenue to pay positive target allocations. The result of a payout ratio less than 1.0 is to reduce the benefits of holding prevailing flow FTRs and to increase the benefits of holding counter flow FTRs. It is clear that portfolio netting, which results in applying the payout ratio to counter flow FTRs, treats counter flow FTRs differently and better than prevailing flow FTRs. The net result of portfolio netting, when there is revenue inadequacy, is reduced profits for prevailing flow FTRs and increased profits for counter flow FTRs.

Arguments that participants would leave the FTR market if portfolio netting were eliminated, and thereby reduce the efficiency of the FTR market, have no basis in fact or evidence. FTRs have been historically profitable, and without portfolio netting will remain profitable. Table 2 shows the historical profits from FTRs for financial FTR participants. Participants are free to set their bid price according to what they think will be profitable. The cleared auction price is meant to be a prediction of congestion charges, but has been historically under estimated. Financial companies have seen consistent profits since 2011 even in revenue inadequate years, indicating ARR prices below actual congestion values. The fact that FTRs have been historically profitable demonstrates that they are not correctly reflecting actual congestion costs at the expense of load. The fact that FTRs have been historically profitable also demonstrates that the cross subsidies generated by the portfolio netting rules are not needed to justify participation in the FTR market.

Table 2 Historical financial entity profits from FTRs, excluding self scheduled

Calendar Year	Financial Profits
2010	$138,712,214
2011	$125,697,493
2012	$78,762,923
2013	$177,494,506
2014	$543,642,102
2015	$182,282,134
2016*	$42,533,701
*Through June 30, 2016	

The Commission decision of portfolio netting relies on a misunderstanding of the application of the payout ratio to prevailing and counter flow FTRs based on specious single participant examples from Elliott Bay that ignore the impact of counter flow FTRs on a multi-participant market. In a single participant market it might be the case that a prevailing flow and counter flow FTR cancel out with no impact. However, in a multi-participant market with portfolio netting this is not the case. In a multi-participant market with portfolio netting, a counter flow FTR has consequences felt by all prevailing flow FTRs, and cannot directly cancel out with a prevailing flow FTR. Counter flow FTRs placed on a constrained path are not simply a marginal quantity, allowing a single prevailing flow FTR to be freed up, but have larger impacts on the overall market.

Table 3 shows the impacts a counter flow FTR has on participants in the FTR market. In this example each MW of FTR from path A to B is worth $1 in target allocations for the example period with a total of $2 in congestion collected from load. If the market only contained one participant, and that participant purchased both the counter flow and newly created prevailing flow FTR, it is true that these transactions would cancel out. However, when there is more than one participant in the system the impacts are not so simple when there is portfolio netting.

In the first scenario there are no negative target allocations, a net target allocation of $4 and congestion collected of $2, so all participants realize a payout ratio of 50 percent. In the second scenario, Participant 1 purchases a 1 MW counter flow FTR and Participant 2 purchases the corresponding 1 MW prevailing flow FTR. Since the counter flow FTR results in negative target allocations, all participants could be expected to receive a higher realized payout, but that is not the case with portfolio netting due to faulty accounting. With portfolio netting Participant 1 receives 75 percent of their positive target allocations, while Participants 2 and 3 still only receive 50 percent. The additional revenue to subsidize Participant 1 to 75 percent is taken from Participant 2 and 3's potential realized payout without portfolio netting. If portfolio netting were eliminated all participants would receive the same realized payout ratio of 60 percent, regardless of the construction of their

portfolio. This would result in an increased payment to Participants 2 and 3 of $0.20 and $0.10 which results from the elimination of the $0.30 subsidy to Participant 1 for holding a counter flow FTR. Elliott Bay's assertions of "cancelling out" counter flows only persist in a single participant system, but do not carry over into a multiple participant system when it is clear that some participants are receiving a smaller realized payout than others simply due to the construction of their FTR portfolio.

Table 3 Demonstration with and without portfolio netting of counter flow FTR impacts

		Congestion = $2.00				With Netting		Without Netting	
Scenario	Participant	Positive Target Allocations	Negative Target Allocations	Net Target Allocations	Reported Payout Ratio	Payout with Netting	Positive TA Payout Ratio	Payout without netting	Positive TA Payout without netting
1	1	$2.00	$0.00	$2.00	50.0%	$1.00	50.0%	$1.00	50.0%
	2	$1.00	$0.00	$1.00	50.0%	$0.50	50.0%	$0.50	50.0%
	3	$1.00	$0.00	$1.00	50.0%	$0.50	50.0%	$0.50	50.0%
	Total	$4.00	$0.00	$4.00	-	$2.00	-	$2.00	-
	Incremented with 1MW counter flow FTR								
2	1	$2.00	-$1.00	$1.00	50.0%	$0.50	75.0%	$0.20	60.0%
	2	$2.00	$0.00	$2.00	50.0%	$1.00	50.0%	$1.20	60.0%
	3	$1.00	$0.00	$1.00	50.0%	$0.50	50.0%	$0.60	60.0%
	Total	$5.00	-$1.00	$4.00	-	$2.00	-	$2.00	-

C. There Is No Way to Implement the Stage 1A ARR Allocations Rule.

The Commission states (at P 40) that the use of historical generation to load paths "… presents a disconnect between the Stage 1A ARR allocation and the actual system usage, which could result in infeasible Stage 1A ARRs." The use of long outdated generation to load paths is clearly the wrong way to assign ARRs. But the use of generation to load paths, even if they could be updated, does not and cannot reflect the actual network nature of the transmission system or the actual way in which congestion is paid. It is not only the generation to load paths that are outdated, the entire concept of generation to load paths is archaic, reflecting the contract path approach to physical transmission rights prior to the introduction of markets.

Despite the Commission's direction to PJM, it is not possible to update generation to load paths to reflect the way in which generation serves load or the reasons that congestion

is incurred in the actual PJM network. In a network system it is not possible to identify which generator is serving which load or to track MW from generation to load.

The Market Monitor has proposed a method to return congestion revenues to load that is consistent with the network nature of the market.[46]

Prior to the introduction of ARRs, load received all congestion revenues despite the use of generation to load paths. FTRs were directly allocated to load and the value of the FTRs was paid to load. If congestion revenues, including both day-ahead and balancing, were less than the FTR value, only congestion revenues were paid to load. If congestion revenues, including both day-ahead and balancing, were greater than the FTR value, all congestion revenues were paid to load. Unlike the situation under the current design, there were no leakages of congestion revenues. There are leakages under the current system and the goal of the Commission should be to eliminate the leakages rather than to increase them.

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[46] *See In the matter of PJM's FTR/ARR Allocation*, Technical Conference Transcript, Docket Nos. EL16-6-001, ER16-121-000 (Feb. 4, 2016) at 173:22–174:9.

III. CONCLUSION

For the reasons provided above, the Market Monitor respectfully requests that the Commission grant rehearing.

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Dated: October 14, 2016

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Eagleville, Pennsylvania,
this 14th day of October, 2016.

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