169 FERC ¶ 61,047
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;
Richard Glick and Bernard L. McNamee.

PJM Interconnection, L.L.C. Docket No. EL14-37-000

ORDER REQUIRING ADDITIONAL BRIEFING

(Issued October 17, 2019)

1. On August 29, 2014, the Commission instituted an investigation, pursuant to section 206 of the Federal Power Act (FPA),[1] concerning two issues: (1) the application of PJM Interconnection, L.L.C.'s (PJM) Financial Transmission Rights (FTR) forfeiture rule (FTR forfeiture rule) to Up-to Congestion (UTC) transactions; and (2) how uplift is, or should be, allocated to all virtual transactions in PJM.[2] On January 19, 2017, the Commission made a finding with respect to the first issue, determining that PJM's application of its FTR forfeiture rule to virtual transactions was no longer just and reasonable and requiring PJM to submit revised tariff provisions implementing the order's determinations.[3] With regard to the second issue of how uplift is, or should be, allocated to all virtual transactions, the Commission held the issue in abeyance pending the outcome of any final rule resulting from the Notice of Proposed Rulemaking (NOPR) issued concurrently with the January 19, 2017 Order.[4] This second issue also considered

[1] 16 U.S.C. § 824e (2018).

[2] *PJM Interconnection, L.L.C.*, 148 FERC ¶ 61,144 (2014) (August 29, 2014 Order). Pursuant to section 206(b) of the FPA, the August 29, 2014 Order established a refund effective date of September 8, 2014.

[3] *PJM Interconnection*, *L.L.C.*, 158 FERC ¶ 61,038, at P 2 (2017) (January 19, 2017 Order).

[4] January 19, 2017 Order, 158 FERC ¶ 61,038 at P 3 (citing *Uplift Cost Allocation and Transparency in Markets Operated by Regional Transmission Organizations and Independent System Operators*, 158 FERC ¶ 61,047 (2017) (Uplift NOPR)).

PJM's different treatment of UTCs as compared to Incremental Offers (INCs) and Decrement Bids (DECs)[5] for purposes of allocating uplift.

2. On April 19, 2018, the Commission issued Order No. 844, the final rule in the Uplift NOPR proceeding.[6] Of relevance here, the Commission did not require revisions to Regional Transmission Organization (RTO) tariffs addressing real-time uplift.[7]

3. In this order, we provide parties with an opportunity to provide additional briefing to update the record in this proceeding. We require PJM to submit its brief answering the questions listed below within 30 days of the date of this order. Parties may then file reply briefs updating their positions within 30 days of PJM's filing.

I. Background

A. PJM's Filing in Docket No. ER13-1654-000, *et al.*

4. On June 10, 2013, in Docket No. ER13-1654-000, PJM filed revisions to its Open Access Transmission Tariff (Tariff) and Amended and Restated Operating Agreement (Operating Agreement) to define UTC transactions as virtual transactions and to clarify the rules concerning the use of such transactions (June 2013 Filing).[8] PJM stated that the proposed revisions reflected the evolution of UTC transactions from financial hedges of real-time congestion charges associated with physical transactions to purely virtual

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[5] As described below, there are three types of virtual transactions in PJM: INCs, DECs, and UTCs.

[6] *Uplift Cost Allocation and Transparency in Markets Operated by Regional Transmission Organizations and Independent System Operators*, Order No. 844, 163 FERC ¶ 61,041 (2018).

[7] Order No. 844, 163 FERC ¶ 61,041 at P 29.

[8] A UTC is a bid in the day-ahead market to buy congestion and losses between two points. In its filing, PJM proposed to define a UTC as a virtual transaction that combines an offer to simultaneously sell energy at a specified source with a bid to buy the same megawatt quantity of energy at a specified sink in the day-ahead market, where such transaction specifies the maximum difference between the Locational Marginal Prices (LMP) at the source and sink that the market participant is willing to pay. PJM Operating Agreement, Attachment K – Appendix, § 1.10.1A(c-1).

products. In addition, PJM proposed to extend the application of the FTR forfeiture rule from INCs and DECs to also apply to UTCs.[9]

5. On August 9, 2013, the Commission accepted PJM's proposed tariff revisions conditioned upon PJM's submission of a compliance filing further explaining how it intended to apply the FTR forfeiture rule to UTC transactions.[10] The Commission also required PJM to make an informational filing within six months describing the financial performance of UTCs, INCs, and DECs, as well as these transactions' effects on uplift.

6. On September 6, 2013, PJM submitted its compliance filing to the August 9, 2013 Order in Docket No. ER13-1654-001.[11] On February 7, 2014, PJM submitted the informational filing on uplift, the PJM Report on the Impact of Virtual Transactions.[12]

B. Section 206 Investigation in Docket No. EL14-37-000 and Technical Conference

7. In the August 29, 2014 Order, the Commission stated that PJM's filings in Docket No. ER13-1654 raised, but did not resolve, issues concerning its proposed treatment of UTCs as virtual transactions, in particular, the proposed application of the FTR forfeiture rule differently to UTCs and to INCs and DECs. With regard to uplift, the Commission noted that PJM stated in the PJM Report on the Impact of Virtual Transactions that both UTCs and INCs/DECs affect uplift; however, only INCs and DECs are currently subject

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[9] An INC is a virtual offer to sell energy at a specified source location in the day-ahead market. A cleared INC results in scheduled generation at the specified location in the day-ahead market. A DEC is a bid to purchase energy at a specified sink location in the PJM day-ahead market. A cleared DEC results in scheduled load at the specified location in the day-ahead market. PJM, Operating Agreement, Schedule 1, §§ 1.3.1E, 1.3.9A.

[10] *PJM Interconnection, L.L.C.*, 144 FERC ¶ 61,121 (2013) (August 9, 2013 Order).

[11] On December 18, 2013, Commission staff issued a data request seeking further information regarding the application of the FTR forfeiture rule. On January 16, 2014, PJM submitted answers to the data request in Docket No. ER13-1654-002.

[12] *Report on the Impact of Virtual Transactions*, Docket No. ER13-1654-000 (February 7, 2014) (also filed on May 29, 2015 as an attachment to PJM's Comments in Docket No. EL14-37-000) (PJM Report on the Impact of Virtual Transactions).

to uplift charges. Accordingly, the Commission stated that the section 206 proceeding should also examine how uplift is, or should be, allocated to all virtual transactions.[13]

8. As part of the section 206 investigation, the Commission convened a technical conference on January 7, 2015, to explore the issues further. On the topic of uplift, the Notice of Technical Conference stated that the technical conference would explore whether PJM's current uplift allocation rules associated with UTC transactions and INCs/DECs are just and reasonable.[14]

9. On July 22, 2015, the Financial Marketers Coalition filed a Motion to Lodge a June 23, 2015 PJM analysis of three proposals regarding uplift cost allocation to UTCs that received the highest votes in the stakeholder process.[15]

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[13] August 29, 2014 Order, 148 FERC ¶ 61,144 at P 13.

[14] Post-technical conference comments were filed by: Acorn Energy Trading, LLC (Acorn); Angell Energy, LLC (Angell); Appian Way; Dominion Resources Services, Inc. (Dominion); Dyon, LLC (Dyon); EDF Trading North America, LLC (EDFT); eXion Energy, Inc. (eXion); Dufossat Capital; Monterey Enterprises, LLC; Red Wolf; and XO Energy (collectively); the Financial Marketers Coalition;[14] Inertia Power I, LLC and Twin Cities Power Holding, LLC (Inertia/Twin Cities); Kass Commodities; Lawrence Smith; Old Dominion Electric Company and Southern Maryland Electric Cooperative (Electric Cooperatives); PJM; PJM Industrial Customer Coalition (PJMICC); PJM Market Monitor; PJM Utilities Coalition; Red Wolf; SESCO Enterprises LLC (SESCO); Step2 Capital Incorporated (Step2 Capital); Vitol Inc. (Vitol); XO Energy, LLC (XO Energy); and Yes Energy, LLC. Responsive comments to the post-technical conference comments were filed by: eXion, Inertia Power I, LLC, Twin Cities Power Holdings, LLC, Dyon, and Angell (collectively, Select Financial Marketers); the Financial Marketers Coalition; and the PJM Market Monitor. Answers to responsive comments were filed by the PJM Market Monitor and PJM.

[15] The proposals include: (1) PJM's proposal to allocate uplift to UTCs as a single deviation and no longer allow Internal Bilateral Transactions to offset uplift; (2) a flat $0.15/MW fee to UTCs, changes to the classification as economic for local reliability committed units, and the removal of Internal Bilateral Transactions' ability to offset uplift; and (3) PJM's "MISO-Lite" proposal, which would create energy and transmission uplift buckets. Financial Marketers Coalition, Motion to Lodge, Docket No. EL14-37-000, Ex. A (Phase 2 Package Summaries) (July 22, 2015) (PJM Analysis of Uplift Proposals).

C. January 19, 2017 Order

10. In the January 19, 2017 Order, the Commission determined that PJM's current application of its FTR forfeiture rule to virtual transactions was no longer just and reasonable and directed PJM to submit a compliance filing implementing the order's determinations. Relevant to this order, the Commission held the issue of how uplift is, or should be, allocated to all virtual transactions in abeyance, pending the outcome of any final rule in the Uplift NOPR proceeding. The Commission also granted the Financial Marketers Coalition's Motion to Lodge the PJM Analysis of Uplift Proposals.[16]

11. In a concurrently issued order, the Commission accepted PJM's compliance filing relating to its proposal in Docket No. ER13-1654 to clarify the use of UTCs as virtual transactions and extend the FTR forfeiture rule to UTCs, effective August 9, 2013.[17]

D. Uplift NOPR and Order No. 844 in Docket No. RM17-2-000

12. On January 19, 2017, the Commission issued the Uplift NOPR. The Commission proposed to require each RTO and independent system operator (ISO) that allocates the costs of real-time uplift due to deviations to allocate such real-time uplift costs only to those market participants whose transactions are reasonably expected to have caused the real-time uplift costs.

13. The Commission also proposed to revise its regulations to enhance transparency.[18] On April 19, 2018, the Commission issued Order No. 844, which adopted the Uplift NOPR's transparency proposals, with certain modifications.[19] Relevant to the instant 206 proceeding, the Commission declined to adopt the uplift cost allocation reforms proposed in the NOPR. The Commission stated that it continued to believe that uplift ideally should be allocated to those market participants whose transactions caused the uplift and that allocations of uplift costs should avoid penalizing behavior that can improve price formation. However, based on the record in that proceeding, the Commission found commenters' substantial concerns about the NOPR proposal sufficiently persuasive to decline to take generic action at the time.[20]

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[16] January 19, 2017 Order, 158 FERC ¶ 61,038, at PP 2-3, 23.

[17] *PJM Interconnection, L.L.C.*, 158 FERC ¶ 61,039 (2017).

[18] Uplift NOPR, 158 FERC ¶ 61,047 at P 82.

[19] Order No. 844, 163 FERC ¶ 61,041 at P 1.

[20] *Id.*

II. Notice of Section 206 Investigation and Responsive Pleadings

14. Notice of the institution of the instant section 206 proceeding and the refund effective date was published in the *Federal Register*, 79 Fed. Reg. 53,189 (2014).

15. Notices of intervention and timely motions to intervene were filed by: American Electric Power Service Corporation; Appian Way; Boston Energy Trading and Marketing LLC; Black Oak Energy LLC; Calpine Corporation; Consumer Advocate Division of West Virginia, The Dayton Power and Light Company; DC Energy, LLC; Dominion; Dufossat Capital; Dyon; Duke Energy Corporation; Electric Power Supply Association; Elliott Bay Energy Trading Company, LLC; Exelon Corporation; the Financial Marketers Coalition; Great Bay Energy; H.Q. Energy Services (U.S.) Inc.; Inertia Power I, LLC; J. Aron & Company; Macquarie Energy LLC; Maryland Public Service Commission; Monterey MA, LLC; North Carolina Electric Membership Corporation; NRG Companies; PJMICC; PJM Market Monitor; PSEG Companies; Red Wolf; RTO Trading Energy, LLC; Solios; Twin Cities Power Holdings, LLC; SESCO; and XO Energy.

16. The FirstEnergy Companies filed a timely motion to intervene and comments.

17. Motions to intervene out-of-time were filed by: Acorn; Angell; Bartram Lane LLC; Buckeye Power, Inc.; Conch Energy Trading, LLC; DC Energy Southwest LLC; Delaware Division of the Public Advocate; Direct Energy Business Marketing, LLC; Duquesne Light Company; Dyon; East Kentucky Power Cooperative; EDFT; eXion; Falcon Energy, LLC; Greene Energy LLC; Kass Commodities; Liberty Hill Power LLC; LM Power, LLC; NextEra Energy Power Marketing, LLC; Old Dominion Electric Cooperative; Pure Energy, Inc.; Solea Energy, LLC; Southard Energy Partners; Southern Maryland Electric Cooperative; Vandelay Holdings, LLC; Vitol; Yasmin Partners LLC; and Yes Energy, LLC.

III. Responsive Pleadings

18. PJM, the PJM Market Monitor, and load, such as the Electric Cooperatives, PJM Utilities Coalition, PJMICC, and Dominion, argue that UTCs contribute to uplift and thus should be assessed uplift, while financial marketers generally argue the opposite. PJM asserts that UTCs' impacts to transmission system losses and transmission flows in the day-ahead market alter congestion patterns and the commitment and dispatch of resources in congested areas.[21] PJM states that because UTCs either impact uplift or have the potential to cause uplift, they should be charged uplift even if the exact effect on uplift for any particular UTC transaction cannot be determined.[22] For example, PJM

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[21] PJM Comments at 11.

[22] *Id.* at 12.

explains that when there is a large amount of cleared UTCs in the day-ahead market, these transactions can significantly impact transmission system losses because they increase the loading of the transmission system (i.e., congestion) and therefore increase losses across the system. The PJM Market Monitor also argues that UTCs affect resource commitment and dispatch, transmission line flows and LMPs, and thus the level of uplift collected.[23]

19. On the other hand, many financial marketers argue that the critical question is not whether UTCs impact uplift, but whether they increase or decrease it and the magnitude of the impact. They contend that in helping to pre-position the day-ahead market and converge prices, UTCs and other virtual products actually reduce uplift.[24] Some financial marketers argue that UTCs never cause uplift.[25] Others assert that although UTCs may typically reduce uplift, they may increase uplift only in very limited circumstances and to a minimal degree, such as only causing uplift associated with congestion.[26]

A. Comments supporting uplift allocation to UTCs

20. PJM states that UTCs are energy neutral and, outside of their impact on losses, largely only impact the commitment and dispatch of the system for transmission constraints.[27] PJM explains that, similar to INCs and DECs, UTCs are virtual transactions in the day-ahead market that do not represent the physical delivery of power in real-time. Therefore, PJM states UTC transactions represent a deviation between megawatts in the day-ahead and real-time markets that is liquidated at the real-time LMP.[28]

21. In order to assess the impact of UTCs on unit commitment and dispatch, PJM conducted an analysis considering four day-ahead market cases from various days in

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[23] PJM Market Monitor Comments at 6-7.

[24] Inertia/Twin Cities Comments at 8; Financial Marketers Coalition Comments at 34-35; Red Wolf Comments at 29-31; Vitol Comments at 5.

[25] Financial Marketers Coalition Comments at 2.

[26] Appian Way Comments at 8-9; XO Energy Comments at 16.

[27] *Report on the Impact of Virtual Transactions* at 3.

[28] *Id.* at 3.

December 2013.[29] While UTCs are energy neutral, PJM's analysis found that UTCs can impose flows on transmission facilities in the day-ahead market that either cause or relieve congestion. As a result, PJM either commits or de-commits units for congestion management.[30]

22. In its analysis, PJM found that removing UTCs from the market leads to the de-commitment of certain units that are then replaced via the commitment of other units. However, the cost of the replacement unit(s) is not always identical. Therefore, in some cases UTCs may be driving the commitment of lower cost resources in the day-ahead market because the UTCs are in the counterflow direction of transmission constraints and therefore relieve congestion.[31] PJM argues that in other cases the opposite will occur; UTCs will impose forward flow on a facility in the day-ahead market and cause increased congestion and out-of-merit commitment and dispatch for constraint management.[32] Additionally, PJM explains that a precise determination of the direction and impact on resource commitment and dispatch by UTCs is virtually impossible due to the complexity of the day-ahead market and the interactions of the various different types of transactions.[33]

23. The PJM Market Monitor also performed an analysis that, among other things, illustrated the energy uplift charges eight weeks before and after the refund effective date of this proceeding, September 8, 2014. The PJM Market Monitor found that there was a decrease in the volume of daily cleared UTCs since the refund effective date was established, and indicates a nearly 8 percent decrease in total energy uplift in that same time period.[34]

24. The PJM Market Monitor points out that, although UTCs are not included in the initial reliability run resource commitment process, UTC bids are included in the

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[29] *Id.* at 7-9.

[30] *Id.* at 8-9.

[31] *Report on the Impact of Virtual Transactions* at 9.

[32] *Id.*

[33] *Id.*

[34] PJM Market Monitor July 17 Answer at 6 (citing PJM Market Monitor, MC Webinar presentation (November 17, 2014)), http://monitoringanalytics.com/reports/Presentations/2014/IMM_MC_Webinar_Market_Monitor_Report_20141117.pdf.

subsequent day-ahead market solution process, thereby affecting unit commitment, dispatch, congestion, and prices.[35] The PJM Market Monitor argues that it is no longer disputed that UTCs affect unit commitment in PJM's day-ahead market, and, thus, by affecting unit commitment and dispatch, UTCs also affect operating reserve (uplift) charges. [36]

25. Electric Cooperatives, PJM Utilities Coalition, and PJMICC state that UTCs can and do impact unit commitment as well as uplift, as demonstrated by PJM and the PJM Market Monitor.[37] Dominion asserts that UTCs were the marginal resource in the day-ahead market during 90 percent of all hours in 2013 and 2014, and have a significant impact on the day-ahead market clearing process, with a resulting impact on uplift costs.[38] PJM Utilities Coalition argues that UTCs should not enable market participants to engage in transactions essentially identical to INCs and DECs, but avoid the uplift costs accompanying INCs and DECs.[39]

B. Comments opposing uplift allocation to UTCs

26. Various commenters argue that UTCs should not be assessed uplift and assert that there is a lack of evidence that the current uplift allocation solely to INCs and DECs is not just and reasonable and thus does not meet the burden of proof required for FPA section 206 action.[40] Many of these commenters also argue that the critical question is not whether UTCs affect unit commitment and dispatch, but rather, whether they increase or reduce uplift.[41]

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[35] PJM Market Monitor Comments at 9-10.

[36] *Id.*

[37] Electric Cooperatives Comments at 13; PJM Utilities Coalition Comments at 5; PJMICC Comments at 2.

[38] Dominion Comments at 6-7.

[39] PJM Utilities Coalition Comments at 5.

[40] Acorn Comments at 1; Angell Comments at 1; Dyon Comments at 1; eXion Comments at 2-3; Financial Marketers Coalition Comments at 34; Red Wolf Comments at 29-30.

[41] Acorn Comments at 1; Angell Comments at 1; Dyon Comments at 1; eXion Comments at 4; Financial Marketers Coalition Comments at 34; Vitol Comments at 5-7.

27. eXion contends that there is no sound basis to conclude that UTCs cause uplift and attacks PJM's evidence regarding UTCs' contribution to uplift, arguing that PJM's Report on the Impact of Virtual Transactions, which considers a small sample size of four random days, is methodologically flawed.[42] eXion argues that the small sample size cannot be reasonably relied upon to reallocate millions of dollars of uplift, especially where PJM admits that the effects on commitment and dispatch "change on a daily basis."[43] eXion also argues that PJM's analysis focuses entirely on unit commitment and dispatch, which sheds little light on the impact of virtual trading on uplift. eXion states that changing the unit commitment and dispatch is not synonymous with causing uplift. eXion contends that virtual transactions should not be allocated uplift because no virtual transaction has an obligation to deliver energy or serve load; they are financial products that automatically settle against the real-time LMP.[44]

28. Inertia/Twin Cities state that PJM and the PJM Market Monitor's arguments in favor of allocating uplift to UTCs rely entirely on the theoretical assumption that any market participant that affects unit dispatch and commitment should also be required to pay uplift. According to Inertia/Twin Cities, however, that assumption, without credible empirical evidence, is dubious at best and does not constitute the affirmative showing necessary to prove that the existing tariff is in violation of section 206 of the FPA.[45] In addition, Inertia/Twin Cities also claim that PJM has previously asserted that its current rules for allocating uplift are just and reasonable.[46]

29. Vitol requests that the Commission direct PJM to perform a cost causation analysis to determine how uplift should be allocated to virtual and UTC transactions.[47] Financial Marketers Coalition argues that by helping to pre-position the day-ahead market more efficiently, UTCs and other financial products actually help reduce uplift; therefore, any uplift allocation should consider their minimal, if any, contribution to uplift and their elasticity of demand.[48] Similarly, Inertia/Twin Cities and Red Wolf assert

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[42] eXion Comments at 3-5.

[43] *Id.* at 4 (citing PJM *Report on the Impact of Virtual Transactions* at 9).

[44] *Id.* at 5 (citing *PJM Interconnection, L.L.C.*, 148 FERC ¶ 61,144, at P 3 (2014)).

[45] Inertia/Twin Cities Comments at 5-8.

[46] *Id.* at 5-6.

[47] Vitol Comments at 5.

[48] Financial Marketers Coalition Comments at 34-35; Vitol Comments at 5.

that the benefits of UTCs, including, among other things, increasing competition and liquidity, converging day-ahead and real-time prices, improving the accuracy of price signals and day-ahead commitment, and discouraging economic withholding, help to reduce uplift.[49] Red Wolf notes that, since the substantial decline in UTC volumes in September 2014, uplift costs have increased and price convergence has decreased.[50]

30. Financial Marketers Coalition, Inertia/Twin Cities, and SESCO claim that UTCs do not impact unit commitment decisions in the day-ahead market, although UTCs can impact dispatch or which units are displaced. More specifically, Financial Marketers Coalition states that PJM begins its day-ahead clearing process with the Resource Scheduling Commitment (RSC) run, where PJM considers generation, load, major transmission constraints and INCs/DECs, but not UTCs. Financial Marketers Coalition states that the RSC run determines unit commitment. Financial Marketers Coalition notes that PJM then performs a second run, the Scheduling Pricing and Dispatch (SPD) run, where it considers all transmission constraints as well as UTCs, in addition to the factors considered in the RSC run. According to the Financial Marketers Coalition, the SPD run sets hourly MW dispatch and produces hourly LMPs, performing economic dispatch rather than unit commitment.[51] The Financial Marketers Coalition also points out that unit commitment is not equivalent to uplift. According to the Financial Marketers Coalition, one of the benefits that INCs/DEC and UTCs bring to the market is more efficient pre-positioning of the day-ahead market, and this pre-positioning helps to reduce uplift, not cause it.[52]

31. XO Energy, Red Wolf, and Appian Way state that UTCs can impact unit commitment decisions, but only under limited circumstances or with minimal impact. XO Energy states that since UTCs are considered in the SPD run and the SPD run may commit/de-commit CT units, it is possible for a UTC to impact unit commitment, but only to CTs in the SPD run.[53] XO Energy also contends that PJM's analysis does not indicate whether the changes in unit commitment due to virtual transactions helped or harmed uplift. XO Energy states that the units that were changed as a result of the UTCs

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[49] Inertia/Twin Cities Comments at 2-3; Red Wolf Comments at 2-3.

[50] Red Wolf Comments at 30.

[51] Financial Marketers Coalition Comments at 38-39.

[52] *Id.* at 40.

[53] XO Energy Comments at 21-22.

could have helped better align the day-ahead market for the real-time market, thereby reducing uplift costs.[54]

32. Angell, Dyon, Step2 Capital, and Acorn submit that whether virtual transactions affect unit commitment and dispatch alone does not address the effect of virtual transactions on uplift. Angell contends that PJM's analysis on the impact of virtual transactions assumes that any transaction that affects unit commitment and dispatch should be assessed uplift. According to Angell, this assumption alone falls well short of the evidentiary hurdle established by section 206 of the FPA.[55] Similarly, Dyon argues that the finding that INCs, DECs, and UTCs affect unit commitment and dispatch says nothing about whether they increase or reduce uplift. Dyon also asserts that such a generalized analysis does not prove under section 206 of the FPA that the current allocation is not just and reasonable.[56] Likewise, Step2 Capital states that the relevant question with regard to UTCs' impact on unit commitment is not whether they change unit commitment but whether those unit commitment changes cause uplift.[57] Acorn and Step2 Capital note that the conclusion in PJM's analysis that virtual transactions affect resource commitment and dispatch is based on a sample size of only four or five days; Acorn contends that this says little about UTCs' effect on uplift and Step2 Capital states that the reasons for the selection of those days has not been communicated.[58] SESCO and Step2 Capital assert that UTCs do not affect unit commitment or dispatch. SESCO states that this is because UTCs are transmission products and cause no net energy imbalance. Accordingly, SESCO and Step2 Capital contend that no uplift charges should be assessed to UTCs.[59]

33. XO Energy states that UTCs should only be assessed uplift if the uplift is allocated on a transaction-by-transaction basis; that is, if a "helping" versus "harming" analysis is performed. XO Energy contends that if uplift is allocated on a broad, socialized basis, UTCs should not be charged as they have been demonstrated to reduce total system cost. XO Energy explains that the impact on uplift is not always intuitive; for example, a UTC could "cause" uplift but at the same time reduce the total system cost (including uplift).

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[54] *Id.* at 23-25.

[55] Angell Comments at 1-2.

[56] Dyon Comments at 1.

[57] Step2 Capital Comments at 2-3.

[58] Acorn Comments at 1; Step2 Capital Comments at 3.

[59] SESCO Comments at 4-6, 9; Step2 Capital Comments at 1-3.

XO Energy contends that charging a UTC for the uplift it "caused," while ignoring the total system benefit it provided, is unreasonable.[60]

C. Answers

34. Select Financial Marketers argue that there is no record evidence that UTCs cause uplift and the statutory burden required to demonstrate that the existing tariff contravenes section 206 of the FPA has not been met.[61] Select Financial Marketers state that PJM's flawed analysis does not account for the fact that virtual transactions may, and most likely do, result in more efficient dispatch, and thus reduce costs for all market participants. Select Financial Marketers state that PJM has previously analyzed UTCs' impact on uplift and concluded that there is no relationship between UTCs and uplift costs.[62]

35. In its answer to Inertia/Twin Cities, PJM states that it does not suggest that UTCs cause uplift in every instance, but, simply that they can and do result in uplift on particular occasions, given the fact that UTCs affect unit commitment and dispatch. PJM also contends that it is impossible for PJM (or anyone) to calculate whether and how much uplift a particular UTC causes, and, therefore, PJM proposes one methodology to allocate a portion of PJM's total uplift costs uniformly across all UTCs, thus minimizing the uplift allocation's price impact on any given UTC and treating them in the same manner as other virtual transactions that cause uplift. According to PJM, this proposed allocation methodology is just and reasonable, and corrects the unjust and unreasonable allocation methodology currently employed, which allows market participants that use UTCs to pass uplift-related costs caused by UTCs on to other market participants.[63] PJM also asserts that it has never concluded that there is no relationship between UTCs and uplift costs.[64]

36. In its July 17 Answer to Select Financial Marketers, the PJM Market Monitor states that the parties' assertion that "PJM has previously analyzed the issue and concluded that there is no relationship between UTCs and uplift costs" is based on PJM's earlier analysis on this issue. The PJM Market Monitor states that its review of this

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[60] XO Energy Comments at 16.

[61] Select Financial Marketers Answer at 1-2.

[62] *Id.* at 6.

[63] PJM Answer at 2-4.

[64] *Id.* at 4-5.

earlier analysis as well as the most recent PJM analysis, filed by PJM in this proceeding, support the conclusion that UTCs do affect uplift.[65]

37. The PJM Market Monitor also argues that the premise that UTCs can make market results more efficient is predicated on the ability of UTCs to affect unit commitment and dispatch, and therefore uplift. The PJM Market Monitor contends that, absent an ability to affect commitment, dispatch and uplift, UTCs cannot improve the efficiency of the market. In addition, absent such possible effects, the PJM Market Monitor argues that UTCs could provide no benefit to the market, and would be merely an inefficient wealth transfer from physical participants to UTC transactions.[66]

IV. Procedural Matters

38. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2019), the notices of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

39. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2019), we grant the late-filed motions to intervene given their interest in the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay.

40. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2019), prohibits an answer to an answer or protest unless otherwise ordered by the decisional authority. We accept the answers filed in this proceeding because they have provided information that assisted us in our decision-making process.

V. Commission Determination

41. Following the technical conference on January 7, 2015, various parties submitted comments and reply comments on the issue of uplift in this proceeding, as summarized above. However, since that time, there have been several proceedings that may have resulted in changed circumstances relevant to the inquiry here. For instance, on January 12, 2018, the Commission rejected PJM's proposal, submitted pursuant to FPA section 205,[67] to allocate uplift to UTCs as if an individual UTC transaction was simultaneously a separate INC and DEC at the same locations as the UTC source and

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[65] PJM Market Monitor July 17 Answer at 6.

[66] *Id.* at 4.

[67] 16 U.S.C. § 824d (2018).

sink.[68] Further, on February 20, 2018, the Commission accepted PJM's proposal, submitted pursuant to FPA section 205, to reduce eligible trading points for UTCs, INCs, and DECs.[69] The Commission also issued Order No. 844 dealing with uplift reporting requirements on April 19, 2018.[70]

42. In light of the potential changed circumstances since the time that pleadings were last submitted in this proceeding, we seek to update the record by providing an opportunity for further briefing. Accordingly, we require PJM to submit its brief answering the questions below within 30 days of the date of this order. Parties may then file reply briefs updating their positions within 30 days of PJM's filing. We request that briefs only supplement and update the record and request that information that has already been submitted not be resubmitted.

43. Please provide the information requested below:

1. In light of the changed circumstances discussed above, please explain whether PJM still believes that its tariff is unjust and unreasonable because it does not allocate uplift to UTCs.

2. While PJM has previously stated that it is not possible to assess the impact of any individual UTC transaction on uplift, is PJM able to determine the typical aggregate impact of UTCs on uplift? How does this compare to other virtual transactions (i.e., INC and DEC transactions)? Please provide additional analysis on the typical magnitude (i.e., total change) and direction (i.e., increasing or decreasing) of UTCs' impact on uplift.[71] Such analysis should focus on more recent time periods that account for the changed circumstances since PJM submitted its last brief in this proceeding.

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[68] *See PJM Interconnection L.L.C.,* 162 FERC ¶ 61,019, *order on reh'g*, 164 FERC ¶ 61,168 (2018).

[69] *PJM Interconnection, L.L.C.,* 162 FERC ¶ 61,139, *order on reh'g* 164 FERC ¶ 61,170 (2018).

[70] Order No. 844, 163 FERC ¶ 61,041 at P 1.

[71] One possible way that PJM could meet this request is by simulating a representative sample of days with and without UTC transactions and then analyzing the changes. *See id.* at 8-9.

3. Similarly, please provide additional analysis on the changes to unit commitment caused by UTCs that takes into account the changed circumstances since PJM submitted its last brief in this proceeding. Compare the extent of the unit commitment changes from UTCs with that caused by INCs and DECs, and explain whether and how this information could be used for the purpose of allocating uplift to INCs, DECs, and UTCs.

4. Based on the responses to the forgoing and in light of other recent tariff changes that appear to have reduced the volume of UTC trading, does PJM believe that UTCs' impact on uplift warrants the allocation of uplift charges? Why or why not?

5. Are there considerations other than UTCs' impact on uplift that would still render the PJM tariff unjust and unreasonable because it does allocate the costs of uplift to all deviations? Please explain.

6. If PJM still believes that uplift should be allocated to UTCs, please explain whether PJM believes that UTC transactions should be assessed a flat fee or whether an alternative methodology is now more appropriate in light of changed circumstances.[72]

7. If some types of transactions typically have a smaller impact on uplift than other types of transactions, is it appropriate for PJM to allocate uplift differently to some deviations based on the impact of that transaction type? Why or why not?

8. Previous analysis from PJM and its stakeholders suggests that PJM might be able to establish at least a rough relationship between energy and transmission related uplift.[73] Please explain whether PJM could create an allocation factor to allocate a certain percentage of uplift associated with deviations to UTCs, and please share PJM's perspective on such an approach.

9. Please explain whether PJM would be able to allocate uplift costs to UTCs by assessing a fixed fee on a per transaction basis and how PJM would determine such a fixed fee. In particular, please describe the relationship between the fixed fee and the amount of uplift caused by UTCs and how frequently such a charge would need to be updated. In addition, please explain whether it is appropriate to provide UTCs, but not other virtual transactions, with the certainty of a fixed fee.

10. Share any additional new pertinent information since PJM's last set of comments were filed with the Commission.

The Commission orders:

PJM is hereby directed to file its initial brief no later than 30 days after the issuance of this order. Parties may file reply briefs no later than 30 days thereafter, as discussed in the body of this order.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

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[72] *See PJM Report on the Impact of Virtual Transactions* at 10.

[73] *See* Financial Marketers Coalition, Protest, Docket No. ER18-86-000, at 24-26 (Nov. 7, 2017). *See also* PJM, *Energy Market Uplift Senior Task Force: Phase 2 - Data Analysis Packages*, https://www.pjm.com/committees-and-groups/task-forces/emustf.aspx (Indicating that transmission-related uplift was half the size of energy-related uplift during a 1.5 year period).