

taxes that they are not required to pay. As of November 17, 2022, refund protection in this Section 206 proceeding expired.³

The Second Offer would provide an unjustified windfall to affected black start unit owners of at least \$74.1 million.

Action by the Commission is needed to ensure that the formula rate, the black start unit Capital Cost Recovery Rate, of which the CRF is a component input, operates as it was intended, allows unit owners recovery of specific investment costs but no more, sets just and reasonable rates for PJM customers, and serves the public interest.

Based on the record of this proceeding, including the Affidavit and supporting attachments included with this pleading, PJM should be required to provide accurate CRF values for units selected for black start service prior to June 6, 2021. There is no reason why this proceeding cannot be immediately resolved with the just and reasonable, accurate, implementation of the formula rates for black start service in PJM, recognizing the recovery of capital to date and the remaining term of the CRF values.

I. ARGUMENT

A contested offer of settlement may only be approved based on its merits.⁴ A contested settlement may be approved on its merits under one of the four approaches set forth in *Trailblazer Pipeline Company*.⁵ None of the approaches under *Trailblazer Pipeline Company* can

³ See *PJM Interconnection, L.L.C.; Notice of Institution of Section 206 Proceeding and Refund Effective Date*, Docket No. EL21-19-000, 86 Fed. Reg. 45980 (August 17, 2021); 16 U.S.C. § 824e(b).

⁴ 18 CFR § 385.602(h)(1) (“If the Commission determines that any offer of settlement is contested in whole or in part, by any party, the Commission may decide the merits of the contested settlement issues, if the record contains substantial evidence upon which to base a reasoned decision or the Commission determines there is no genuine issue of material fact.”).

⁵ The four approaches for approving a settlement under *Trailblazer Pipeline Company* include: (i) addressing the contentions of the contesting party on the merits when there is any adequate record; (ii) approving a contested settlement as a package on the ground that the overall result of the settlement is just and reasonable; (iii) determining that the contesting party's interest is sufficiently attenuated such that the settlement can be analyzed under the fair and reasonable standard applicable to uncontested settlements when the settlement benefits the directly affected settling parties; or (iv) preserving the settlement for the consenting parties while allowing contesting parties to obtain a litigated result on the merits. See *Trailblazer Pipeline Company*, 85 FERC ¶ 61,345 (1998).

be relied on for approval of the Second Offer. The Second Offer does not and cannot resolve the issue identified in the order setting this matter for hearing.⁶ Despite the addition of five affidavits, there is still no record and no substantial evidence supporting the Second Offer's CRF values as just and reasonable, including as a "package." The Market Monitor represents the public interest in efficient and competitive markets. The settlement cannot be analyzed under the fair and reasonable standard applicable to uncontested settlements because the Offer allows unjust and unreasonable over recovery of investment costs, contrary to efficient and competitive markets.⁷ Settling Parties arguments (at 31–34) on the difficulty of obtaining relief superior to accepting the Second Offer is speculative and prejudges the outcome of legal issues that have not been briefed. There is no possibility of severing the issues in the manner contemplated under the *Trailblazer Pipeline Company* approaches.⁸

Judge deJesus declined to certify the first offer of settlement filed January 1, 2024 ("First Offer"), finding that the settlement met none of the four *Trailblazer* approaches.⁹ Judge deJesus determined that the First Offer failed because it was unsupported by substantial

⁶ See *PJM Interconnection, L.L.C.*, 182 FERC ¶ 61,194 at P 32 ("[W]hether, as a result of changes from the TCJA, the existing CRF values result in a Capital Cost Recovery Rate for generating units that were selected to provide Black Start Service prior to June 6, 2021 that is unjust and unreasonable. While the record does not contain conclusive evidence that the existing CRF values include a 35% tax rate, the Market Monitor has introduced sufficient evidence that those values may include a 35% tax rate, raising a disputed issue of material fact as to whether changes to the tax rate render the existing CRF values unjust and unreasonable. The import of the tax rate in the determination of the CRF value is a material fact that cannot be determined based on the existing record, which warrants setting the justness and reasonableness of the existing CRF values for hearing and settlement judge procedures.").

⁷ See *PJM Interconnection, L.L.C.*, 186 FERC ¶ 63,019 at PP 108–113 ("Pursuant to Approach No. 3, since the IMM's interests are not attenuated and the IMM does not have another forum to litigate its objections, I may not certify, and the Commission may not approve, the Settlement as if the Settlement were uncontested.").

⁸ *Id.* at 114 ("Severance of the IMM or its issues is inappropriate in this proceeding. Like competitors, indirect customers, and state commissions in other contested settlements,[footnote omitted] it is impossible to allow the IMM to litigate its concerns without affecting the settling customers' rates.").

⁹ *PJM Interconnection, L.L.C.*, 186 FERC ¶ 63,019 at PP 28–30, 115, 127 (2024).

evidence, noting that there were no supporting affidavits.¹⁰ The CRF values included in the Offer are the same values included in the First Offer.¹¹

Judge deJesus also noted that the Market Monitor, in opposing the First Offer, included an affidavit by Dr. Joseph Bowring that “raises myriad factual issues in support of his conclusion that the CRF values that are currently in the PJM Tariff and the revised CRF values proposed in the Settlement are not just and reasonable and result in Capital Cost Recovery Rates that are unjust and unreasonable.” Dr. Bowring’s affidavit opposing the Second Offer similarly raises genuine issues of material fact about whether the affidavits attached to the Second Offer constitute substantial evidence, whether the proposed CRF values address the impacts of TCJA, and whether those CRF values result in Capital Cost Recovery Rates that are unjust and unreasonable.

The only difference between the Second Offer and First Offer is the addition of five affidavits that are apparently intended to provide “substantial evidence.”

Judge deJesus has explained: “I do not view my substantial evidence determination under Rule 602(h)(2)(iii)(B) to entail merely counting the number of affidavits or exhibits in support of or in opposition to a contested settlement. Rather, in certifying a settlement to the Commission, a presiding judge should ensure that the record substantially supports a Commission decision to approve a contested settlement under one or more of the Trailblazer approaches.”¹² The Commission has explained: “[T]o meet the substantial evidence requirement to support a finding, the courts have stated that the record must include “such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.”¹³

¹⁰ *Id.* at P 127.

¹¹ Second Offer, Explanatory Statement (August 14, 2024) at 8 (“the Settlement is substantively the same as the Prior Settlement, subject to minor clarifying and ministerial changes.”).

¹² *PJM Interconnection, L.L.C.*, 186 FERC ¶ 63,019 at P 78 (2024).

¹³ *Koch Gateway Pipeline Co.*, 75 FERC ¶ 61,132, 61457–61458 (1996), citing *Pierce v. Underwood*, 487 U.S. 552, 564–65 (1988)..

The record shows that the CRF values currently in the tariff were calculated based on a specific formula that included the federal tax code including rates and depreciation treatment for tax purposes based on a tax code that was superseded effective January 1, 2018, as a result of the TCJA. There is no record supporting any change to the CRF formula in this proceeding. The CRF formula is correct but the tax code provisions included in the formula have not been correct since January 1, 2018. In this same proceeding, the Commission approved as just and reasonable the detailed inclusion of the CRF formula in the tariff, replacing the CRF table of values are the product of that formula. The only question raised in the show cause order and in the hearing order is to ensure that the CRF values are just and reasonable after the enactment of TCJA.

The record shows that the tax rates changed with the passage of TCJA from 36 percent to 21 percent and that bonus depreciation was added. The change does not require any exercise of judgment to determine; the change concerns fixed objectives values. The tax code results in defined values that affect the calculation based on the change in the rate and the effect of the change in the depreciation provisions. The appropriate compensation for the black start resources must reflect the total return of capital to date as well as the remaining term of the CRF rates.

The settlement proposes a table of CRF values. Substantial evidence supporting those values requires such relevant evidence as a reasonable mind might accept as adequate to support a conclusion that the values account for the impact of the enactment of TCJA.

The five affidavits fail to provide substantial evidence, even before the information in the opposing affidavit is considered. Two of the affidavits (Bryson and Norton) argue that the proceedings have taken too long, required resources for litigation and created uncertainty.¹⁴ Neither affidavit provides good cause to accept a settlement that is not accurate

¹⁴ Second Offer, Attachment B (Affidavit of Michael E. Bryson on behalf of PJM) (August 14, 2024) (“Mr. Bryson explains the critical role of Black Start Service in reliable system operation and the need to respect prior long-term commitments of Black Start Units to balance the need to secure this critical resource while containing the cost of service paid by customers.”); Attachment E (the Affidavit of Christopher Norton on behalf of AMP) (August 14, 2024) (“Mr. Norton explains that the Settlement

and not just and reasonable. Neither affidavit is relevant.¹⁵ The two affidavits show that the motivations behind the Second Offer for a number of Settling Parties is not to establish a just and reasonable rate. These affidavits are not only irrelevant to the substantial evidence necessary to support the Second Offer as just and reasonable, they constitute evidence that the substantial evidence standard is not met.

Only three of the five affidavits attempt to explain the basis for the CRF values in the Second Offer.

One affidavit by PJM Witness Graf, discusses alternative approaches to calculating CRF values that are irrelevant to the CRF tables and its approach to calculating CRF that is in the OATT Schedule 6A.¹⁶ Witness Graf also asserts that there is a range of reasonableness around a correct CRF, based on an inapposite comparison to the range of reasonableness related to the cost of capital. These assertions are not evidence and they are irrelevant to a determination of the accuracy of the CRF calculations. In fact, these assertions are evidence that PJM cannot support the actual CRF numbers in the Second Offer based on the tax code that defines specific elements of the CRF formula.

PJM Witness Boyle submitted an affidavit (“Boyle Affidavit”) comparing the revenue requirements under the existing stated CRFs in the Tariff, the Settlement CRFs, and a set of CRFs referred to by Witness Boyles as the “IMM CRFs.”¹⁷ Witness Boyle’s “IMM CRFs” are not the Market Monitor’s CRFs and do not reflect the position of the Market Monitor in this proceeding. The “IMM CRFs”, as calculated by Witness Boyle, are CRFs calculated using bonus depreciation. The Market Monitor cited PJM’s failure to include bonus depreciation as one of five problems with the first settlement offer yet the Second Offer does not address any

is of benefit to AMP because it provides immediate certainty and material rate reductions while avoiding the risk and uncertainty associated with litigation.”).

¹⁵ See Bowring Affidavit at 17:16–18, 18:23–30, 19: 23–25, 23:12–18.

¹⁶ Attachment C (Affidavit of Dr. Walter Graf on behalf of PJM) (August 14, 2024) (“Dr. Graf explains that there is a range of just and reasonable capital recovery factors that can be calculated and the bounds of that range are not fixed.”); Bowring Affidavit at 12:3–8, 17: 16–18, 18:7–8.

¹⁷ Second Offer, Attachment A (Affidavit of Glen Boyle on behalf of PJM) (August 14, 2024).

of the other problems.¹⁸ Boyle's conclusions regarding revenue differences are not a correct or meaningful comparison of the Second Offer and the Market Monitor's proposed resolution. The true difference between the Second Offer and the Market Monitor's proposal is that the Second Offer would result in an unsupported increase in customer payments to black start generators of \$50.5 million. The Boyle Affidavit fails to provide any relevant evidence.¹⁹

Witness Boyle presents an inaccurate and incomplete characterization of the Market Monitor's position in order to find a \$2.8 million difference.²⁰ The true difference is \$50.5 million.²¹ The Boyle Affidavit does not justify the Second Offer, which is wrong by either \$2.8 million, as incorrectly calculated, or by \$50.5 million, as correctly calculated.

Settling Parties state (at 11), "[T]he Settlement CRFs are black-box rates," but that Witness Kimbrough shows that they are nonetheless consistent with the CRFs that would result if the stated CRFs in the Tariff were recalculated using the IMM's purported formula with a 21 percent tax rate and no bonus depreciation.²² Witness Kimbrough provides a rate of return analysis that shows a CRF calculated under the weighted average cost of capital model does not provide a 12 percent return under the model assumptions of the flow to equity model. This conclusion has no relevance to the current situation because it mixes the use of two different models and it ignores the windfall profits that the equity investors have received after years of revenue payments based on an incorrect CRF.²³

The affidavits provided with the Second Offer do not provide substantial evidence. There is no more reason to certify the Second Offer than there was to certify the First Offer.

¹⁸ Comments of the Independent Market Monitor for PJM in Opposition to Offer of Settlement, Exhibit IMM-0001 (Bowring Affidavit) (February 20, 2024) at 14-15.

¹⁹ Bowring Affidavit at 17:16-18, 18:23-30, 19: 23-25, 23:12-18.

²⁰ Bowring Affidavit at 19: 23-25.

²¹ *Id.* at 20:14-15.

²² Second Offer, Attachment D (Affidavit of Adrian Kimbrough on behalf of the Indicated Suppliers) (August 14, 2024).

²³ Bowring Affidavit at 22:10-23:9.

The Second Offer CRF values are filed only because the Settling Parties preferred accepting them, rather than completing a process that would determine accurate and just and reasonable CRF values based on the impacts of the passage of the TCJA.

In the attached Affidavit of Dr. Joseph Bowring, the Market Monitor explains why the CRF values proposed in the Second Offer are arbitrary, have no merit, are not just and reasonable, and do not resolve the issue raised in this proceeding. Dr. Bowring also addresses the five affidavits and explains why they are not relevant to this proceeding and why they fail to provide substantial evidence that the proposed CRF values are just and reasonable.

The original source of the issue in this case was the failure of PJM to change the CRF values in the black start formula rate, effective January 1, 2018, to correctly reflect the changes in the tax code that resulted from the TCJA. PJM knew the inputs to the CRF and had a tariff defined responsibility to review the black start formula rate and its costs components for accuracy.²⁴ In PJM's review of and related report on the black start formula rates dated October 2019, PJM failed to recognize that the tax rate had changed effective January 1, 2018, and incorrectly stated the federal tax rate.²⁵

This case is about how to address PJM's failure to recognize the issue, and once the issue had been brought to their attention, PJM's failure to address the issue consistent with the tariff and in a timely manner. PJM could have filed to correct the tax rate included in the black start formula rate effective on January 1, 2018, at any time. Yet PJM failed to make any such filing. PJM proposed to change the formula rate only for black start generators that are scheduled for service after June 6, 2021. The result has been to substantially over charge PJM customers and to substantially over pay black start generators.

PJM, in this case, fails to take responsibility for that failure. PJM continues to delay a resolution of the issue that is based on the tax code and the tariff while attempting to blame the Market Monitor for delays.

²⁴ OATT Schedule 6A para. 18 ("Every five years, PJM shall review the formula and its costs components set forth in this section 18, and report on the results of that review to stakeholders.").

²⁵ See Attachment G.

PJM, together with the black start generators, filed a second settlement offer (“Second Offer”) that would lock in the overpayment to black start generators that were scheduled for service prior to June 6, 2021, ignore prior overpayments and ignore the remaining life of the CRF periods.

Although the Commission encourages settlements, that policy is not a license to resolve cases at all costs.²⁶ An offer of settlement, as in this case, that is unfair, unreasonable, or against the public interest must be rejected.²⁷

II. CONCLUSION

The Second Offer is arbitrary, raises unresolved issues of material fact, and is unsupported by substantial evidence. The Second Offer does not satisfy any of the *Trailblazer* standards. The Market Monitor opposes the Second Offer. The Second Offer should be rejected.

Respectfully submitted,



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²⁶ See, e.g., *Arkla Energy Resources*, 49 FERC ¶ 61,051, 61,217 (1989); *Transwestern Pipeline Co.*, 9 FERC ¶ 61,075, at 61,166 (1979).

²⁷ See *Petal Gas Storage, L.L.C. v. FERC*, 496 F.3d 695, 701 (2007) (“[T]he Commission has a duty to disapprove uncontested settlements that are unfair, unreasonable, or against the public interest”); citing *Mobil Oil Corp. v. FPC*, 417 U.S. 283, 314 (“If a [settlement] proposal enjoys unanimous support . . . , it could certainly be adopted . . . if approved in the general interest of the public.” (emphasis added) (internal quotation marks omitted)); *NorAm Gas Transmission Co. v. FERC*, 148 F.3d 1158, 1165 (D.C. Cir. 1998) (“Even if . . . customers had unanimously supported the proposed settlement, the Commission would still have the responsibility to make an independent judgment as to whether the settlement is ‘fair and reasonable and in the public interest.’”); *Tejas Power Corp. v. FERC*, 908 F.2d 998, 1003 (D.C. Cir. 1990) (“Commission may approve uncontested settlement only upon a finding that the settlement appears to be fair and reasonable and in the public interest.” (internal quotation marks omitted)).

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Dated: September 3, 2024

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 3rd day of September, 2024.



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**Bowring Affidavit
and
Attachment A through S**

1 to provide Black Start Service prior to June 6, 2021, that are unjust, unreasonable,
2 and unduly discriminatory or preferential; (4) how the CRF input to the existing
3 black start formula rate should be adjusted to produce a correct Capital Cost
4 Recovery Rate for such units; and (5) why the settlement proposed August 8, 2024,
5 (“Second Offer”) is not supported by substantial evidence, has not been shown to be
6 just and reasonable, and should not be certified or approved.

7 **Q 3. PLEASE PROVIDE A SUMMARY OF THE CENTRAL ISSUE IN THIS**
8 **CASE.**

9 A. The federal tax law inputs to the formula rate for black start capital cost recovery
10 changed as a result of tax law changes that became effective on January 1, 2018.
11 The result was that the correctly calculated CRF rates decreased significantly
12 effective January 1, 2018. PJM failed to reflect those changed inputs in the CRF
13 rates paid to black start owners. PJM failed to change the CRF rates after being
14 notified of the issue by the Market Monitor. PJM finally changed the CRF rates in a
15 filing approved by order issued by the Commission on August 10, 2021, but those
16 rates failed to address the ongoing overpayments to black start resources that had
17 been selected to provide service prior to June 6, 2021.⁴ PJM’s approach in this case
18 misunderstands the fundamental purpose of the CRF provision. That purpose is to
19 ensure the payment of 100 percent of the defined return to investors. PJM’s
20 approach would result in substantial overpayment to investors in all affected black
21 start units. This is a factual matter.

22 **Q 4. WHAT ISSUE(S) DID THE COMMISSION SET FOR HEARING?**

23 A. The Commission’s March 24, 2023, order set the following issue of fact for hearing:

24 [W]hether, as a result of changes from the TCJA, the
25 existing CRF values result in a Capital Cost Recovery
26 Rate for generating units that were selected to provide
27 Black Start Service prior to June 6, 2021 that is unjust
28 and unreasonable. While the record does not contain
29 conclusive evidence that the existing CRF values
30 include a 35% tax rate, the Market Monitor has
31 introduced sufficient evidence that those values may
32 include a 35% tax rate, raising a disputed issue of

4 *See PJM Interconnection, L.L.C.*, 176 FERC ¶ 61,080 (2021).

1 material fact as to whether changes to the tax rate
2 render the existing CRF values unjust and
3 unreasonable. The import of the tax rate in the
4 determination of the CRF value is a material fact that
5 cannot be determined based on the existing record,
6 which warrants setting the justness and reasonableness
7 of the existing CRF values for hearing and settlement
8 judge procedures.⁵

9 I conclude in this testimony that the CRF rate for black start resources that were
10 selected prior to June 6, 2021, included a tax rate of 36 percent and did not include
11 the TCJA bonus depreciation provisions. I conclude that the TCJA federal tax
12 provisions should have been included in all CRF rates effective on January 1, 2018,
13 and thereafter. I conclude that failure to include the correct tax provisions in CRF
14 rates resulted in overstated rates and resulted in overpayments to black start
15 resources that were unjust and unreasonable as a result. I explain how to provide
16 appropriate relief to ensure, to the maximum extent consistent with Commission
17 policy on refunds, that PJM customers do not pay overpay for black start service
18 based on PJM's errors in implementing the impact of the TCJA on CRF rates for
19 black start resources selected for service prior to June 6, 2021.

20 **Q 5. HOW DO YOU RESPOND TO THE ISSUES SET FOR HEARING?**

21 A. The Commission noted that the Market Monitor had provided sufficient evidence to
22 raise the issue but did not find that there was conclusive evidence as to the tax rate
23 included in the CRF calculations. This affidavit and attachments provide dispositive
24 evidence that the existing CRF rates are based on a 36 percent tax rate, including
25 public PJM reports.^{6 7} This affidavit and attachments provide dispositive evidence
26 that the existing CRF rates were based on the use of Modified Accelerated Cost

⁵ See *PJM Interconnection, L.L.C.*, 182 FERC ¶ 61,194 at P 32.

⁶ *Comments of the Independent Market Monitor for PJM* at 6, Docket No. ER21-1635-000 (April 28, 2021). See Attachment L.

⁷ *Id.* at footnote 15.

1 Recovery System (MACRS) depreciation, including public PJM reports.^{8 9} The
 2 question is not complicated. The straightforward CRF math demonstrates the tax
 3 rate that is incorporated in the referenced CRF rates. As a result, this testimony
 4 demonstrates that the existing CRF rates that PJM continues to apply to black start
 5 resources selected prior to June 6, 2021, are simply wrong. The federal income tax
 6 rate was reduced to 21 percent and the MACRS depreciation was replaced with the
 7 more favorable bonus depreciation. Because the CRF rates do not include the actual
 8 tax rate and depreciation provisions that became effective on January 1, 2018, both
 9 of which significantly reduced the taxes paid by the referenced black start resources,
 10 the rates necessarily allow for over recovery of the investment that the rate is
 11 designed to recover, and are therefore unjust and unreasonable. The rate is excessive
 12 and the over recovery is substantial. The rate cannot be properly determined to be
 13 just and reasonable based on a determination that the impact is de minimis. The
 14 impact is not de minimis.

15 Once the factual issue is resolved, the issue of how to determine the appropriate
 16 going forward CRF rates for units selected prior to June 6, 2021, must be resolved,
 17 in order to ensure just and reasonable recovery of their discrete investment under the
 18 applicable formula rate.

19 **Q 6. WHAT IS THE EVIDENCE FOR THE LEVEL AND DEFINITION OF**
 20 **THE FEDERAL TAX RATE IN THE ORIGINAL CRF VALUES?**

21 A. PJM's required reports to stakeholders (see Attachment E at 7, Attachment F at 8
 22 and Attachment G at 8 to this affidavit) all document explicitly the inputs to CRF
 23 calculations and that the level of the federal tax rate included in the CRF values is
 24 36 percent. PJM also included the 36 percent tax rate in its report to stakeholders
 25 dated October 2019, after the tax law changes took effect. The income tax and
 26 depreciation assumptions are also validated by responses to discovery questions by
 27 the Market Monitor and PJM. In response to S-IMM-1.1, the Market Monitor
 28 provided a spreadsheet that shows the calculation of the CRF values (Attachment P).
 29 In response to S-PJM-1.2, PJM provided a copy of the original spreadsheet that was
 30 used to calculate the CRF values (Attachment S). These CRF values, including the
 31 superseded 36 percent federal tax rate, and the superseded MACRS depreciation,

⁸ See Attachment D at 6.

⁹ Spreadsheets provided in response to data requests also validate that 15 year MACRS factors were used to calculate the original CRF. See responses to Staff-IMM 1-1 and Staff-PJM 1-2, provided as Attachments P and S.

1 have applied and continue to apply to black start resources that were selected to
 2 provide black start service prior to June 6, 2021.

3 **Q 7. WHAT IS THE RESPONSE OF THE SETTLING PARTIES TO THESE**
 4 **FACTS?**

5 A. The settling parties acknowledge that the TCJA changed the federal income tax rate
 6 from 36 percent to 21 percent and changed the depreciation provisions from
 7 MACRS to 100 percent bonus depreciation. However the settling parties assert that
 8 it is reasonable to ignore the depreciation provisions of the TCJA.¹⁰ In addition to
 9 other issues with the proposed settlement, the going forward proposed CRF
 10 calculations are simply incorrect because they ignore the depreciation provisions of
 11 the tax code. The CRF calculation in the PJM tariff includes the depreciation
 12 provisions of the tax code. Any correct CRF calculation includes the depreciation
 13 provisions of the tax code. These provisions are not optional and are not a matter of
 14 judgment. The proposed settlement would ignore the tax code and violate the tariff.
 15 The proposed settlement is not just and reasonable for this reason alone.

16 **Q 8. PLEASE DESCRIBE THE NATURE AND PURPOSE OF THE RATE AT**
 17 **ISSUE IN THIS PROCEEDING.**

18 A. The specific rate at issue in this proceeding is a formula rate included in Paragraph
 19 18 of Schedule 6A of the OATT (Schedule 6A). The formula rate in Schedule 6A
 20 compensates black start service units included in PJM’s system restoration plan.
 21 PJM relies on the black start system restoration plan to restore service if there is a
 22 system wide black out event, a shutdown of the PJM transmission system.

23 The formula rate included in Schedule 6A is:

$$24 \quad \text{(Fixed BSSC) + (Variable BSSC) + (Training Costs)}$$

$$25 \quad \quad \quad + \text{(Fuel Storage Costs)} \} * (1 + Z)$$

26 Only the Fixed BSSC term of the formula is at issue in this proceeding and even
 27 more specifically only the CRF component of the Fixed BSCC as it applies to black
 28 start units selected to provide black start service prior to June 6, 2021, is at issue in
 29 this proceeding. Selected to provide service means that PJM selected the black start

¹⁰ See, e.g., Second Offer, Attachment A (Boyle Affidavit); Second Offer, Explanatory Statement at 32–34.

1 resource pursuant to a PJM RFP process prior to June 6, 2021, and does not refer to
 2 the date that the resource actually began providing service.

3 There are three options for calculating the Fixed BSSC term: the Base Formula
 4 Rate; the Capital Cost Recovery NERC-CIP Specific Recovery; and the Capital
 5 Cost Recovery Rate.

6 The first option is the Base Formula Rate for Fixed BSSC:

7 (Net CONE * Black Start Unit Capacity * X.)

8 The Base Formula Rate formula calculates a rate based on the net cost of new entry
 9 (Net CONE) for a new unit in the PJM Capacity Market in \$/MW-day, multiplied
 10 by the Black Start Unit Capacity in MW, multiplied by an allocation factor X which
 11 is defined to be .02 for CTs (combustion turbine generators). The Net CONE value
 12 is a parameter of the PJM Capacity Market and has nothing directly to do with the
 13 cost of units providing black start service.

14 The Base Formula Rate for Fixed BSSC does not provide for the recovery of a
 15 specific capital investment in black start capability. The default Fixed BSSC is not
 16 based on the cost of the black start resource. The Base Formula Rate in Paragraph
 17 18 is not a cost of service rate.

18 The second option is the Capital Cost Recovery NERC-CIP Specific Recovery, a
 19 special purpose Fixed BSSC that allows existing black start units to recover
 20 incremental costs associated with compliance with NERC reliability standards.¹¹

21 The formula for Capital Cost Recovery NERC-CIP Specific Recovery is:

22 (Net Cone * Black Start NERC-CIP Unit Capacity * X) + (Incremental Black Start
 23 NERC-CIP Capital Costs * CRF) + (Fuel Assurance Capital Costs * CRF)

24 The third option, the Capital Cost Recovery Rate, is at issue in this proceeding.¹²
 25 The Fixed BSSC formula is:

11 *See PJM Interconnection, L.L.C.*, 127 FERC ¶ 61,197, at P 39; order on
 compliance filing 1, 128 FERC ¶ 61,249 (September 17, 2009); delegated order on
 compliance filing 2 (November 17, 2009).

12 This option was established by the Commission in 2011. *See PJM
 Interconnection, L.L.C.*, 138 FERC ¶ 61,020; PJM Filing, Docket No. ER11-1440
 (August 30, 2011) at 9.

1 (FERC-approved rate) + (Incremental Black Start Capital Costs * CRF) + (Fuel
2 Assurance Capital Costs * CRF)

3 The issue in this case is the correct CRF values for black start resources that are paid
4 under the Capital Cost Recovery Rate.

5 As there is no “FERC-approved rate” component of the rates for the units at issue in
6 this proceeding, the “FERC approved rate” component is effectively zero dollars.

7 None of the black start resources at issue have any Fuel Assurance Capital Costs to
8 date.

9 Therefore, the effective Fixed BSCC formula for purposes of this proceeding is:

10 (Incremental Black Start Capital Costs * CRF)

11 The CRF provides for the return on and of a discrete, defined investment in black
12 start capability over a defined period at a defined rate of return, after which the
13 payment for black start becomes the default black start charge for the remainder of
14 the term for which the resource provides black start service.

15 **Q 9. WHAT IS A CRF?**

16 A. CRF means capital recovery factor. A CRF is a rate which, when multiplied by the
17 investment in an asset, results in an equal annual revenue requirement over the
18 defined term of the CRF. That annual revenue requirement provides for full
19 recovery of the investment costs and a return on that investment over the defined
20 term of the CRF at a rate of return defined in the CRF formula. CRF is a general
21 financial concept broadly applicable across investments and industries. (See the
22 IMM reports on the CRF calculations in Attachment B, Attachment C and
23 Attachment M at 7–10).

24 **Q 10. WHAT IS THE PURPOSE OF THE CRF RATE FOR BLACK START
25 REVENUE REQUIREMENTS?**

26 A. The CRF calculations in the PJM OATT were originally developed for use in
27 defining market seller offer caps in PJM capacity market auctions.¹³ The purpose of

¹³ See *PJM Interconnection, L.L.C.*, 117 FERC ¶ 61,331 (2006); OATT Attachment DD § 6.8(a).

1 the CRF values in the capacity market was to explicitly match the return of and on
2 capital to the expected life of the incremental investment in capacity resources,
3 defined as APIR in the OATT, Attachment DD.¹⁴ At the time of the establishment
4 of the RPM capacity market rules, coal units with relatively short expected
5 remaining lives were required to make large investments in environmental controls.
6 As a result, it was necessary to provide for different time periods over which the
7 opportunity for full recovery of capital costs could occur. The CRF table defined
8 CRF levels for a range of expected asset lives with a defined set of input variables
9 and values.

10 **Q 11. HOW WERE THE EXISTING CRF VALUES CALCULATED FOR**
11 **GENERATING UNITS THAT WERE SELECTED TO PROVIDE BLACK**
12 **START SERVICE PRIOR TO JUNE 6, 2021?**

13 A. The CRF values were included in the initial RPM filing in 2005.¹⁵ The Market
14 Monitor calculated the CRF values that were included in PJM's 2005 RPM filing.¹⁶
15 The CRF values were added to Schedule 6A in 2009 to allow for the recovery of
16 new or additional fixed black start capital costs.¹⁷ It was explicit at the time of the
17 filing that the CRF rate was an input to a specifically defined formula rate and not a
18 stated rate.¹⁸

19 **Q 12. WERE THE CRF VALUES ALWAYS BASED ON EXPLICITLY STATED**
20 **INPUT VALUES, INCLUDING THE APPLICABLE FEDERAL INCOME**
21 **TAX RATE?**

22 A. Yes. There are six defined inputs to the CRF formula: debt to equity ratio, rate of
23 return on equity, interest rate on debt, federal income tax rate, state income tax rate

14 *See* OATT Attachment DD § 6.8(a).

15 PJM Filing, ER05-1410 (August 31, 2005) Tab C (Revised Original Sheet No. 590).

16 Affidavits by Joseph Bowring and Raymond Pasteris included in PJM's Filing in ER05-1410 describe the CRF calculation and the model assumptions. *Id.*, Tab G (Affidavit of Joseph E. Bowring) at 23, and Tab I ("Independent Study to Determine Cost of New Entry Combustion Turbine Power Plan Revenue Requirement," Attachment to the Affidavit of Raymond M. Pasteris on Behalf of PJM Interconnection, L.L.C.) at 3–4.

17 *See* Attachment J at 7.

18 *Id.*

1 and depreciation factors. (See the IMM reports on the CRF calculations in
2 Attachment B and Attachment C). These inputs were stated explicitly the very first
3 time that PJM filed the CRF rates in the capacity market filing. The Market Monitor
4 developed the CRF method that was incorporated in the CRF tables in the PJM
5 OATT.

6 Q 13. IS THE CRF CALCULATION A BLACK BOX CALCULATION?

7 A. No. The CRF calculation is not and has never been a black box calculation. The
8 CRF calculation is based on a limited set of known inputs that result in the defined
9 CRF values that were first listed in a table in Attachment DD to the PJM OATT. In
10 addition to the fact that the Market Monitor calculated the CRF values and the
11 details of those calculations have been provided, PJM also explicitly states the
12 detailed assumptions of the original CRF calculation. See PJM reports that
13 demonstrate PJM's knowledge of the detailed nature of the CRF calculations:
14 Attachment F at 7, Attachment G at 8, Attachment H at 8, Attachment K at 9 to this
15 affidavit.)

**16 Q 14. IS THE FEDERAL INCOME TAX RATE ONE OF THE INPUTS TO THE
17 CRF CALCULATION?**

18 A. Yes. The federal income tax rate is one of the explicitly stated inputs to the CRF
19 calculation. The original CRF calculations explicitly included a federal income tax
20 rate of 36 percent. This tax rate was included in the original PJM RPM filing, has
21 been stated publicly by the Market Monitor on numerous occasions, and was
22 included in PJM's reports to stakeholders on black start costs.¹⁹

**23 Q 15. IS THE TAX DEPRECIATION METHOD ONE OF THE INPUTS TO THE
24 CRF CALCULATION?**

25 A. Yes. The tax laws in place prior to the TCJA provided for the use of MACRS
26 depreciation in the calculation of federal taxes. The TCJA replaced MACRS with a
27 bonus depreciation method that allowed for depreciation of 100 percent of the asset
28 value in the first year of operation.²⁰ The impact of that change was to reduce the

¹⁹ See Attachment E at 7, Attachment F at 8, Attachment G at 8, Attachment K at 9, Attachment S.

²⁰ Bonus depreciation is 100 percent for capital investments placed in service after September 27, 2017 and before January 1, 2023. Bonus depreciation is 80 percent

1 federal income taxes owed by the affected entity. The original CRF calculations
 2 explicitly included federal income tax payments based on MACRS depreciation
 3 rate. The MACRS depreciation method was included in the original PJM RPM
 4 filing, has been stated publicly by the Market Monitor on numerous occasions, and
 5 was included in an October 31, 2006, presentation to the MIC.²¹

6 **Q 16. HAS THE MARKET MONITOR USED DIFFERENT APPROACHES TO**
 7 **DEFINING THE CRF FORMULA?**

8 A. Yes. The Market Monitor has used different approaches but all of them are
 9 substantively identical. The Market Monitor used a multiyear financial model to
 10 calculate the CRF values that were included in Attachment DD to the PJM OATT.
 11 That financial model included repayment of debt on a fixed mortgage style schedule
 12 and recognized that all net revenue in excess of costs including debt costs and tax
 13 obligations flow to the equity owner of the asset. This approach is called the flow to
 14 equity (FTE) approach.

15 In 2021, the Market Monitor developed a formula that is the equivalent of the
 16 multiyear financial model for calculating CRF values.²² However, the formula
 17 provided by the Market Monitor used the weighted average cost of capital (WACC)
 18 approach to defining returns to debt holders and equity owners rather than the FTE
 19 approach. The WACC approach maintains a constant debt to equity ratio by
 20 attributing net revenue in excess of costs to both debt holders and equity owners in
 21 proportion to the debt to equity ratio. That formula was filed by PJM and approved
 22 by the Commission and is now both in Attachment DD and Schedule 6A of the PJM
 23 OATT.

24 As part of the Market Monitor's responses to Commission Staff discovery in this
 25 case, the Market Monitor clarified that the FTE approach correctly reflects the

for capital investments placed in service after December 31, 2022 and before
 January 1, 2024, and the bonus depreciation level is reduced by 20 percent for
 each subsequent year through 2026. Capital investments placed in service after
 December 31, 2026 are not eligible for bonus depreciation. See 26 U.S. Code
 §168(k)(6)(A).

²¹ See Attachment D.

²² *Comments of the Independent Market Monitor for PJM* at 16, ER21-1635-000
 (April 28, 2021).

1 ownership interests in net revenue in excess of costs.²³ The pre-June 6, 2021, CRFs
2 were calculated using a flow to equity (FTE) financial model that incorporates a
3 mortgage payment approach for the loan repayment. Under this approach, the debt
4 to equity ratio is not constant during the cost recovery period. The formula for the
5 post-June 6, 2021, CRF was derived from a weighted average cost of capital
6 (WACC) financial model that maintains a constant debt to equity ratio. When the
7 revenue is equal to the level required to meet all the payment obligations, without
8 excess payments, the results of the two models are quite close.

9 When there are payments in excess of the level required to meet all the payment
10 obligations, as has occurred in this case, the difference between the models is
11 significant. In the WACC model, the revenue in excess of income taxes, required
12 interest payments and return on equity is split between accelerated loan repayment
13 and payment to equity according to the debt to equity ratio, and the debt to equity
14 ratio is maintained at a constant level during the cost recovery period. In the FTE
15 model, revenue in excess of income taxes and required debt payments flows to the
16 equity investor.

17 In this case, payments to black start resources used CRF calculations based on taxes
18 higher than actual required tax payments. As a result, there were payments in excess
19 of the level required to meet all the payment obligations. In cases where there are
20 excess payments, the FTE model accurately captures the excess returns to equity
21 while the WACC model does not.

22 Rather than assuming that a part of excess earnings flow to debt holders as the
23 WACC approach does, the FTE approach correctly recognizes that all of the excess
24 earnings flow to equity holders. The FTE approach is the correct way to calculate
25 CRF values because it reflects the fact that excess revenues flow to the equity
26 holders. The FTE is also expressed as a formula with the same inputs and same
27 input values as the Market Monitor's formula with the WACC approach.²⁴ The

²³ See the Market Monitor's response to discovery question S-IMM-1.3, Attachment O, Attachment Q.

²⁴ Attachment B provides the FTE formula at 11. Attachment C shows the WACC formula at 7.

1 Market Monitor developed and provided the CRF formula based on the FTE
2 approach as part of the responses to Staff discovery in this matter.²⁵

3 **Q 17. ARE THERE MULTIPLE WAYS TO CORRECTLY CALCULATE THE**
4 **CRF?**

5 A. No. Contrary to PJM’s explanatory statement and contrary to PJM Witness Graf,
6 there are not multiple ways to correctly calculate the CRF. The choice of inputs to
7 the CRF is not a matter of judgment. The inputs are defined and have been
8 recognized by PJM.

9 **Q 18. WHAT IS THE RELATIONSHIP BETWEEN THE CRF TABLE IN**
10 **ATTACHMENT DD AND THE CRF TABLE IN SCHEDULE 6A?**

11 A. The table of CRF values based on the CRF table in Attachment DD was included in
12 Schedule 6A for black start because the issue was the same issue addressed in the
13 capacity market. The issue was how to match the expected or intended life of the
14 asset (black start investment) to the recovery of the capital costs using equal annual
15 payments for a range of different recovery periods. The financial calculation is the
16 same for any asset if the inputs are the same. The inputs were the same for the
17 capacity market and the black start cost recovery. One important difference between
18 the two applications of CRF is that the CRF is intended to pay black start owners the
19 exact amount of the CRF revenue requirement while in the capacity market, the
20 CRF/APIR calculation changes the market seller offer cap and provides the
21 opportunity to receive the full annual revenue requirement in the capacity market.

22 **Q 19. DOES SCHEDULE 6A PROVIDE FOR FULL RECOVERY OF CAPACITY**
23 **COSTS OVER A DEFINED PERIOD?**

24 A. Yes. Schedule 6A provides that at the conclusion of the recovery of the specific and
25 discrete investment cost over the defined term of the recovery period, recovery of
26 the investment cost using the Capital Cost Recovery Rate is complete. The Capital
27 Cost Recovery Rate is specifically designed for the recovery of a discrete fixed
28 capital investment plus a return on the invested capital. When the Capital Cost
29 Recovery Rate has served its purpose and provided a return of and on the
30 investment, continued black start service is then compensated under the default rate.

²⁵ See spreadsheet attached to the Market Monitor’s response to discovery question S-IMM-1.3, Attachment Q.

1 **Q 20. WHAT IS THE DIFFERENCE BETWEEN A STATED RATE AND A**
2 **FORMULA RATE?**

3 A. A stated rate is a fixed value approved by the Commission. A formula rate is a
4 formula approved by the Commission with defined inputs. As input values change,
5 the new values are used in the formula to calculate the applicable rate.²⁶ The Capital
6 Cost Recovery Rate is a formula rate. The CRF, a component of the Capital Cost
7 Recovery Rate, is a specific input to a formula rate that is calculated based on a
8 defined formula.

9 **Q 21. WHY DO THE EXISTING CRF VALUES RESULT IN AN**
10 **OVERRECOVERY OF CAPITAL COSTS FOR BLACK START UNITS**
11 **SELECTED PRIOR TO JUNE 6, 2021?**

12 A. The CRFs, when multiplied by the capital investment amount, result in an annual
13 revenue payment that is sufficient to provide for the return on and return of the
14 capital investment and to provide for the income taxes associated with the annual
15 revenue payment over the term of the CRF.

16 The original CRF calculation, which resulted in values calculated by the Market
17 Monitor and proposed by PJM for inclusion in the OATT in 2005, and included in
18 Schedule 6A of the PJM OATT in 2009, was based on a federal income tax rate of
19 36 percent and depreciation using the 15 year Modified Accelerated Cost Recovery
20 System (MACRS).²⁷

21 The TCJA reduced the federal income tax rate for existing and new investments,
22 including black start investments, effective January 1, 2018. The TCJA reduced the
23 federal corporate income tax rate to 21 percent. The TCJA also included a provision
24 that allows for 100 percent bonus depreciation for property placed in service after
25 September 27, 2017, and before January 1, 2023.^{28 29}

²⁶ See Attachment L at 3–4.

²⁷ See for example Attachment D at 6, Attachment E at 7, Attachment F at 8,
Attachment G at 8, Attachment K at 9.

²⁸ Tax Cuts and Jobs Act, Pub. L. No. 115-97, 131 Stat. 2096, Stat. 2105 (2017) at
Subtitle C, Part I, SEC. 13001.

²⁹ *Id.* at Subtitle C, Part III, SEC. 13201.

1 The result was a significant reduction in the CRF for black start investments. The
2 continued application of the CRF rates that include higher than actual tax
3 obligations has resulted in customers paying black start owners a windfall equal to
4 the impact of the reduction in tax obligations under the TCJA. Customers paid and
5 are paying for the capital costs of black start resources as if those resources were
6 obligated to pay taxes at the prior high rate when those resources were actually
7 paying taxes at a much lower rate.³⁰

8 PJM should have reduced CRF rates immediately, effective January 1, 2018, for all
9 existing and new black start resources. The result would have been to ensure that all
10 black start owners received what they reasonably expected when PJM selected them
11 to provide black start service and to ensure that all customers paid what they could
12 have reasonably expected. Those reasonable expectations included a return on and
13 of the capital invested to provide black start service, over the defined recovery
14 period.

15 The Market Monitor notified PJM by email of the CRF errors on October 3, 2019.³¹
16 Eighteen months later, in April 2021, PJM filed to update the CRFs and at that time
17 argued the original CRFs were black box values that could not be updated for
18 existing black start providers. PJM recognized in 2020 that the federal income tax
19 rate in the CRF values needed to be corrected from 36 percent to 21 percent.³²

20 **Q 22. WHAT HAS BEEN THE RESULT OF THE FAILURE TO CORRECTLY**
21 **CALCULATE THE CRF VALUES?**

- 22 A. There are 49 black start generators that have received payments based on the
23 outdated CRFs that reflect federal income tax rates and depreciation schedules
24 corresponding to the tax laws in effect prior to the passage of the TCJA. The 49
25 generators include 29 black start generators that began providing black start service
26 prior to September 27, 2017, and would not have been eligible for bonus
27 depreciation under the TCJA. Of those 29 black start generators, 11 completed their
28 capital recovery terms between January 1, 2018, and June 2021. The excess
29 payments to these 29 generators were due to the change in the federal income tax

30 *See Attachment M, Attachment B, Section F at 13.*

31 *See Attachment H.*

32 *See Attachment L at 9, attached, Black Start Education, PJM Interconnection, L.L.C., PJM Operating Committee Meeting (May 14, 2020).*

1 rate alone and were not affected by the changes to depreciation rules. Of the 49
2 black start generators, 20 began black start service after September 27, 2017, and
3 before January 1, 2023, and received excess payments as a combined result of the
4 change in the federal income tax rate and the change in depreciation rules included
5 in the TCJA. Of the 38 black start generators, from that group of 49, that have not
6 completed their capital recovery terms, 24 generators will complete their capital
7 recovery terms in 2024 and 2025. An additional 8 generators will complete their
8 capital recovery terms in 2026. The last 6 generators will complete their capital
9 recovery terms from 2035 through 2040.

10 **Q 23. WHAT IS THE SOURCE OF THE ISSUES IN THIS CASE?**

11 A. The original source of the issue in this case was the failure of PJM to change the
12 CRF values in the black start formula rate, effective January 1, 2018, to correctly
13 reflect the changes in the tax code that resulted from the TCJA. PJM knew the
14 inputs to the CRF and had a tariff defined responsibility to review the black start
15 formula rate and its costs components for accuracy.³³ In PJM’s review of and related
16 report on the black start formula rates dated October 2019, PJM failed to recognize
17 that the tax rate had changed effective January 1, 2018, and incorrectly stated the
18 federal tax rate.³⁴

19 This case is about how to address PJM’s failure to recognize the issue, and once the
20 issue had been brought to their attention, PJM’s failure to address the issue
21 consistent with the tariff and in a timely manner. PJM could have filed to correct the
22 tax rate included in the black start formula rate effective on January 1, 2018, at any
23 time. Yet PJM failed to make any such filing. PJM proposed to change the formula
24 rate only for black start generators that are scheduled for service after June 6, 2021.
25 The result has been to substantially over charge PJM customers and to substantially
26 over pay black start generators.

27 PJM, in this case, fails to take responsibility for that failure. PJM continues to delay
28 a resolution of the issue that is based on the tax code and the tariff while attempting
29 to blame the Market Monitor for delays.

33 OATT Schedule 6A para. 18 (“Every five years, PJM shall review the formula and its costs components set forth in this section 18, and report on the results of that review to stakeholders.”).

34 See Attachment G.

1 PJM, together with the black start generators, filed a second settlement offer
2 (“Second Offer”) that would lock in the overpayment to black start generators that
3 were scheduled for service prior to June 6, 2021, ignore prior overpayments and
4 ignore the remaining life of the CRF periods.

5 **Q 24. THE FILING PARTIES REFERENCE DELAY AND LITIGATION RISK.**
6 **WHO IS RESPONSIBLE FOR DELAY IN THIS MATTER?**

7 A. PJM had and continues to have the ability to file with the Commission to change the
8 CRF. PJM could have filed with the Commission to modify the CRF values based
9 on the new tax code, effective January 1, 2018. PJM could still make that filing.

10 It is at best ironic that PJM should complain about the Market Monitor slowing
11 down the process.

12 **Q 25. HOW DOES TIMING AFFECT THE POSSIBLE OUTCOMES IN THIS**
13 **MATTER?**

14 The Commission has indicated that retroactive application of revised CRFs to black
15 start resources that have completed their capital cost recovery is not a viable option
16 in this proceeding.³⁵ Twenty four black start resources will complete their capital
17 recovery terms in 2024 and 2025. Eight black start resources will complete their
18 capital recovery terms in 2026. Six generators will complete their capital recovery
19 terms from 2035 through 2040. In the absence of a Commission decision, these
20 black start resources will continue to be paid based on the incorrect and overstated
21 CRFs through the full term of their CRFs.

22 **Q 26. HOW DOES THE SECOND OFFER PROPOSE TO RESOLVE THE ISSUE**
23 **IN THIS CASE?**

24 A. The Second Offer, which is substantively identical to the first settlement offer,
25 proposes to resolve the issue in this case by largely ignoring it and raising unrelated
26 issues. The settlement ignores the fact that PJM could file to fix the black start
27 formula rate at any time. The settlement ignores the substantial over recovery that
28 has resulted from the use of inaccurate CRFs since 2018. The settlement incorrectly
29 calculates the CRF values going forward for the black start generators scheduled for

³⁵ See 176 FERC ¶ 61,080 at P 50.

1 service after June 6, 2021, by ignoring the fact that the depreciation elements of the
2 tax code are included in the tariff definition of the CRF.³⁶

3 **Q 27. IS THE PROPOSED SETTLEMENT SUPPORTED BY SUBSTANTIAL**
4 **EVIDENCE?**

5 No. While the proposed settlement includes affidavits from three PJM witnesses
6 and two generator witnesses, the affidavits largely and explicitly reference the prior
7 testimony filed by each witness. The affidavits/testimony do not provide any
8 evidence in support of the settlement. The affidavits never explain why it is
9 acceptable to ignore part of the tax code and the tariff definition of CRF. The
10 affidavits/testimony repeat a number of irrelevant assertions, including assertions
11 about a range of reasonableness. The affidavits misstate the Market Monitor's
12 position and misrepresent the differences between the settlement and the Market
13 Monitor's position.

14 **Q 28. HOW ARE THE ASSERTIONS ABOUT RANGE OF REASONABLENESS**
15 **RELEVANT IN THIS PROCEEDING?**

16 A. The assertions by Witnesses Boyle and Graf that the results from the Second Offer
17 would be reasonable despite the fact that the tax provision are wrong are not
18 relevant in any way to this proceeding. When the Market Monitor identified the
19 impact of the tax change on the accuracy of the CRF values, neither the Market
20 Monitor, nor PJM nor any stakeholder identified any other issue with the accuracy
21 of the CRF table. The Market Monitor requested that PJM file to change the CRF
22 values solely to address the impacts of the change in the applicable tax rates. The
23 level and accuracy of the tax provisions in the black start formula rate are the only
24 issues in this case.³⁷ After prolonged and unnecessary delay, PJM filed to correct the
25 impact of the tax change issue going forward, and no other issue, in Docket No.
26 ER21-1635-000. In response to the Market Monitor and others' pleadings protesting
27 the failure to address the impact on the CRF values of the tax change issues on

³⁶ See OATT Schedule 6A para. 18, as approved by order issued in this proceeding, 176 FERC ¶ 61,080 at PP 40–41 (2021).

³⁷ See 176 FERC ¶ 61,080 at PP 46–49; *PJM Interconnection, L.L.C.*, 182 FERC ¶ 61,194 at PP 32–33 (2023).

1 formula rates applied prior to June 6, 2021, and no other issue, the Commission
2 issued a show cause order in Docket No. EL21-91-000.³⁸

3 The assertions that the numbers are fuzzy and that all the results are pretty much the
4 same are factually incorrect and unsupported by the affidavits. Most of the
5 assertions that the black start formula rate results are subject to a range of
6 reasonableness are based on the cost of capital and not on the provisions of the tax
7 code. The repeated assertions (Witness Graf) that the cost of capital includes
8 judgment are correct and completely irrelevant to this case. The cost of capital is not
9 at issue in this case. The provisions of the tax code are not a matter of judgment.
10 The relevant provisions of the tax code in this case are clear, unequivocal and not
11 subject to a range of reasonableness.

12 There is not a zone of reasonableness applicable to the CRF. The CRF is an input to
13 the black start formula rate. The CRF is a formula with defined components. When
14 the federal tax provisions changed, the appropriate CRF value was a single number
15 for each identified duration. There is no zone of reasonableness in this case of a
16 black start formula rate with an objectively incorrect input. The federal tax
17 provisions are not a matter of regulatory judgment like the cost of capital. The CRF
18 values for post June 6, 2021, black start resources have been correctly calculated.
19 The CRF values for those black start resources that received and continue to receive
20 a windfall starting on January 1, 2018, are overstated.

21 **Q 29. WHAT IS THE STATED OPINION OF THE SETTLING PARTIES ON**
22 **THE OVERCOLLECTION?**

- 23 A. PJM states that the overcollection should be ignored because of the potential impact
24 on investor incentives to build new black start resources. (Witnesses Boyle and
25 Bryson) It is not PJM's role to decide to allow indeterminate overrecovery because
26 of PJM's unsupported view about incentives. PJM neither defines nor applies any
27 metric for appropriate overrecovery. PJM has not evaluated whether the amount of
28 overrecovery is needed or how PJM would know that. PJM is a regulated public
29 utility and not a regulator. PJM's policy views about a need to allow overrecovery
30 are not relevant to the evaluation of the application of the tax code. The Commission
31 has not granted PJM that authority. If PJM believes that black start resources are not
32 adequately compensated, PJM could make that argument explicitly. PJM has not
33 argued to increase payments under the black start formula rate in order to increase

³⁸ 176 FERC ¶ 61,080.

1 compensation despite the fact that the forward looking CRF values include the
2 correct tax provisions, including bonus depreciation.

3 In addition, PJM (Witness Boyle) asserts that the results of all the different CRF
4 approaches are all similar so that the overrecovery can be safely ignored and the
5 settlement implemented. If that were true, PJM and the generators could simply
6 have agreed with the Market Monitor's position and saved a lot of time. Clearly,
7 PJM's position is not correct and not supported by any actual facts in the affidavits.
8 This case is about the significant differences between the positions.

9 **Q 30. IS THERE ANY EVIDENCE TO SUPPORT THE ASSERTION THAT THE**
10 **SETTLEMENT RATES ARE ABOUT THE SAME AS THE MARKET**
11 **MONITOR'S CRF VALUES?**

12 A. No. No evidence of any kind has been provided to support that assertion. Several
13 witnesses made the assertion but their calculations are misleading and incorrect and
14 fail to support their assertion.

15 **Q 31. WHY ARE THE ASSERTIONS THAT THE SETTLEMENT CRFS ARE**
16 **SIMILAR TO THE MARKET MONITOR CRFS INCORRECT?**

17 A. Both Witness Kimbrough and Witness Boyle compare the settlement CRFs to what
18 they incorrectly state are the Market Monitor's position and conclude that the
19 settlement CRFs compare well to the manufactured alternatives. Witness Boyle and
20 Witness Kimbrough simply ignore and/or misstate the actual Market Monitor
21 position that has been clearly provided. For example, Witness Boyle compares
22 revenue payments under the settlement CRFs to a set of CRFs that he incorrectly
23 calls the "IMM CRFs." On the basis of this comparison to a nonexistent position,
24 Witness Boyle incorrectly concludes that there is only a \$2.8 million difference in
25 total revenue payments under the Settlement CRF versus his "IMM CRF."³⁹
26 Witness Boyle's "IMM CRFs" are the CRF tariff formula with 100 percent bonus
27 depreciation. Witness Boyle fails to explain why PJM did not simply include the
28 correct calculation of bonus depreciation in the Second Offer CRF values given that
29 bonus depreciation is in the tax code and based on his view that difference is small.

³⁹ Second Offer, Attachment A (Boyle Affidavit) at 5, item 11.

1 While the Market Monitor included a comparison of CRFs with and without 100
 2 percent bonus depreciation in its opposition to settlement in February 2024⁴⁰ PJM
 3 and Witness Boyle fail to recognize that the failure to use the correct depreciation is
 4 only one of five problems with the settlement CRF that the Market Monitor detailed
 5 in its opposition.⁴¹ Boyle’s misrepresentation of the CRF with bonus depreciation as
 6 the “IMM CRF” is the basis for his incorrect conclusion that there is little difference
 7 between the Market Monitor’s position and the Second Offer.

8 In fact, in the same document that includes the so called “IMM CRF,” the Market
 9 Monitor compares the revenue payments under the Second Offer to the revenue
 10 payments under the Market Monitor’s actual proposal.⁴² Under the Second Offer,
 11 customers would pay \$50.5 million more than under the Market Monitor’s proposal.
 12 Witness Boyle describes the Market Monitor’s proposal in his prior testimony but
 13 does not actually analyze the differences between the Market Monitor’s proposal
 14 and the Second Offer.⁴³

15 **Q 32. IS THE MARKET MONITOR’S APPROACH RETROACTIVE**
 16 **RATEMAKING?**

- 17 A. No. The CRF is an input to a formula rate that defines total payments over a defined
 18 term. If the CRF is overstated in the early years, regardless of the reason, it can be
 19 reduced in the later years in order to produce the intended result over the entire
 20 term. That is not retroactive ratemaking as it does not require the repayment of
 21 payments made under a stated or filed rate. The proposed going forward adjustment
 22 to the formula produces an outcome that is the only outcome consistent with the
 23 purpose of this specific black start formula rate, to provide 100 percent of the
 24 defined return to both debt and equity investors over the defined term of the CRF.

40 Comments of the Independent Market Monitor for PJM in Opposition to Offer of
 Settlement, Exhibit IMM-0001 (Bowring Affidavit) (February 20, 2024) at 14,
 Table 3.

41 *Id.* at 14-15.

42 Comments of the Independent Market Monitor for PJM in Opposition to Offer of
 Settlement, Exhibit IMM-0001 (Bowring Affidavit) (February 20, 2024) at 14,
 Table 6.

43 Second Offer, Attachment A, (Boyle Answering Testimony), Exhibit No. 1 at
 15:11.

1 Note that this is very different from standard cost of service ratemaking that sets a
2 stated rate that remains in place until it is changed by a subsequent decision of the
3 Commission. That is the essential difference between a stated rate and a formula
4 rate designed to recover capital costs over a defined term.

5 **Q 33. IS WITNESS BOYLE CORRECT IN SAYING THE MARKET**
6 **MONITOR’S PROPOSED RESOLUTION IS RETROACTIVE**
7 **RATEMAKING?**

8 A. No. The Market Monitor proposes to the change the going forward CRF value to a
9 CRF value that is consistent with the original financial parameters (12 percent return
10 on equity, 7 percent interest on debt and a 50-50 debt to equity ratio). The windfall
11 due to the failure to include the correct income tax rate and the correct depreciation
12 rules effective January 1, 2018, results in returns on equity that range from 12.8
13 percent to 59.8 percent under the Second Offer.

14 **Q 34. HAS THE COMMISSION RULED THAT THE MARKET MONITOR’S**
15 **RESOLUTION IS RETROACTIVE RATEMAKING?**

16 A. No. In the August 2021 Order, the Commission declined to “include in this
17 proceeding” the Market Monitor’s proposal that new CRFs, calculated using the
18 post June 6, 2021, CRF formula, be applied back to the later of the black start
19 service date or January 1, 2018.⁴⁴ The Market Monitor’s current proposal, which
20 only affects the going forward CRF values, was first introduced in a November
21 2021 comment in response to the PJM’s Answer to the Show Cause order.⁴⁵ The
22 Commission has not commented on the Market Monitor’s proposed resolution.

23 **Q 35. DOES THE MARKET MONITOR’S PROPOSAL PUT AN UNDUE**
24 **ADMINISTRATIVE BURDEN ON PJM?**

25 A. No. Witness Boyle incorrectly asserts that the Market Monitor’s proposal includes
26 an inappropriate level of granularity, requiring unit specific data such as
27 Accumulated Deferred Income Tax.⁴⁶ That is not an accurate statement. The data
28 required for each black start unit are the capital investment amount, the service start

44 176 FERC ¶ 61,080 at P 50.

45 See Attachment M at 49 (Section H).

46 Second Offer, Attachment A, Exhibit No. 1 (Boyle Answering Testimony)
(August 14, 2024) at 17:10.

1 date and capital recovery term. These are the same data requirements for assigning a
 2 CRF to any black start generator. The Market Monitor's resolution does not place an
 3 undue administrative burden on PJM because the Market Monitor has done all the
 4 necessary calculations and provided a copy of these calculations in spreadsheet
 5 format via discovery.⁴⁷

6 In addition, once PJM has corrected the current issues with the CRFs for generating
 7 units that were selected to provide Black Start Service prior to June 6, 2021, the
 8 process under the Market Monitor approach will be identical to the current tariff
 9 approach to units that were selected to provide Black Start Service after June 6,
 10 2021.

11 **Q 36. IS WITNESS KIMBROUGH'S RATE OF RETURN ANALYSIS CORRECT**
 12 **OR RELEVANT?**

13 A. No. Witness Kimbrough mixes and matches inconsistent elements of CRF analysis
 14 and not surprisingly produces an irrelevant and meaningless result. Witness
 15 Kimbrough plugged the settlement CRFs that were calculated using a WACC model
 16 into an FTE model provided by the Market Monitor through the discovery process,
 17 and noted that the returns on equity were less than 12.0 percent.⁴⁸ The Market
 18 Monitor has thoroughly described the differences between the WACC model and
 19 the FTE model.⁴⁹ In short, the two approaches distribute the net income to the equity
 20 investors differently. The WACC model distributes the net income to the debt and
 21 equity investors based on the debt to equity ratio. The FTE model maintains a
 22 constant debt payment similar to a mortgage and the remaining net income flows to
 23 the equity investors.⁵⁰ That the WACC CRFs do not provide a 12 percent return
 24 under the FTE model assumptions is not a surprise nor is it meaningful. The

47 *Response of the Independent Market Monitor for PJM to PJM Interconnection, L.L.C.'s First Set of Data Requests*, PJM-IMM-1.7, PJM-IMM-1.13, PJM-IMM-1.15 (July 8, 2024). The responses are CUI/PRIV-HC.

48 Second Offer, Attachment D (Kimbrough Affidavit) (August 14, 2024) at 4, Table 4.

49 *See infra* at pp. 10:6–12:2.

50 The Indicated Suppliers, who Mr. Kimbrough represents, requested via discovery that the Market Monitor expand the spreadsheet (Attachment Q), which only included a five year recovery period, to include recovery periods of 10, 15 and 20 years.

1 fundamental mistake in Witness Kimbrough’s analysis is that he ignores the fact
 2 that the generators have been paid for several years at the incorrectly inflated CRF
 3 and that the equity investors have been the recipient of windfall profits as a result.
 4 Any achieved return on equity analysis that fails to include these facts is misleading
 5 and provides no useful information. The Market Monitor calculated the achieved
 6 return on equity for each generator under the Second Offer accounting for all the
 7 returns over the term of the CRF and incorporating both the correct tax rate and
 8 depreciation provisions.⁵¹ The achieved returns on equity range from 12.8 percent to
 9 59.8 percent under the Second Offer.

10 **Q 37. PLEASE EXPLAIN WHY INCORPORATING BONUS DEPRECIATION**
 11 **IN THE CALCULATION OF THE CRF IS CORRECT.**

12 A. Both Witness Boyle and Witness Kimbrough ignore the bonus depreciation
 13 provisions of the tax code in their analyses. Neither witness has any logical reason
 14 for ignoring a part of the tax code in the calculation of CRF values. The CRF values
 15 define the return on and of the investment in black start resources based on the
 16 stated inputs. It is completely irrelevant whether the actual behavior of individual
 17 unit investors match those inputs. The tariff does not provide PJM the discretion to
 18 ignore parts of the CRF calculation.

19 Kimbrough argues “there is no evidence” that the units that began black start service
 20 between September 2017 and June 2021 (Kimbrough defines as “Legacy Units”)
 21 were eligible for bonus depreciation.⁵² On the contrary, the federal income tax code
 22 is evidence that capital investments placed in service after September 27, 2017,
 23 were and are eligible for bonus depreciation.⁵³ The current black start CRF formula
 24 in the tariff also includes bonus depreciation.

51 *Comments of the Independent Market Monitor for PJM in Opposition to Offer of Settlement*, Exhibit IMM-0001 (Bowring Affidavit) (February 20, 2024) at 14, Table 4.

52 Second Offer, Attachment D (Kimbrough Affidavit) (August 14, 2024) at 6.

53 *See* 26 U.S. Code §168(k)(6)(A).

1 Kimbrough cites to one generator owner that claims without evidence that bonus
 2 depreciation was not used.^{54 55} It is irrelevant whether a particular generator used
 3 bonus depreciation. Generation owners can make any choices they want. But
 4 generators do not have the option to increase the rate for black start service above
 5 the tariff rate. Yet that is what Witness Kimbrough effectively supports.

6 **Q 38. DOES WITNESS KIMBROUGH PROVIDE ANY EVIDENCE RELATED**
 7 **TO THE FINANCIAL AND INCOME TAX ASSUMPTIONS USED TO**
 8 **CALCULATE THE ORIGINAL CRF?**

9 A. No. Witness Kimbrough, despite overwhelming evidence to the contrary, continues
 10 to question whether anybody actually knows how the original CRFs were
 11 calculated. Witness Kimbrough's affidavit includes multiple such statements and
 12 related innuendo. Witness Kimbrough states the "IMM claims" (item 7 at 3) a 12
 13 percent ROE was assumed in the CRF calculation, despite the fact that multiple
 14 sources corroborate that ROE.⁵⁶ Kimbrough questions the state income tax rate
 15 assumption (item 12, page 6).⁵⁷ If there had been any legitimate confusion regarding
 16 the assumptions and income tax rates, any doubt has been removed through the
 17 discovery process and additional testimony since 2021. Witness Kimbrough should
 18 know this based on his use of the Market Monitor's spreadsheet, provided through
 19 discovery, to match the original CRF.⁵⁸ In addition, PJM provided the original
 20 spreadsheet that was used to calculate the CRF and which demonstrates the same
 21 inputs. Numerous PJM reports and presentations have been added to the record that
 22 corroborate the financial parameter and income tax assumptions.⁵⁹

54 Second Offer, Attachment D (Kimbrough Affidavit) (August 14, 2024) at 6.

55 Of the 38 black start generators that part of this settlement, 20 generators began
 providing black start service after September 27, 2017. See *Comments of the
 Independent Market Monitor for PJM in Opposition to Offer of Settlement*, Exhibit
 IMM-0001 (Bowring Affidavit) (February 20, 2024) at 14, Table 4.

56 Second Offer, Attachment D (Kimbrough Affidavit) (August 14, 2024) at 3, item
 7.

57 *Id.* at 6, item 12.

58 *Id.* at 3, item 7.

59 *See infra* 9:20–22.

1 **Q 39. IS AFUDC (ALLOWANCE FOR FUNDS USED DURING**
2 **CONSTRUCTION) ACCOUNTED FOR IN THE CAPITAL COST**
3 **RECOVERY?**

4 Yes. Witness Kimbrough states, without evidence, that the Market Monitor
5 “unrealistically” assumes “that a generator’s capital costs were incurred on the first
6 day” of the capital recovery period.⁶⁰ The capital investment, which is multiplied by
7 a CRF to obtain the revenue payment amount, includes AFUDC (allowance for
8 funds used during construction), also referred to as capitalized interest. AFUDC
9 allows the generation owner to capitalize carrying costs incurred prior to placing the
10 capital investment into service. The capital investment used to determine the
11 revenue payment is the fully capitalized project cost as of the service start date.⁶¹
12 This is not a model assumption but rather part of the PJM process for determining
13 black start capital cost recovery and have been part of that process since the CRF
14 was first used for black start capital cost recovery. The AFUDC issue has nothing to
15 do with the calculation of the CRF values. It is related only to Witness Kimbrough’s
16 assertions about how to calculate achieved returns when CRF values are applied.

17 **Q 40. CAN YOU PROVIDE OF A CHRONOLOGY OF EVENTS RELEVANT TO**
18 **THIS PROCEEDING?**

19 A. Yes. Attachment A to this affidavit is a chronology of the key dates in the history of
20 the CRF issue. The chronology includes: the implementation date of CRF values in
21 the capacity market; the implementation date of the Capital Cost Recovery Rate
22 component in Paragraph 18 of Schedule 6A for black start; the enactment and
23 effective dates of the TCJA; the dates of the Market Monitor’s efforts to correct the
24 CRF table to reflect the changed federal tax provisions; the dates of the PJM
25 stakeholder process relating to the CRF; the dates in this proceeding of PJM’s
26 filings with the Commission and the Commission’s investigation.

27 **Q 41. PLEASE EXPLAIN THE ATTACHMENTS SUPPORTING THIS**
28 **TESTIMONY**

29 A. Attachment A is the CRF Chronology.

⁶⁰ Second Offer, Attachment D (Kimbrough Affidavit) (August 14, 2024) at 5, item 10.

⁶¹ AFUDC was addressed in response to discovery request Staff-IMM-5.1(e).

1 Attachment B is the IMM’s “Capital Recovery Factors for the Flow to Equity
2 Approach Technical Reference,” dated December 10, 2021. This Technical
3 Reference defines CRF and includes the derivation of the CRF formula under the
4 flow to equity (FTE) approach. The original CRF values, filed by PJM in 2005 for
5 the capacity market and in 2009 for black start, were calculated using the FTE
6 approach. The Technical Reference explains the role of federal tax rates and the
7 difference between the tax depreciation provisions prior to the TCJA (MACRS) and
8 the tax depreciation provisions included in the TJCA (bonus depreciation).

9 Attachment C is the IMM’s “Capital Recovery Factors Technical Reference,” dated
10 April 25, 2022. This Technical Reference defines CRF and includes the derivation
11 of the CRF formula under the weighted average cost of capital (WACC) approach.
12 The CRF formula added to the PJM OATT in October 2021 and currently applicable
13 to black start generators that are scheduled for service after June 6, 2021, was
14 derived by the Market Monitor using the WACC approach. The WACC CRF
15 formula is included in Schedule 6A of the PJM OATT.

16 Attachment D is an IMM MIC presentation, dated September 18, 2006. This IMM
17 presentation provides a description of proposed tariff changes applicable to black
18 start units. The presentation includes the original CRF values on slide 6. Slide 6 also
19 makes explicit that Modified Accelerated Cost Recovery System (MACRS)
20 depreciation was used in the calculation of taxes included in the CRF values at that
21 time, prior to the TCJA. This demonstrates that the tax depreciation schedule used in
22 the calculation of the CRF values was an explicit part of the calculation of the
23 original CRF values.

24 Attachment E is PJM’s “Review of Black Start Formula and Cost Components,”
25 dated June 2011. This PJM report was required by the tariff and included “a review
26 of the components and formulas in the current approved version of Schedule 6A:
27 Section 18,” and “report on the results of that review to stakeholders.” This PJM
28 report was the first report to the stakeholders that addressed the use of the CRF for
29 black start resources. The report provides a complete description of the CRF model
30 assumptions (at 7), including all six inputs and including a federal tax rate of 36
31 percent. The report states that the CRF values used for black start originated in the
32 capacity market tariff. The report was included in the meeting materials for and
33 reviewed at a meeting of the Black Start Service Task Force on June 21, 2011.

34 Attachment F is PJM’s “Review of PJM Black Start Formula and Cost
35 Components,” dated December 2014. This PJM report was the second report to

1 stakeholders on the review of the black start formula as required by the PJM tariff.
2 The report provides a complete description of the CRF model assumptions (at 8),
3 including all six inputs and including a federal tax rate of 36 percent. The report was
4 included in the meeting materials for and reviewed at the MC Webinar on January
5 20, 2015.

6 Attachment G is PJM’s “Review of PJM Black Start Formula and Cost
7 Components,” dated October 2019. This PJM report was the third report to
8 stakeholders on the review of the black start formula as required by the PJM tariff.
9 The report provides a complete description of the CRF model assumptions (at 8),
10 including all six inputs and including a federal tax rate of 36 percent. This report
11 was included in the meeting materials for and reviewed at the MC Webinar on
12 October 30, 2019. This report was presented to the stakeholders after the tax law
13 changes in the TCJA became effective on January 1, 2018. This report was
14 presented to stakeholders after the Market Monitor had informed PJM by email of
15 the incorrect CRF values on October 3, 2019. The report concludes (at 10) that
16 “PJM has received, reviewed, and approved several resources during the multiple
17 RFPs listed above. As a result, no additional changes are needed due to the response
18 following the above mentioned RTO Wide and Incremental RFPs.” Two of the
19 referenced RFPs were issued after the January 1, 2018, effective date of the TCJA
20 tax provisions. The Market Monitor referenced this report in Comments of the
21 Independent Market Monitor for PJM, Docket No. ER21-1635-000 (April 28, 2021)
22 at 5–6 n.15.

23 Attachment H is an email from the Market Monitor to PJM, dated October 3, 2019.
24 The email clearly documents the required changes to the CRF rates in the PJM tariff
25 as a result of the tax law changes included in the TCJA. The email also documents
26 the appropriate level of each of the inputs to the CRF calculation as a result of the
27 TCJA.

28 Attachment I is an email from PJM to the Market Monitor, dated February 7, 2020.
29 The email shows that PJM is in agreement with the Market Monitor regarding the
30 updates to the CRF rates in the PJM tariff as a result of the tax law changes included
31 in the TCJA. Attachment I is treated as confidential at PJM’s request.

32 Attachment J is PJM’s filing in Docket ER09-730 Filing, dated February 19, 2009.
33 This is the PJM filing that included the tariff updates with the original black start
34 CRF values. The PJM filing letter describes the addition of the CRF values at pages
35 3-4, and 7.

1 Attachment K is PJM’s presentation to the PJM Operating Committee: “Black Start
2 Education, Black Start Unit Testing, Substitution, Termination Rules, and Capital
3 Recovery Factor (CRF),” dated May 14, 2020. This PJM presentation shows (at 9)
4 the changes to the CRF parameter assumptions that are necessary due to the TCJA,
5 including a reduction in the federal tax rate from 36 percent to 21 percent.

6 Attachment L is the Market Monitor’s initial response to the PJM filing to update
7 the CRF in Docket ER21-1635. The Market Monitor addresses (at 5-7) the
8 derivation of the CRF values, notes (at 6 and fn 15) the tariff requirement that PJM
9 provide a periodic review of the CRF rates and assumptions, states (at fn 15) the
10 parameter assumptions used to compute the CRF and includes (at 16) a general
11 formula for calculating CRF values. The Market Monitor also objects (at 13) to
12 PJM’s proposal to leave in place the incorrect CRF values for units selected for
13 black start service prior to June 6, 2021.

14 Attachment M is the Market Monitor’s response in accordance with paragraph 53 of
15 176 FERC ¶ 61,080. These comments were filed on November 18, 2021, in ER21-
16 91-000 and are a revised version of the Market Monitor’s comments filed on
17 November 11, 2021. Attachment B to this filing is a clean version of the comments.
18 The comments provide a background on CRF (at 7–10), detailed examples
19 explaining the over recovery of capital investment costs that is occurring (at 10-18)
20 and a proposed resolution (at 18-26) that resets the CRF values, on a prospective
21 basis, to levels that provide capital cost recovery that aligns with the intended rates
22 of return (12 percent return on equity, 7 percent cost of debt).

23 Attachment N is an answer filed by the Market Monitor on December 20, 2021, in
24 response to an answer by Vistra Corp. and Dynegy Marketing and Trade (“Vistra”)
25 in EL21-91-000. The Market Monitor’s answer provides additional details and
26 clarifications regarding its proposed resolution. The Market Monitor addresses (at 3)
27 Vistra’s contention that the Market Monitor’s proposed resolution constitutes
28 retroactive ratemaking.

29 Attachment O is the Market Monitor’s response to FERC Trial Staff’s first set of
30 data requests.

31 Attachment P is a spreadsheet attachment to request S-IMM-1.1. The spreadsheet
32 replicates the calculation of the original CRF values.

1 Attachment Q is a spreadsheet attachment to request S-IMM-1.3. The spreadsheet
2 shows the differences in the FTE and WACC approaches.

3 Attachment R is PJM's response to FERC Trial Staff's first set of data requests.
4 Attachment R is treated as confidential at PJM's request.

5 Attachment S is a spreadsheet attachment to request S-PJM-1.2. The spreadsheet
6 shows the financial and income tax assumptions used to calculate the original CRF
7 values. Attachment S is treated as confidential at PJM's request.

8 **Q 42. DOES THIS CONCLUDE YOUR AFFIDAVIT?**

9 A. Yes.

