UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

Energy Harbor LLC, Complainant,)
v.)
PJM Interconnection, L.L.C., Respondent.)

Docket No. EL23-63-000

ANSWER OF PJM INTERCONNECTION, L.L.C.

PJM Interconnection, L.L.C. ("PJM"), pursuant to Rule 213 of the Federal Energy Regulatory Commission's ("Commission") Rules of Practice and Procedure,¹ submits this answer to the complaint filed by Energy Harbor LLC ("Energy Harbor" or "Complainant") on April 27, 2023.² The Commission should deny the Complaint.

I. INTRODUCTION

Energy Harbor's Complaint defies the Tariff³ and the well-established performance expectations for Capacity Resources.⁴ Simply put, Energy Harbor's argument is that the mere existence of a Generator Maintenance Outage ("Maintenance Outage") should excuse its capacity obligations even when there is a Performance Shortfall due to a Generator

¹ 18 C.F.R. § 385.213.

² Energy Harbor, LLC v. PJM Interconnection, L.L.C., Complaint of Energy Harbor LLC Against PJM Interconnection, L.L.C., Docket No. EL23-63-000 (Apr. 27, 2023) ("Complaint").

³ Open Access Transmission Tariff of PJM Interconnection, L.L.C. ("Tariff").

⁴ Capitalized terms used, but not defined, in this answer have the meaning provided by, as applicable, the Tariff, the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. ("Operating Agreement"), or the Reliability Assurance Agreement Among Load Serving Entities in the PJM Region ("RAA").

Forced Outage ("Forced Outage"). The Commission should reject Energy Harbor's plea to evade its Capacity Performance obligations and deny the Complaint.

II. BACKGROUND

A. Tariff Calculation of Performance Shortfalls During Performance Assessment Intervals

The Tariff provides that Capacity Market Sellers will be charged to the extent the Actual Performance of their committed Capacity Resources during Performance Assessment Intervals⁵ falls short of the Expected Performance of such resources.⁶

The Tariff defines Expected Performance as Resource Committed Capacity times the Balancing Ratio, where Resource Committed Capacity equals the total megawatts ("MWs") of Unforced Capacity of the Capacity Resource committed by the Seller, and the Balancing Ratio equals the ratio of (i) the actual performance of all generation, storage, price responsive demand, and demand response resources; to (ii) the total MWs of Unforced Capacity of all Generation Capacity Resources and Capacity Storage Resources committed for that period.⁷ The Tariff also defines Actual Performance as the metered output of energy delivered to PJM by the resource at issue.⁸

The Tariff further provides that a Capacity Resource shall not be considered in the calculation of a Performance Shortfall for a Performance Assessment Interval "to the extent such Capacity Resource . . . was unavailable during such Performance Assessment Interval

⁵ This answer sometimes abbreviates "Performance Assessment Intervals" as "PAI."

⁶ Tariff, Attachment DD, section 10A(a), (b).

⁷ Tariff, Attachment DD, section 10A(c).

⁸ Tariff, Attachment DD, section 10A(c).

solely because the resource on which such Capacity Resource . . . is based was on a . . . Generator Maintenance Outage approved by [PJM]."⁹

B. Performance of Energy Harbor's Capacity Resource During the Performance Assessment Intervals on December 23 and December 24

Performance Assessment Intervals are triggered when PJM declares certain types of Emergency Action, including a Maximum Generation Emergency Action ("MaxGen"). When the PJM Region was in the grip of Winter Storm Elliot,¹⁰ PJM declared MaxGens on December 23 and December 24, 2022, resulting in a total of 277 Performance Assessment Intervals.

Here, "the resource on which [the] Capacity Resource . . . is based"¹¹ is an aggregation of three separate generating units, i.e., Units 5, 6, and 7 of the W.H. Sammis plant,¹² which combined have an Installed Capacity of 1,490 MWs.¹³ The Capacity Resource committed by Energy Harbor during all Performance Assessment Intervals on December 23 was 1,011.9 MWs of Unforced Capacity from that underlying resource, and during all Performance Assessment Intervals on December 24 was 1,036.2 MWs of Unforced Capacity from that underlying resource.¹⁴

⁹ Tariff, Attachment DD, section 10A(d).

¹⁰ Winter Storm Elliott refers to a large winter storm that passed through the PJM Region between December 23 and December 25, 2022. *See Winter Storm Elliott Info*, PJM Interconnection, L.L.C., https://pjm.com/markets-and-operations/winter-storm-elliott (last visited June 1, 2023) (collecting PJM's public statements addressing Winter Storm Elliott's impact on PJM's operations and markets).

¹¹ Tariff, Attachment DD, section 10A(d).

¹² Talen treats these three units individually for some purposes, such as reporting their outages and modeling them in the energy market, but in the aggregate for other purposes, such as the aggregate resource underlying the Capacity Resource Talen committed for the Delivery Year at issue.

¹³ Complaint at 8.

¹⁴ Complaint, Exh. No. 1, col. K.

The Balancing Ratio varied among the PAIs. For the December 23 PAIs, the Balancing Ratio ranged from approximately 0.822 to approximately 0.885, and averaged 0.855 across the PAIs for that day.¹⁵ For the December 24 PAIs, the Balancing Ratio ranged from approximately 0.777 to approximately 0.840, and averaged 0.810 across the PAIs for that day.¹⁶

Thus, the Expected Performance, i.e., the committed capacity times the Balancing Ratio likewise varied across the PAIs. For the December 23 PAIs, the Expected Performance ranged from approximately 832 MWs to approximately 896 MWs¹⁷ and averaged 865 MWs across the PAIs for that day.¹⁸ For the December 24 PAIs, the Expected Performance ranged from approximately 805 MWs to approximately 870 MWs, ¹⁹ and averaged 840 MWs across the PAIs for that day.

The Actual Performance, i.e., the resource's metered output of energy adjusted for any regulation or reserve assignments, varied over the course of the December 23 PAIs from approximately 465 MWs to approximately 503 MWs²⁰ and averaged 490 MWs. For the December 24 PAIs, the Actual performance ranged from approximately 657 MWs to approximately 731 MWs²¹ and averaged 698 MWs.

¹⁵ Complaint, Exh. No. 1, col. J.

¹⁶ Complaint, Exh. No. 1, col. J.

¹⁷ Complaint, Exh. No. 1, col. L.

¹⁸ The averages reported here and in the next paragraph do not appear on the face of the exhibit; they are the calculated simple average of the values that do appear on the exhibit.

¹⁹ Complaint, Exh. No. 1, col. L.

²⁰ Complaint, Exh. No. 1, col. O.

²¹ Complaint, Exh. No. 1, col. O.

During all PAIs at issue, one of the three units comprising "the resource[s] on which [the] Capacity Resource ... is based,"²² i.e., Sammis Unit 6, was on a 300 MW Maintenance Outage.²³ A Maintenance Outage is "the scheduled removal from service, in whole or in part, of a generating unit in order to perform necessary repairs on specific components of the facility."²⁴ Here, the PJM-approved Maintenance Outage of Sammis Unit 6 began on [**BEGIN CUI**//**PRIV-HC**]

[END CUI//PRIV-HC]. Taking account of the Maintenance Outage, the MWs of Installed Capacity of the "generating unit[s]" supporting the Capacity Resource that were *not* on Maintenance Outage were 1,190 MWs as the PJM Region headed into the MaxGens at issue here.²⁵

In addition to the Maintenance Outage, Sammis Unit 5 and Sammis Unit 7 also were on Forced Outages of a total of 740 MWs during all December 23 PAIs, and on Forced Outages ranging from 140 MWs to 530 MWs over the course of the December 24 PAIs.²⁶ A Forced Outage is "an immediate reduction in output or capacity or removal from service, in whole or in part, of a generating unit by reason of an Emergency or threatened Emergency, unanticipated failure, or other cause beyond the control of the owner or operator of the facility."²⁷ Sammis Unit 5 and Sammis Unit 7 were on Forced Outage due to **[BEGIN CUI//PRIV-HC]**

²² Tariff, Attachment DD, section 10A(d).

²³ Complaint, Exh. No. 2, col. O.

²⁴ Operating Agreement, section 1, Definitions G-H.

²⁵ Complaint, Exh. No. 2, col. Q.

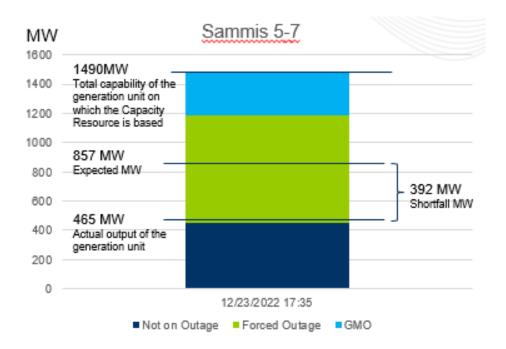
²⁶ Complaint, Exh. No. 2, col. N. The noted MW values are the sum, at any given time, of the Forced Outages at the two units.

²⁷ Operating Agreement, section 1, Definitions G-H.

[END CUI//PRIV-HC], respectively. Energy Harbor reflected these Forced Outages through several Forced Outage tickets that Energy Harbor submitted in PJM's eDART system that together spanned all of the Performance Assessment Intervals at issue in this case.

Figure 1, below, graphically summarizes the aggregated status of "the resource on which [the] Capacity Resource . . . is based,"²⁸ relevant here, using as a representative example the first Performance Assessment Interval (i.e., 17:30 to 17:35)²⁹ on December 23, 2022.³⁰

<u>Figure 1</u> <u>Relevant Metrics for Sammis Units 5, 6, and7, and the Capacity Resource Based on</u> <u>Those Units, at Interval Ending 17:35 on December 23, 2022, in Megawatts of Installed</u> Capacity



²⁸ Tariff, Attachment DD, section 10A(d).

²⁹ All times in this answer are in 24-hour clock and in Eastern Prevailing Time.

³⁰ As described above, the Expected Performance, Actual Performance, and Forced Outage values varied over the course of the PAIs on December 23 and December 24, 2022, but not in a way that changes the Tariff analysis at issue here.

As represented above, the aggregate Installed Capacity of Sammis Units 5, 6, and 7 is 1,490 MW. As also shown, Expected Performance for the Capacity Resource committed here was 857 MWs,³¹ Actual Performance was 465 MWs, and the Performance Shortfall was 392 MWs. The graphic also color-codes the outage status of the aggregate of Sammis Units 5, 6, and 7 during this PAI, showing in light blue the 300 MW Maintenance Outage, in light green the 740 MW Forced Outage, and in dark blue the 450 MWs not on outage.

As noted, the Tariff provides that a Capacity Resource shall not be considered in the calculation of a Performance Shortfall for a PAI "to the extent such Capacity Resource . . . was unavailable during such [PAI] solely because the resource on which such Capacity Resource is based was on a . . . Generator Maintenance Outage approved by [PJM]."³²

As depicted in Figure 1, the Capacity Resource was not "unavailable during such [PAI] solely because the resource on which such Capacity Resource is based was on a . . . Generator Maintenance Outage."³³ The Forced Outage is what reduced the resource's Actual performance below the resource's Expected Performance. The resource was not unavailable "solely because" of the Maintenance Outage on one of the underlying generation units.

³¹ As previously noted, the Capacity Resource committed by Energy Harbor for December 23, 2022 was 1,011.9 MWs of Unforced Capacity. The Tariff results in Expected Performance at a level below the Committed Capacity when, as here, all relevant Capacity Resources in the aggregate were underperforming the Actual Performance from the universe of all resources in the aggregate.

³² Tariff, Attachment DD, section 10A(d).

³³ Tariff, Attachment DD, section 10A(d).

PJM accordingly calculated Non-Performance Charges for Energy Harbor for the Performance Shortfall due to the difference between the Capacity Resource's Actual Performance versus its Expected Performance, as specified in the Tariff.

III. ANSWER

A. Contrary to the Complaint, Nothing in the Tariff States that PJM Must First Calculate the Performance Shortfall, and then Reduce that Performance Shortfall by the MW Amount of Any Generator Maintenance Outage

The issue in the Complaint is quite narrow. Energy Harbor does not contest that Sammis Units 5 and 7 were on Forced Outages during the PAIs at issue. Energy Harbor does not contest the MW amounts and timing of those Forced Outages as noted above and in Complaint, Exhibit No. 2. Nor does Energy Harbor contest the Expected Performance and Actual Performance amounts summarized above and shown in Complaint, Exhibit No. 1. The sole issue is Energy Harbor's insistence that, after calculating the Performance Shortfall as the difference between Expected Performance and Actual Performance, PJM must then subtract from that Performance Shortfall the MW amount of the Maintenance Outage taken by Sammis Unit 6.³⁴ But the Tariff does not say that.

The Non-Performance Charges are described formulaically in the Tariff. If the intent of the Tariff had been to calculate the Performance Shortfall, and then reduce that calculated value by the amount of any Generator Planned Outage or Generator Maintenance Outage before (as required by Tariff, Attachment DD, section 10A(e)) multiplying the Performance Shortfall by the Non-Performance Charge Rate, then the Tariff would have so stated. But it does not. The Tariff instead provides that a Capacity Resource shall not be considered in the calculation of a Performance Shortfall for a PAI

³⁴ Complaint at 2-4.

"to the extent [the] Resource . . . was unavailable . . . solely because the resource on which such Capacity Resource . . . is based was on a . . . Maintenance Outage."³⁵

Energy Harbor's proposed interpretation requires the Commission to disregard much of that language. By subtracting the Maintenance Outage from the Performance Shortfall, which the Tariff defines³⁶ as being calculated from the "Committed Capacity" of the Capacity Resource, Energy Harbor treats the Capacity Resource as being "on" a Maintenance Outage, instead of, as the Tariff specifies, the "resource on which such Capacity Resource . . . is based" being "on" a Maintenance Outage. The Tariff correctly reflects that a "resource," i.e., a "generating unit," goes on a Maintenance Outage.³⁷ A Capacity Resource does not go "on" a Maintenance Outage, because the Capacity Resource is not itself a generating unit, but is instead "megawatts of net capacity from," as relevant here, a generation resource.³⁸ Yet Energy Harbor's Tariff interpretation, by subtracting the Maintenance Outage from the Performance Shortfall (which, as noted, is calculated from the Committed Capacity of the Capacity Resource) will always result in the entire Maintenance Outage being subtracted from the Capacity Resource, regardless of how much, or how little, the Capacity Resource represents of "the resource on which [it] is based."

Energy Harbor's proposed Tariff interpretation also requires the Commission to disregard the language that the Capacity Resource was "unavailable solely because" the underlying resource was on a Maintenance Outage. Here, "the resource on which the

³⁵ Tariff, Attachment DD, section 10A(d).

³⁶ Tariff, Attachment DD, section 10A(c).

³⁷ See Operating Agreement, section 1, Definitions G-H.

³⁸ RAA, Art. 1, Definitions (Capacity Resource).

Capacity Resource is based,"³⁹ i.e., the aggregate of Sammis Units 5, 6, and 7, were on multiple outages: the Maintenance Outage on Sammis Unit 6 that began on [BEGIN CUI//PRIV-HC] [END CUI//PRIV-HC], and the series of Forced Outages on Sammis Units 5 and 7 that began on [BEGIN CUI//PRIV-HC]

[END CUI//PRIV-HC]. As can be seen from Figure 1, after taking account of the two outages, the MWs of the combined generating units that were *not* on outage for that PAI roughly correspond to the Actual Performance for that PAI. Unsurprisingly, this is true of all the PAIs, with the actual generation roughly corresponding with the MWs that were not on either a Maintenance Outage or Forced Outage.⁴⁰ Those Actual Performance levels, which are well below the Expected Performance levels, are the source of the Performance Shortfalls.

If, correctly considering, as the Tariff requires, "solely" the Maintenance Outage on Sammis Unit 6, then the MWs of the underlying resource that are *not* on outage are 1,190 MWs, as can be seen from Figure 1, and as shown on Complaint, Exhibit No. 2, column Q. That MW value is far above the Expected Performance for Energy Harbor's committed Capacity Resource for every PAI.⁴¹ Thus, if we consider "solely" the Maintenance Outage associated with the underlying resource, then the Capacity Resource was not *at all* "unavailable" to meet and exceed its Expected Performance.

Tellingly, the Complaint never mentions the Forced Outages that, for most of the PAIs at issue, were higher (usually well higher) than the 300 MW Maintenance Outage. The Complaint never offers any theory on what the Tariff term "solely" means in this

³⁹ Tariff, Attachment DD, section 10A(d).

⁴⁰ Compare Complaint, Exh. No. 2, col. P, with Complaint, Exh. No. 1, col. O.

⁴¹ Compare Complaint, Exh. No. 2, col. Q, with Complaint, Exh. No. 1, col. O.

context, and never acknowledges any role whatsoever for a forced outage—which ranged as high as 740 MWs—in the assessment of the plant's performance during the PAIs. Thus, if nothing else, that single Tariff word "solely" is utterly fatal to the Complaint.

PJM's Tariff interpretation, by contrast, does give effect to the non-performance excusal "to the extent" the Capacity Resource is "unavailable solely because" of the Maintenance Outage. If, for example, there is both a Forced Outage and a Maintenance Outage, and the Forced Outage is *not enough* standing alone to account for the entire Performance Shortfall, then—in that case—the Maintenance Outage would be the sole reason for *the rest of* the shortfall, and would be a proper excuse under the Tariff "to the extent" of the rest of that Performance Shortfall. Similarly, if there is *only* a Maintenance Outage (and correspondingly reduces Actual Performance) to a level below the Expected Performance, then the "extent" of the unavailability below Expected Performance would be "solely because" of the Maintenance Outage. PJM's approach thus satisfies the standard canon of interpretation to give effect to all words in a statute, contract, or (as here) Tariff;⁴² Energy Harbor's interpretation clearly does not, and should be rejected.

B. Energy Harbor's Approach Runs Contrary to the Capacity Performance Principles

The Commission approved the Non-Performance Charge as a key part of Capacity Performance's objective to "hold[] capacity resources accountable for delivering on their

⁴² See, e.g., Hudson Transmission Partners, LLC v. N.Y. Indep. Sys. Operator, Inc., 145 FERC ¶ 61,156, at PP 44, 52 (2013) (Commission, as urged by the respondent, interprets the governing tariff provision "as a whole"); Exelon Wind 1, LLC v. Nelson, 766 F.3d 380, 399 (5th Cir. 2014) ("[O]ne of the most basic interpretive canons, [is] that a statute should be construed so that effect is given to all its provisions, so that no part will be inoperative or superfluous, void or insignificant." (quoting *Corley v United States*, 556 U.S. 303, 314 (2009))).

capacity commitments^{**43} and thereby "reallocate a significant portion of [] performance risk to capacity resource owners and operators" from load.⁴⁴ As the Commission explained, Non-Performance Charges will "act as a strong incentive for performance,"⁴⁵ because "if and to the extent [a Capacity Resource] fails to perform during an emergency, when it is most needed, it is appropriate that the compensation for that resource be reduced and possibly entirely forfeited."⁴⁶

Consistent with preserving this strong incentive, the Commission held that the excuses from Non-Performance Charges are "strictly circumscribed."⁴⁷ PJM's interpretation of the Tariff, closely hewing to the language of the Tariff, ensures that Commission guidance on the Non-Performance Charge excuses is honored. By the Tariff's plain terms, the excuse is indeed "strictly circumscribed:" applying only when (and to the extent) the Capacity Resource is unavailable solely because the resource on which the Capacity Resource is based is on a Maintenance Outage.

By contrast, Energy Harbor's proposed interpretation would broaden that excuse to: (i) apply any time there is a Maintenance Outage; (ii) always forgive Capacity Resource Performance Shortfalls by the full amount of any Maintenance Outage; and (iii) excuse Capacity Resource non-performance even when caused by other factors, such as the Forced Outages which were the true driving factor here in Energy Harbor's non-performance. Energy Harbor's proposed Tariff interpretation thus requires the Commission to jettison

⁴³ *PJM Interconnection, L.L.C.*, 151 FERC ¶ 61,208 (2015) ("CP Order"), order on reh'g & compliance, 155 FERC ¶ 61,157, at P 18 (2016) ("CP Rehearing Order"), aff'd sub nom. Advanced Energy Mgmt. All. v. FERC, 860 F.3d 656 (D.C. Cir. 2017).

⁴⁴ CP Rehearing Order at P 27.

⁴⁵ CP Rehearing Order at P 72.

⁴⁶ CP Rehearing Order at P 29.

⁴⁷ CP Order at P 167.

these fundamental principles of Capacity Performance, and should be rejected for that reason as well.

IV. ADMISSIONS AND DENIALS PURSUANT TO 18 C.F.R. § 385.213(c)(2)(i)

Pursuant to Rule 213(c)(2)(i) of the Commission's rules of Practice and Procedure,⁴⁸ PJM affirms that any allegation in the Complaint is not specifically and expressly admitted above is denied.

V. AFFIRMATIVE DEFENSES PURSUANT TO 18 C.F.R. § 385.213(c)(2)(ii)

PJM's affirmative defenses are set forth above in this answer, and include the

following, subject to amendment and supplementation.

1. The Complainant has failed to satisfy its burden of proof under FPA section 206 (16 U.S.C. § 824e), and has not demonstrated that PJM violated any Commission order, the Tariff, the Operating Agreement, Reliability Assurance Agreement, the Consolidated Transmission Owners Agreement, or any other Commission-jurisdictional governing document.

VI. REQUEST FOR CONFIDENTIAL TREATMENT

PJM respectfully requests, pursuant to 18 C.F.R. § 388.112, privileged treatment of identified portions of this answer and its attachments that are exempt from the mandatory public disclosure requirements of the Freedom of Information Act ("FOIA"),⁴⁹ and that should be withheld from public disclosure. Specifically, non-public treatment is requested for certain market sensitive information provided to PJM by Market Participants as confidential under Operating Agreement, section 18.17, which fall within the FOIA public disclosure exemption for "trade secrets and commercial or financial information obtained from a person and privileged or confidential."⁵⁰

⁴⁸ 18 C.F.R. § 385.213(c)(2)(i).

⁴⁹ 5 U.S.C. § 552.

⁵⁰ See 5 U.S.C. § 552(b)(4).

In accordance with 18 C.F.R. § 388.112(b)(2)(i), PJM includes with this filing, as Attachment A, a proposed form of protective agreement by which parties to this proceeding can obtain access to the non-public version of this answer and its attachments. The proposed Protective Agreement is identical in all substantive respects (other than being labeled a Protective Agreement rather than a Protective Order) to the Protective Order PJM moved the Commission on May 24, 2023, to issue in this proceeding and 11 other related proceedings.⁵¹ The proposed Protective Order, by its terms, will supersede and replace the proposed Protective Agreement five days after Commission issuance of the Protective Order. PJM is submitting a non-public version of this answer and its attachments that is marked "CUII/PRIV-HC" in accordance with Paragraph 11 of the proposed Protective Agreement. PJM asks that the marked version of this answer and its attachments be placed in the Commission's non-public files. PJM is also submitting a public version of this answer and its attachments that is answer and its attachments with the relevant confidential material redacted pursuant to section 388.112(b)(1) of the Commission's regulations.

⁵¹ Essential Power OPP, LLC v. PJM Interconnection, L.L.C., Motion for Adoption of Protective Order, Docket Nos. EL23-54-000, et al. (May 24, 2023).

VII. COMMUNICATIONS AND SERVICE

PJM requests that the Commission place the following individuals on the official

service list for this proceeding:⁵²

Craig Glazer Vice President–Federal Government Policy PJM Interconnection, L.L.C. 1200 G Street, N.W., Suite 600 Washington, D.C. 20005 (202) 423-4743 (phone) (202) 393-7741 (fax) craig.glazer@pjm.com

Chenchao Lu Associate General Counsel PJM Interconnection, L.L.C. 2750 Monroe Blvd. Audubon, PA 19403 (610) 666-2255 (phone) Chenchao.Lu@pjm.com Paul M. Flynn Wendy B. Warren Ryan J. Collins Wright & Talisman, P.C. 1200 G Street, N.W., Suite 600 Washington, D.C. 20005 (202) 393-1200 (phone) (202) 393-1240 (fax) flynn@wrightlaw.com warren@wrightlaw.com collins@wrightlaw.com

⁵² To the extent necessary, PJM requests a waiver of Commission Rule 203(b)(3), 18 C.F.R. § 385.203(b)(3), to permit more than two persons to be listed on the official service list for this proceeding.

VIII. CONCLUSION

For the reasons set forth in this answer, the Commission should deny the Complaint.

Respectfully submitted

/s/ Paul M. Flynn

Craig Glazer Vice President–Federal Government Policy PJM Interconnection, L.L.C. 1200 G Street, N.W., Suite 600 Washington, D.C. 20005 (202) 423-4743 (phone) (202) 393-7741 (fax) craig.glazer@pjm.com

Chenchao Lu Associate General Counsel PJM Interconnection, L.L.C. 2750 Monroe Blvd. Audubon, PA 19403 (610) 666-2255 (phone) Chenchao.Lu@pjm.com Paul M. Flynn Wendy B. Warren Ryan J. Collins Wright & Talisman, P.C. 1200 G Street, N.W., Suite 600 Washington, D.C. 20005 (202) 393-1200 (phone) (202) 393-1240 (fax) flynn@wrightlaw.com warren@wrightlaw.com collins@wrightlaw.com

Attorneys for PJM Interconnection, L.L.C.

June 2, 2023

ATTACHMENT A

PROPOSED PROTECTIVE AGREEMENT

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Energy Harbor LLC

v.

Docket No. EL23-63-000

PJM Interconnection, L.L.C.

PROTECTIVE AGREEMENT

THIS PROTECTIVE AGREEMENT (Protective Agreement) is made and entered into by and between PJM Interconnection L.L.C. (PJM), respondent in the above-captioned Proceeding, and each Participant in this Proceeding that indicates its agreement hereto by and to the extent its Reviewing Representatives execute Non-Disclosure Certificates in the form attached hereto.

WHEREAS, PJM submitted documents to the Federal Energy Regulatory Commission (Commission) in the above captioned docket (Proceeding);

WHEREAS, pursuant to section 388.112(b) of the Commission's regulations, 18 C.F.R. § 388.112(b), this Protective Agreement applies to requests for access to the non-public version of any document or portion of a document filed or produced by PJM in this Proceeding;

WHEREAS, Participant desires to obtain access to non-public information in this Proceeding;

WHEREAS, Participant has provided a signed Non-Disclosure Certificate and agrees to comply with all terms of this Protective Agreement and the Commission's Regulations; and

WHEREAS, without waiving any claims of privilege or objections to any request for disclosure of documents, PJM agrees to disclose to Participant certain non-public information designated as privileged and/or CEII, or other Protected Materials (as defined below), pursuant to the terms of this Protective Agreement.

NOW, THEREFORE, PJM and Participant agree as follows:

1. This Protective Agreement shall govern the use of all Protected Materials filed or produced by, or on behalf of, PJM in the Proceeding. Notwithstanding any order terminating this Proceeding, this Protective Agreement shall remain in effect until terminated or modified by mutual written agreement of the Parties, by order of the Commission or court of competent jurisdiction, or by order of a Presiding Administrative Law Judge (including the Chief Judge) in a proceeding set for hearing pursuant to 18 C.F.R. § 385 Subpart E.

2. This Protective Agreement applies to the following categories of materials, all constituting Protected Materials (as defined in Paragraph 3):

- (a) all materials filed or produced by PJM in the Proceeding and designated as (i) privileged, or (ii) privileged and not available to Competitive Duty Personnel (as defined below), or otherwise as Protected Materials which are customarily treated as sensitive or proprietary or if disclosed could risk of competitive disadvantage or other business injury;
- (b) all materials produced by PJM in the Proceeding and designated as CEII, and
- (c) all materials filed or produced in the Proceeding which reflect or disclose Protected Materials.

3. For the purposes of this Protective Agreement, the listed terms are defined as follows:

- A. Participant(s): As defined at 18 C.F.R. § 385.102(b), which definition includes PJM as the respondent in this Proceeding.
- B. Protected Material:¹
 - i. Material (including depositions) provided by a Participant in response to discovery requests or filed with the Commission, and that is designated as Protected Material by such Participant;²

¹ The Commission's regulations state that "[f]or the purposes of the Commission's filing requirements, non-CEII subject to an outstanding claim of exemption from disclosure under FOIA will be referred to as privileged material." 18 C.F.R. § 388.112(a). The regulations further state that "[f]or material filed in proceedings set for trial-type hearing or settlement judge proceedings, a participant's access to material for which privileged treatment is claimed is governed by the presiding official's protective order." 18 C.F.R. § 388.112(b)(2)(v).

² See infra P 11 for the procedures governing the labeling of this designation.

Document Accession #: 20230602-5193 Privileged and Highly Confidential Protected Material Redacted Pursuant to 18 C.F.R. § 388.112 Docket No. EL23-63-000 - 3 -

- Material provided by a Participant in the course of settlement negotiations before a settlement judge pursuant to 18 C.F.R. § 385.603, including materials provided in response to informal discovery requests, and designated by such Participant as protected;
- iii. Material that is privileged under federal, state, or foreign law, such as work-product privilege, attorney-client privilege, or governmental privilege, and that is designated as Protected Material by such Participant;³
- iv. Any information contained in or obtained from such designated material;
- v. Any other material which is made subject to this Protective Agreement by the Presiding Administrative Law Judge (Presiding Judge) or the Chief Administrative Law Judge (Chief Judge) in the absence of the Presiding Judge or where no presiding judge is designated, the Commission, any court, or other body having appropriate authority, or by agreement of the Participants (subject to approval by the relevant authority);
- vi. Notes of Protected Material (memoranda, handwritten notes, or any other form of information (including electronic form and audio recordings) which copies or discloses Protected Material);⁴ or
- vii. Copies of Protected Material.
- viii. Protected Material does not include:
 - a. Any information or document that has been filed with and accepted into the public files of the Commission, or contained in the public files of any other federal or state agency, or any

⁴ Notes of Protected Material are subject to the same restrictions for Protected Material except as specifically provided in this Protective Agreement.

³ The Commission's regulations state that "[a] presiding officer may, by order . . . restrict public disclosure of discoverable matter in order to . . . [p]reserve a privilege of a participant. . . ." 18 C.F.R. § 385.410(c)(3). To adjudicate such privileges, the regulations further state that "[i]n the absence of controlling Commission precedent, privileges will be determined in accordance with decisions of the Federal courts with due consideration to the Commission's need to obtain information necessary to discharge its regulatory responsibilities." 18 C.F.R. § 385.410(d)(1)(i).

Document Accession #: 20230602-5193 Privileged and Highly Confidential Protected Material Redacted Pursuant to 18 C.F.R. § 388.112 Docket No. EL23-63-000 -4 -

federal or state court, unless the information or document has been determined to be privileged by such agency or court;

- b. Information that is public knowledge, or which becomes public knowledge.
- ix. Additional Subcategory of Protected Material:
 - Highly Confidential Protected Material: A Participant may use a. this designation for those materials that are of such a commercially sensitive nature among the Participants or of such a private, personal nature that the producing Participant is able to justify a heightened level of confidential protection with respect to those materials. Highly Confidential Protected Material includes materials designated confidential pursuant to section 18.17 of the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. (Operating Agreement). Participants disclosing such information in accordance with the terms of this Protective Agreement will be deemed to not have contravened the prohibitions of this Operating Agreement provision, including without limitation the disclosure and notification requirements of Operating Agreement, section 18.17.2. Except for the more limited list of persons who qualify as Reviewing Representatives for purposes of reviewing Highly Confidential Privileged Materials, such materials are subject to the same provisions in the Protective Agreement as other Protected Materials.
 - b. Notes of Highly Confidential Protected Material (memoranda, handwritten notes, or any other form of information (including electronic form) which copies or discloses Highly Confidential Protected Material);⁵ or
 - c. Copies of Highly Confidential Protected Material.
- C. Critical Energy/Electric Infrastructure Information (CEII): As defined at 18 C.F.R. §§ 388.113(a), (c).

⁵ Notes of Highly Confidential Protected Material are subject to the same restrictions for Highly Confidential Protected Material except as specifically provided in this Protective Agreement.

Document Accession #: 20230602-5193 Privileged and Highly Confidential Protected Material Redacted Pursuant to 18 C.F.R. § 388.112 Docket No. EL23-63-000 - 5 -

- D. Non-Disclosure Certificate: The certificate attached to this Protective Agreement, by which Participants granted access to Protected Material and/or CEII must certify their understanding that such access to such material is provided pursuant to the terms and restrictions of this Protective Agreement, and that such Participants have read the Protective Agreement and agree to be bound by it. All executed Non-Disclosure Certificates must be served on all Participants on the official service list maintained by the Secretary of the Commission for this proceeding.
- E. Reviewing Representative: A person who has signed a Non-Disclosure Certificate and who is:
 - i. Commission Trial Staff designated as such in this proceeding;
 - ii. An attorney who has made an appearance in this proceeding for a Participant;
 - iii. Attorneys, paralegals, and other employees associated for purposes of this case with an attorney who has made an appearance in this proceeding on behalf of a Participant;
 - iv. An expert or an employee of an expert retained by a Participant for the purpose of advising, preparing for, submitting evidence or testifying in this proceeding;
 - v. A person designated as a Reviewing Representative by order of the Presiding Judge, the Chief Judge, or the Commission; or
 - vi. Employees or other representatives of Participants appearing in this proceeding with significant responsibility for this docket.
- F. The term "Reviewing Representative" for purposes of reviewing Highly Confidential Protected Material defined in Paragraph 3(B)(viii)(a) shall mean a person who has signed a Non-Disclosure Certificate and who is:
 - i. Commission Trial Staff designated as such in this proceeding;
 - ii. Outside counsel of a Participant, i.e., an attorney who is not employed by the Participant but is retained by a Participant, who has made an appearance in this proceeding for a Participant, and their partners, associates, and staff of such outside counsel;

- iii. In-house counsel, i.e., an attorney who is employed by the Participant, who has made an appearance in this proceeding for a Participant and who is not Competitive Duty Personnel as defined in Paragraph 3(G);
- iv. An expert or an employee of an expert retained by a Participant for the purpose of advising, preparing for, submitting evidence or testifying in this proceeding; provided, however, such individual is not Competitive Duty Personnel as defined in Paragraph 3(G);
- v. A person designated as a Reviewing Representative and is otherwise eligible to review Highly Confidential Protected Material by order of the Presiding Judge, the Chief Judge, or the Commission.
- vi. A "Reviewing Representative" for purposes of reviewing Highly Confidential Protected Material does not include Competitive Duty Personnel as defined in Paragraph 3(G).
- G. The term "Competitive Duty Personnel" shall mean any individual(s), including in-house counsel, whose scope of employment or engagement includes the marketing, sale, or purchase of electric energy or capacity (collectively, "Covered Marketing"), the direct or indirect supervision of any employee or employees whose duties include Covered Marketing, the provision of consulting services, including legal consultation or advice, to any person whose duties include Covered Marketing, or other Covered Marketing services in competition with the producing Participant, all of which are considered "Competitive Duties;" except that Competitive Duty Personnel shall not include employees of the Federal Energy Regulatory Commission, and/or any state utilities commission which is a Participant, outside counsel.

4. Protected Material, Highly Confidential Protected Material, and/or CEII shall be made available under the terms of this Protective Agreement only to Participants and only to their Reviewing Representatives as provided in Paragraphs 6-10 of this Protective Agreement. The contents of Protected Material, Highly Confidential Protected Material, CEII, or any other form of information that copies or discloses such materials shall not be disclosed to anyone other than in accordance with this Protective Agreement and shall be used only in connection with this specific proceeding.

5. All Protected Material, Highly Confidential Protected Material, and/or CEII must be maintained in a secure place. Access to those materials must be limited to Reviewing Representatives specifically authorized pursuant to Paragraphs 7-9 of this Protective Agreement.

Protected Material, Highly Confidential Protected Material, and/or CEII must be 6. handled by each Participant and by each Reviewing Representative in accordance with the Non-Disclosure Certificate executed pursuant to Paragraph 9 of this Protective Agreement. Protected Material, Highly Confidential Protected Material, and/or CEII shall not be used except as necessary for the conduct of this proceeding, nor shall they (or the substance of their contents) be disclosed in any manner to any person except a Reviewing Representative who is engaged in this proceeding and who needs to know the information in order to carry out that person's responsibilities in this proceeding. Reviewing Representatives may make copies of Protected Material, Highly Confidential Protected Material, and/or CEII, but such copies automatically become Protected Material, Highly Confidential Protected Material, and/or CEII. Reviewing Representatives may make notes of Protected Material and Highly Confidential Protected Material, which shall be treated as Notes of Protected Material if they reflect the contents of Protected Material. Α Reviewing Representative shall not disclose Highly Confidential Protected Material to a Reviewing Representative that does not meet the qualifications in Paragraph 3(F).

7. If a Reviewing Representative's scope of employment includes any of the activities listed under this Paragraph 7, such Reviewing Representative may not use information contained in any Protected Material, Highly Confidential Protected Material, and/or CEII obtained in this proceeding for a commercial purpose (e.g. to give a Participant or competitor of any Participant a commercial advantage):

- A. Covered Marketing;
- B. Direct or indirect supervision of any employee or employees whose duties include Covered Marketing; or
- C. The provision of consulting services, including legal consultation or advice, to any person whose duties include Covered Marketing.

8. If a Participant wishes to designate a person not described in Paragraph 3(E) above as a Reviewing Representative, the Participant must seek agreement from the Participant providing the Protected Material and/or CEII. If an agreement is reached, the designee shall be a Reviewing Representative pursuant to Paragraph 3(D) of this Protective Agreement with respect to those materials. If no agreement is reached, the matter must be submitted to the Presiding Judge, the Chief Judge, or the Commission for resolution. If a Participant wishes to designate a person not described in Paragraph 3(F) above as a Reviewing Representative for the purposes of reviewing Highly Confidential Protected Material, the Participant must request an order from the Presiding Judge, the Chief Judge, or the Commission granting such designation.

9. A Reviewing Representative shall not be permitted to inspect, participate in discussions regarding, or otherwise be permitted access to Protected Material, Highly

Confidential Protected Material, and/or CEII pursuant to this Protective Agreement until three business days after that Reviewing Representative first has executed and served the applicable Non-Disclosure Certificate.⁶ However, if an attorney qualified as a Reviewing Representative has executed a Non-Disclosure Certificate, any participating paralegal, secretarial and clerical personnel under the attorney's instruction, supervision or control need not do so. Attorneys designated Reviewing Representatives are responsible for ensuring that persons under their supervision or control comply with this Protective Agreement, and must take all reasonable precautions to ensure that Protected Material, Highly Confidential Protected Material, and/or CEII are not disclosed to unauthorized persons. Reviewing Representatives that are eligible to review Highly Confidential Protected Material in the form attached hereto. All executed Non-Disclosure Certificates must be served on all Participants on the official service list maintained by the Secretary of the Commission for the proceeding.

10. Any Reviewing Representative may disclose Protected Material, Highly Confidential Protected Material, and/or CEII to any other Reviewing Representative as long as both Reviewing Representatives have executed the appropriate Non-Disclosure Certificate. In the event any Reviewing Representative to whom Protected Material, Highly Confidential Protected Material, and/or CEII are disclosed ceases to participate in this proceeding, or becomes employed or retained for a position that renders him or her ineligible to be a Reviewing Representative under Paragraph 3(E) or ineligible to review Highly Confidential Protected Material under Paragraph 3(E), access to such materials by that person shall be terminated. Even if no longer engaged in this proceeding, every person who has executed a Non-Disclosure Certificate shall continue to be bound by the provisions of this Protective Agreement and the Non-Disclosure Certificate for as long as the Protective Agreement is in effect.⁷

11. All Protected Material, Highly Confidential Protected Material, and/or CEII in this proceeding filed with the Commission, submitted to the Presiding Judge, or submitted to any Commission personnel, must comply with the Commission's *Notice of Document Labelling Guidance for Documents Submitted to or Filed with the Commission or Commission Staff.*⁸ Consistent with those requirements:

⁶ During this three-day period, a Participant may file an objection with the Presiding Judge or the Commission contesting that an individual qualifies as a Reviewing Representative, and the individual shall not receive access to the Protected Material, Highly Confidential Protected Material, and/or CEII, as applicable, until resolution of the dispute.

⁷ See infra P 19.

⁸ Notice of Document Labelling Guidance for Documents Submitted to or Filed With the

Document Accession #: 20230602-5193 Privileged and Highly Confidential Protected Material Redacted Pursuant to 18 C.F.R. § 388.112 Docket No. EL23-63-000 -9 -

- A. Documents that contain Protected Material must include a top center header on each page of the document with the following text: CUI//PRIV or CUI//PRIV-HC for Highly Confidential Protected Material. Any corresponding electronic files must also include this text in the file name.
- B. Documents that contain CEII must include a top center header on each page of the document with the following text: CUI//CEII. Any corresponding electronic files must also include this text in the file name.
- C. Documents that contain both Protected Material and CEII must include a top center header on each page of the document with the following text: CUI//CEII/PRIV. Any corresponding electronic files must also include this text in the file name.
- D. The specific content on each page of the document that constitutes Protected Material and/or CEII must also be clearly identified. For example, lines or individual words or numbers that include both Protected Material and CEII shall be prefaced and end with "BEGIN CUI//CEII/PRIV" and "END CUI//CEII/PRIV".

12. If any Participant desires to include, utilize, or refer to Protected Material, Highly Confidential Protected Material, or information derived from such material in testimony or other exhibits during the hearing in this proceeding in a manner that might require disclosure of such materials to persons other than Reviewing Representatives, that Participant first must notify both counsel for the disclosing Participant and the Presiding Judge (or the Commission in the absence of a Presiding Judge), and identify all such Protected Material or Highly Confidential Protected Material. Thereafter, use of such Protected Material or Highly Confidential Protected Material will be governed by procedures determined by the Presiding Judge (or the Commission in the absence of a Presiding Judge).

13. Nothing in this Protective Agreement shall be construed as precluding any Participant from objecting to the production or use of Protected Material, Highly Confidential Protected Material, and/or CEII on any appropriate ground.

14. Nothing in this Protective Agreement shall preclude any Participant from requesting the Presiding Judge (or the Chief Judge in the Presiding Judge's absence or where no presiding judge is designated), the Commission, or any other body having appropriate authority, to find this Protective Agreement should not apply to all or any materials

Commission or Commission Staff, 82 Fed. Reg. 18,632 (Apr. 20, 2017) (issued by Commission Apr. 14, 2017).

previously designated Protected Material or Highly Confidential Protected Material pursuant to this Protective Agreement. The Presiding Judge (or the Chief Judge in the Presiding Judge's absence or where no presiding judge is designated), the Commission, or any other body having appropriate authority may alter or amend this Protective Agreement as circumstances warrant at any time during the course of this proceeding.

15. Each Participant governed by this Protective Agreement has the right to seek changes in it as appropriate from the Presiding Judge (or the Chief Judge in the Presiding Judge's absence or where no presiding judge is designated), the Commission, or any other body having appropriate authority.

16. Subject to Paragraph 18, the Presiding Judge (or the Chief Judge in the Presiding Judge's absence or where no presiding judge is designated), or the Commission shall resolve any disputes arising under this Protective Agreement pertaining to Protected Material (or Highly Confidential Protected Material) according to the following procedures. Prior to presenting any such dispute to the Presiding Judge, the Chief Judge or the Commission, the Participants to the dispute shall employ good faith best efforts to resolve it.

- A. Any Participant that contests the designation of material as Protected Material (or Highly Confidential Protected Material) shall notify the Participant that provided the Protected Material (or Highly Confidential Protected Material) by specifying in writing the material for which the designation is contested.
- B. In any challenge to the designation of material as Protected Material (or Highly Confidential Protected Material), the burden of proof shall be on the Participant seeking protection. If the Presiding Judge, the Chief Judge, or the Commission finds that the material at issue is not entitled to the designation, the procedures of Paragraph 17 shall apply.
- C. The procedures described above shall not apply to material designated by a Participant as CEII. Material so designated shall remain subject to the provisions of this Protective Agreement, unless a Participant requests and obtains a determination from the Commission's CEII Coordinator that such material need not retain that designation.

17. The designator will have five (5) days in which to respond to any pleading requesting disclosure of Protected Material (or Highly Confidential Protected Material). Should the Presiding Judge, the Chief Judge, or the Commission, as appropriate, determine that the information should be made public (or should not be subject to the restrictions applicable to Highly Confidential Protected Material), the Presiding Judge, the Chief Judge, or the Commission no less than five (5) days

prior to the date on which the material will become public. This Protective Agreement shall automatically cease to apply to such material on the sixth (6th) calendar day after the notification is made unless the designator files a motion with the Presiding Judge, the Chief Judge, or the Commission, as appropriate, with supporting affidavits, demonstrating why the material should continue to receive the requested protection. Should such a motion be filed, the material will remain confidential until such time as the interlocutory appeal or certified question has been addressed by the Motions Commissioner or Commission, as provided in the Commission's regulations, 18 C.F.R. §§ 385.714, .715. No Participant waives its rights to seek additional administrative or judicial remedies after a Presiding Judge or Chief Judge decision regarding Protected Material (or Highly Confidential Protected Material) or the Commission's denial of any appeal thereof or determination in response to any certified question. The provisions of 18 C.F.R. §§ 388.112 and 388.113 shall apply to any requests under the Freedom of Information Act (5 U.S.C. § 552) for Protected Material, Highly Confidential Protected Material, and/or CEII in the files of the Commission.

Protected Material, Highly Confidential Protected Material, and/or CEII shall 18. remain available to Participants until the later of 1) the date an order terminating this proceeding no longer is subject to judicial review, or 2) the date any other Commission proceeding relating to the Protected Material and/or CEII is concluded and no longer subject to judicial review. After this time, the Participant that produced the Protected Material and/or CEII may request (in writing) that all other Participants return or destroy the Protected Material and/or CEII. This request must be satisfied with within fifteen (15) days of the date the request is made. However, copies of filings, official transcripts and exhibits in this proceeding containing Protected Material, or Notes of Protected Material, may be retained if they are maintained in accordance with Paragraph 5 of this Protective Agreement. If requested, each Participant also must submit to the Participant making the request an affidavit stating that to the best of its knowledge it has satisfied the request to return or destroy the Protected Material and/or CEII. To the extent Protected Material and/or CEII are not returned or destroyed, they shall remain subject to this Protective Agreement.

19. Regardless of any order terminating this proceeding, this Protective Agreement shall remain in effect until specifically modified or terminated by the Presiding Judge, the Chief Judge, or the Commission. All CEII designations shall be subject to the "[d]uration of the CEII designation" provisions of 18 C.F.R. § 388.113(e).

Document Accession #: 20230602-5193 Privileged and Highly Confidential Protected Material Redacted Pursuant to 18 C.F.R. § 388.112 Docket No. EL23-63-000 - 12 -

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Energy Harbor LLC

v.

Docket No. EL23-63-000

PJM Interconnection, L.L.C.

NON-DISCLOSURE CERTIFICATE

I hereby certify my understanding that access to Protected Material and/or Critical Energy/Electric Infrastructure Information (CEII) is provided to me pursuant to the terms and restrictions of the Protective Agreement filed by PJM Interconnection, L.L.C. on June 2, 2023 in this proceeding, that I have been given a copy of and have read the Protective Agreement, and that I agree to be bound by it. I understand that the contents of Protected Material and/or CEII, any notes or other memoranda, or any other form of information that copies or discloses such materials, shall not be disclosed to anyone other than in accordance with the Protective Agreement. I acknowledge that I do not meet the qualifications to review Highly Confidential Protected Materials pursuant to Paragraph 3(F) of the Protective Order and my duties and responsibilities may include "Competitive Duties" as described in the Protective Agreement. As such, I understand that I shall neither have access to, nor disclose, the contents of the Highly Confidential Protected Materials that are marked as "CUII/PRIV-HC," any notes or other memoranda, or any other form of information that copies or discloses Highly Confidential Protected Materials that are marked as "CUI/PRIV-HC."

By:
Printed Name:
Title:
Representing:
Date:

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Energy Harbor LLC

v.

Docket No. EL23-63-000

PJM Interconnection, L.L.C.

NON-DISCLOSURE CERTIFICATE FOR HIGHLY CONFIDENTIAL PROTECTED MATERIALS

I hereby certify my understanding that access to Protected Materials, and Highly Confidential Protected Materials and/or Critical Energy/Electric Infrastructure Information (CEII) in the above-captioned case is provided to me pursuant to the terms and restrictions of the Protective Agreement filed by PJM Interconnection, L.L.C. on June 2, 2023 in this proceeding, that I have been given a copy of and have read the Protective Agreement, and that I agree to be bound by it. I understand that the contents of the Protected Materials, Highly Confidential Protected Materials and/or Critical Energy/Electric Infrastructure Information (CEII), any notes or other memoranda, or any other form of information that copies or discloses Protected Materials, Highly Confidential Protected Materials, I affirm that I meet the qualifications to review Highly Confidential Protected Materials pursuant to Paragraph 3(F) of the Protective Order and my duties and responsibilities do not include "Competitive Duties" as described in the Protective Agreement.

D

Ву:
Printed Name:
Title:
Representing:
Date:



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 Washington, D.C., this 2nd day of June 2023.

/s/ Paul M. Flynn

Attorney for PJM Interconnection, L.L.C.

Document Content(s) PUBLIC EL23-63 Answer to Energy Harbor Complaint.pdf......