



January 17, 2020

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E., Dockets, Room 1A, East
Washington, D.C. 20426

Re: PJM Transmission Owners Submission of Proposed Tariff Revisions for a Limited Subset of Supplemental Projects that Require Special Planning Procedures; Docket No. ER20-841-000

Dear Secretary Bose:

Pursuant to Section 205 of the Federal Power Act (“FPA”),¹ and Part 35 of the regulations of the Federal Energy Regulatory Commission (“FERC” or “Commission”),² the PJM Transmission Owners, acting through the voting protocols of the PJM Consolidated Transmission Owners Agreement (“CTOA”),³ hereby respectfully submit for filing a proposed Attachment M-4 to the PJM Transmission, L.L.C. (“PJM”) Open Access Transmission Tariff (“OATT” or “Tariff”), as described herein.⁴ New Attachment M-4 sets forth the planning procedures that the PJM Transmission Owners propose to apply to a limited subset of Supplemental Projects in PJM designed to mitigate the risk associated with

¹ 16 U.S.C. § 824d.

² 18 C.F.R. Pt. 35.

³ PJM Interconnection, L.L.C., Consolidated Transmission Owners Agreement (“CTOA”), Rate Schedule F.E.R.C. No. 42 (June 19, 2008). This filing has been authorized pursuant to the individual and weighted voting requirements in Section 8.5 of the CTOA. In addition, pursuant to section 9.1(b) of the PJM Tariff, the PJM Transmission Owners consulted with PJM and with members of the PJM Members Committee and other stakeholders by providing notice of the tariff revisions proposed herein.

⁴ Pursuant to Order No. 714, this filing is submitted by PJM on behalf of the PJM Transmission Owners as part of an XML filing package that conforms with the Commission’s regulations. PJM has agreed to make all filings on behalf of the PJM Transmission Owners in order to retain administrative control over the PJM Tariff. Thus, the PJM Transmission Owners agreement that has requested PJM submit this proposed Attachment M-3 in the eTariff system as part of PJM’s electronic Intra PJM Tariff.

critical transmission stations and substations identified pursuant to North American Electric Reliability Corporation (“NERC”) reliability standard CIP-014-2 (“CIP-014 Mitigation Projects” or “CMPs”). These new planning procedures, which will exclusively apply to CIP-014 Mitigation Projects, are necessary to allow the PJM Transmission Owners to plan transmission projects for the purpose of mitigating risks associated with CIP-014-2 transmission stations and substations more effectively than physical security measures alone without disclosing highly sensitive information about those stations and substations that could threaten their security. The PJM Transmission Owners request that the proposed tariff sheets be made effective 60 days from the date of this filing, and that this filing be promptly approved so that the finite number of vulnerable locations involved may be swiftly mitigated from physical security risks.

I. BACKGROUND

In the wake of the April 16, 2013 sophisticated assault on the Metcalf Transmission Substation in Coyote, California, the Commission directed NERC to develop a Reliability Standard in order to require utilities to reasonably protect against physical security attacks on the Bulk Power System and allow the Commission to assure the public that critical facilities are reasonably protected.⁵ Pursuant to the Commission’s directive, NERC created the CIP-014 classification and mandatory standard in order to identify and protect transmission stations and substations and their associate primary control centers that, if rendered inoperable or damaged as a result of physical attack, could result in instability, uncontrolled separation, or cascading within an Interconnection.

⁵ *Reliability Standards for Physical Security Measures*, 146 FERC ¶ 61,166, at P 5 (2014) (“March 2014 Order”).

Under Section 9.1 of the PJM OATT and Article 7 of the CTOA, the PJM Transmission Owners have the exclusive authority to submit filings under FPA Section 205 that address, among other things, planning for certain transmission facilities (i.e., those transmission facilities for which the PJM Transmission Owners did not transfer centralized planning authority to PJM under the Regional Transmission Expansion and Enhancement Planning Protocols (“RTEP”)). Such transmission facilities include those defined in the Operating Agreement, Schedule 6, section 1.42A as “Supplemental Projects.”⁶ The PJM Transmission Owners plan Supplemental Projects using the planning procedures set forth in Attachment M-3 of the PJM OATT, procedures that require the PJM Transmission Owners to review and discuss with stakeholders the assumptions that they use to plan and identify Supplemental Projects, the identified criteria and system needs that may drive the need for Supplemental Projects, and potential solutions and alternatives to meeting those needs.⁷

While the open and transparent planning procedures set forth in Attachment M-3 of the PJM OATT are appropriate for Supplemental Projects in PJM, they cannot be used for a limited subset of Supplemental Projects, specifically, transmission projects designed to mitigate the risk associated with critical transmission stations or substations identified pursuant to NERC Reliability Standard CIP-014-2. NERC requires that the location and identification of CIP-014 assets be kept confidential and protected from public disclosure.

⁶ A Supplemental Project is “a transmission expansion or enhancement that is not required for compliance with the following PJM criteria: system reliability, operational performance or economic criteria, pursuant to a determination by the Office of the Interconnection and is not a state public policy project pursuant to Operating Agreement, Schedule 6, section 1.5.9(a)(ii).” Operating Agreement, Schedule 6, Section 1.42A.

⁷ OATT, Attachment M-3, Sections 2 through 4.

To avoid disclosure of the existence of these CIP-014 facilities, the identity of these facilities is known only to the Transmission Owner and the unaffiliated third-party verifier, in this case, PJM. As discussed in greater detail below, a PJM Transmission Owner seeking to mitigate the risks associated with the loss of a CIP-014 substation would be required to plan a Supplemental Project in accordance with Attachment M-3 to the PJM Tariff. That provision, in compliance with Order No. 890 establishes a series of public meetings and postings with affected stakeholders, including a “Needs” meeting in which the PJM Transmission Owner is required to identify the need in response to which a transmission project will be developed, followed by a “Solutions” meeting in which a specific project proposal is discussed. While this stakeholder process is an important part of Supplemental Project planning and has permitted PJM Transmission Owners to consider the transmission needs of PJM stakeholders and their input into the design of Supplemental Project transmission solutions, the process is inherently incompatible with the security concerns surrounding CIP-014 facilities and plans to mitigate the risks associated with those facilities.

To allow the PJM Transmission Owners to move forward, on a voluntary basis, with CIP-014 Mitigation Projects, the PJM Transmission Owners propose to revise the PJM Tariff to include a new Attachment M-4, which will allow individual PJM Transmission Owners to plan CIP-014 Mitigation Projects in consultation with PJM and the affected state commissions without publicly divulging information about the critical transmission station or substation driving the need for a CIP-014 Mitigation Project that would otherwise occur during the Attachment M-3 the planning process. The PJM Transmission Owners submit that modified planning procedures for these projects are appropriate given their criticality and the Transmission Owners’ collective responsibility to provide reliable transmission service.

Fortunately, since the PJM Transmission Owners understand that there are fewer than 20 CIP-014 facilities located in PJM, Attachment M-4 will apply only to a very small fraction of Supplemental Projects planned in PJM. The vast majority will continue to be subject to the open, coordinated and transparent Attachment M-3 stakeholder process approved by the Commission.⁸

II. PROPOSED REVISIONS

As discussed above, the PJM Transmission Owners currently plan Supplemental Projects through the planning procedures set forth in Attachment M-3 of the PJM OATT. Specifically, Attachment M-3 provides for the PJM Transmission Owners to review each Supplemental Project at a minimum of three public stakeholder meetings: (1) an Assumptions Meeting; (2) a Needs Meeting; and (3) a Proposed Solutions Meeting. Respectively, each of these meetings allows for public review of and oral and written comment on (1) the criteria, assumptions, and models that the Transmission Owner proposes to use to plan and identify Supplemental Projects, (2) the identified criteria violations and resulting system needs, if any, that may drive the need for a Supplemental Project, and (3) potential solutions for the identified criteria violations (with an opportunity for stakeholders to propose alternatives).⁹ At each stage in the process, relevant material is published on the PJM website. At the end of this open and transparent process, PJM performs a no-harm analysis of the solution decided upon by the applicable PJM Transmission Owner and imposes any requirement it deems necessary for the PJM Transmission Owner to eliminate any harm identified.¹⁰ The Supplemental Project is

⁸ *Monongahela Power Company, et al.*, 162 FERC ¶ 61,129 (2018), *reh'g denied*, 164 FERC ¶ 61,217 (2018).

⁹ OATT, Attachment M-3, Sections 2 through 4.

¹⁰ Operating Agreement, Schedule 6, Section 1.42A.

then integrated into the RTEP for informational purposes only, with its costs allocated entirely to the host Transmission Owner zone.¹¹

The open and transparent planning procedures set forth in Attachment M-3 to the PJM OATT are appropriate for planning the vast majority of Supplemental Projects in PJM, and only a limited alternate procedure for a finite number of projects to be brought forward in a limited and defined period is being sought in this filing. Specifically, this filing is intended to address a discrete and concrete problem: The inability of the PJM Transmission Owners to plan CIP-014 Mitigation Projects through the Attachment M-3 planning procedures without publicly disclosing information about the CIP-014-2 critical transmission stations or substations driving the need for such projects and potentially endangering their security. Divulging such information would leave CIP-014-2 critical transmission stations and substations more vulnerable to physical attacks, providing would-be attackers with the location of such stations and substations, as well as the consequences of rendering them inoperable or damaging them. In developing the proposed Attachment M-4, the PJM Transmission Owners carefully balanced the need to protect this highly sensitive information pursuant to CIP-014-2 with the desire to provide opportunities for input into the planning process for CIP-014 Mitigation Projects. After extensive outreach with PJM, state commissions, and PJM stakeholders, the PJM Transmission Owners have developed just and reasonable planning procedures for these projects (as described below).

¹¹ OATT, Schedule 12, Section (a)(iii).

A. Information about the existence and location of CIP-014-2 critical transmission stations and substations is highly sensitive given the consequences of their loss.

The purpose of CIP-014-2 is to identify and protect transmission stations and substations, and their associated primary control centers, that if rendered inoperable or damaged by physical attack could result in instability, uncontrolled separation, or cascading.¹² As relevant here, under CIP-014-2, each Transmission Owner must perform a risk assessment to identify any CIP-014 critical transmission stations or substations within its system and, upon identification of such a station or substation, must conduct an evaluation of the potential threats and vulnerabilities of a physical attack.¹³ The Transmission Owner must then develop and implement a documented physical security plan to cover each CIP-014-2 critical transmission station or substation.¹⁴ Such physical security plans shall include “resiliency or security measures designed collectively to deter, detect, delay, assess, communicate, and respond to potential physical threats and vulnerabilities,” such as substation hardening, station switching, the construction of concrete walls, removal of vegetation, and the installation of surveillance cameras, ballistic shields, and barriers.¹⁵ Under CIP-014-2, protection of information concerning the identified critical transmission stations or substations is paramount; the standard requires Transmission Owners to protect sensitive or confidential information from public disclosure.¹⁶

¹² NERC Standard CIP-014-2, Section A.3.

¹³ NERC Standard CIP-014-2, Section B.R1 and B.R4. Under R2 of the standard, each Transmission Owner must also have an unaffiliated third party verify its risk assessment identifying any CIP-014 critical transmission stations or substations. PJM serves this role for each of the PJM Transmission Owners.

¹⁴ NERC Standard CIP-014-2, Section B.R5.

¹⁵ NERC Standard CIP-014-2, Section B.R5.

¹⁶ NERC Standard CIP-014-2, Section B.R2.4.

And the need to protect information about the critical transmission stations and substations identified pursuant to CIP-014-2 is essential given the consequences of their loss. In directing NERC to develop CIP-014, the Commission described a critical facility as “one that, if rendered inoperable or damaged, could have a critical impact on the operation of the interconnection through instability, uncontrolled separation or cascading failures on the Bulk Power System.”¹⁷ As such, CIP-014-2 critical transmission stations and substations are more than just critical energy infrastructure, they are among the most critical facilities on the bulk-power system. In fact, in approving CIP-014-1, the Commission described the purpose of the standard as “enhanc[ing] physical security measures for *the most critical* Bulk-Power System facilities and thereby lessen[ing] the overall vulnerability of the Bulk-Power System against physical attacks.”¹⁸ Publicly identifying the location of these stations and substations would result in exactly the opposite – greater vulnerability of the bulk-power system against physical attacks through the identification of the facilities whose loss would be most consequential.

The Commission recognized the need for Transmission Owners to protect information concerning critical transmission stations and substations identified pursuant to CIP-014-2:

All three steps of compliance with the Reliability Standard described above [i.e., CIP-014] could contain sensitive or confidential information that, if released to the public, could jeopardize the reliable operation of the Bulk-Power System. Guarding sensitive or confidential information is essential to protecting the public by discouraging attacks on critical infrastructure. Therefore, NERC should include in the

¹⁷ March 2014 Order, at P 6.

¹⁸ *Physical Security Reliability Standard*, Order No. 802, 149 FERC ¶ 61,140, at P 1 (2014) (emphasis added).

Reliability Standards a procedure that will ensure confidential treatment of sensitive or confidential information but still allow for the Commission, NERC and the Regional Entities to review and inspect any information that is needed to ensure compliance with the Reliability Standards.¹⁹

Transmission Owners have taken their responsibility to protect this information seriously; apart from the Commission and NERC, only PJM, as the unaffiliated third-party verifier, knows how many CIP-014-2 critical transmission stations and substations are located in PJM in total. Moreover, the PJM Transmission Owners keep information about the existence and location of any CIP-014-2 critical transmission stations or substations located within their systems highly confidential, even within their own companies. Only those employees with a “need to know” have information about any such facilities. Accordingly, the standard non-disclosure agreements upon which PJM and the PJM Transmission Owners rely to protect Critical Energy Infrastructure Information are insufficient for general use to protect the highly sensitive information about CIP-014-2 critical transmission stations and substations.

Furthermore, there are separate protocols even for the Commission and NERC with respect to protection of CIP-014 information. The Compliance section of CIP-014 requires that all compliance evidence used for demonstrating compliance with the Reliability Standard be retained at the Transmission Owner’s and Transmission Operator’s facilities in order to protect the confidentiality and sensitive nature of the evidence.²⁰ In sum, in order to protect the reliability and integrity of the Bulk Electric System, the security of this information must be maintained.

¹⁹ March 2014 Order, 146 FERC ¶ 61,166 at P 10.

²⁰ NERC Reliability Standard CIP-014-2, Section C.1.4.

B. Proposed Attachment M-4 will allow the PJM Transmission Owners to reduce the consequences of the loss of critical transmission stations or substations currently identified pursuant to CIP-014-2.

Although the PJM Transmission Owners are compliant with CIP-014-2, the CIP-014-2 physical security requirements do not fully mitigate the risks associated with the loss of the identified critical transmission stations and substations. As long as these transmission stations and substations remain critical under CIP-014-2, there is the potential for a physical attack against one of these stations or substations to result in instability, uncontrolled separation, or cascading on the electric grid, with the associated loss of electric service. For this reason, the PJM Transmission Owners are proposing a framework for considering whether there are resiliency options to more effectively mitigate this risk through transmission projects that would result in the existing CIP-014 critical transmission stations or substations no longer being identified as critical under CIP-014. However, such CIP-014 Mitigation Projects would be considered Supplemental Projects under the PJM Operating Agreement as they are not required for system reliability, operational performance, economic criteria or individual state public policy purposes and thus must be planned in accordance with the open and transparent planning procedures set forth in Attachment M-3 of the PJM OATT, which would require public disclosure of the existence and location of CIP-014 critical transmission stations or substations (information that Transmission Owners are required to closely protect under CIP-014). The need for greater protection of this highly sensitive information than would be provided under the planning procedures for Supplemental Projects under Attachment M-3 is the challenge that the PJM Transmission Owners set out to resolve through the development of proposed Attachment M-4.

C. The PJM Transmission Owners solicited significant feedback on the proposed Attachment M-4 planning procedures through extensive stakeholder outreach.

Because CIP-014 Mitigation Projects are Supplemental Projects under the PJM Operating Agreement,²¹ the PJM Transmission Owners are responsible for addressing planning procedures for these projects.²² However, recognizing that the proposed planning procedures for CIP-014 Mitigation Projects would be of significant interest to PJM stakeholders and, in particular, to the state commissions that would be involved in the Attachment M-4 process, the PJM Transmission Owners engaged in substantial stakeholder outreach throughout the development of proposed Attachment M-4. For example, the PJM Transmission Owners initially arranged formal meetings with individual states commencing in the Spring of 2018 followed by several meetings and teleconferences with the Organization of PJM States, Inc. (“OPSI”) including an April 8, 2018 meeting and three additional meetings through November 2019. Moreover, from early 2019 onwards, individual PJM Transmission Owners (accompanied by representatives of PJM in some instances) met with and/or periodically updated their own state public utility commissions to apprise them of the status of the issue and proposed tariff revisions. In November 2019, the PJM Transmission Owners also provided a briefing to NERC and ReliabilityFirst Corporation Staff.

²¹ CIP-014 projects are not needed to address the PJM criteria set forth in in the Operating Agreement, Schedule 6 and are not state public policy projects pursuant to Operating Agreement, Schedule 6, section 1.5.9(a)(ii)). Thus, they do not fall within the definition of a Supplemental Project under the Operating Agreement. § 1.42A.

²² The Commission has found that the PJM Transmission Owners have primary responsibility for planning Supplemental Projects and, therefore, retain the filing rights to make modifications to the provisions governing their planning. *See Monongahela Power Co.*, 164 FERC ¶ 61,217, at P 14 (2018) (citing *Atlantic City Elec. Co. v. FERC*, 295 F.3d 1, 10-11 (D.C. Cir. 2000)).

In addition, the PJM Transmission Owners provided opportunities for all interested stakeholders to ask questions about and provide input on the proposed planning procedures for CIP-014 Mitigation Projects through meetings of the PJM Planning Committee, Markets and Reliability Committee, and Members Committee, as well as a stakeholder webinar. The PJM Transmission Owners presented in these PJM public forums an explanation of the need to prevent public disclosure of the existence, location, and exact number of these CIP-014-2 critical transmission stations and substations, and the public imperative of mitigating the criticality of these facilities through a time-limited alternative tariff mechanism to Attachment M-3. This outreach process, which began with a Notice issued on August 12, 2019, also afforded stakeholders the opportunity to review and comment on a draft of the proposed tariff sheets. After extending the stakeholder comment date from September 16, 2019 to September 30, 2019, the PJM Transmission Owners posted changes to the draft proposed tariff provisions in response to comments received from four commenters on November 20, 2019. The PJM Transmission Owners held a webinar on November 22, 2019 to go over a revised draft of Attachment M-4, based on further comments received as well as to further respond to questions. Finally, the Transmission Owners made additional changes to the proposed tariff revisions after the webinar to address additional comments received.

The PJM Transmission Owners' proposed Attachment M-4 is thus the result of substantial stakeholder feedback. OPSI and a range of PJM stakeholders were actively engaged in discussions with the PJM Transmission Owners about the proposed planning procedures for CIP-014 Mitigation Projects, and the PJM Transmission Owners significantly revised their proposal over time to reflect the feedback received, particularly to address

numerous OPSI comments.²³ While the PJM Transmission Owners did not ultimately adopt every revision that stakeholders proposed, Attachment M-4 represents an appropriate balance between stakeholders' expressed interest in greater transparency in transmission planning and the PJM Transmission Owners' concerns about unnecessarily exposing highly sensitive information about CIP-014-2 critical transmission stations and substations to public disclosure.

The PJM Transmission Owners further commit that if any subsequent changes to Attachment M-4 are sought by the PJM Transmission Owners subsequent to its being made effective by the Commission, the PJM Transmission Owners will follow similar advance outreach measures, particularly with OPSI and affected state commissions.

D. The proposed Attachment M-4 planning procedures will allow the PJM Transmission Owners to plan CIP-014 Mitigation Projects in consultation with PJM and the affected state commissions while protecting highly sensitive information about CIP-014-2 critical transmission stations and substations.

To achieve the aforementioned balance, the PJM Transmission Owners are proposing to use modified planning procedures set forth in proposed Attachment M-4 for a limited time (i.e., a five-year window) to allow them to plan CIP-014 Mitigation Projects in consultation with PJM and the affected state commissions without publicly divulging information about

²³ Among other things, the PJM Transmission Owners changed Attachment M-4 in response to OPSI's request that: (i) state commissions have multiple opportunities for confidential consultation; (ii) PJM Transmission Owners explain additional factors in identifying Preferred Solutions; (iii) PJM be authorized to (a) suggest modifications to Preferred or Potential Solutions, (b) advise as to the more efficient or cost-effective solution, and (c) indicate if it recommends that no CMP solution be pursued; (iv) PJM complete its assessment and verification before the Attachment M-4 process proceeds to further steps; (v) Transmission Owners have continuing obligations to provide PJM with additional information once a construction decision is made; (vi) Transmission Owners make reasonable efforts to seek alternative funding of any construction decision; and (vii) Transmission Owners comply with all applicable licensing, permitting, siting, or certification requirements and proceedings for eminent domain authority.

the critical transmission station or substation driving the need for a CIP-014 Mitigation Project during the planning process. The modified planning procedures would apply to a fixed and very limited subset of Supplemental Projects: CIP-014 Mitigation Projects designed specifically to remove a transmission station or substation from PJM's comprehensive list of CIP-014 facilities as of September 30, 2018 ("CIP-014 List"). The totality of the facilities on this list are known only to NERC and PJM, but PJM has confirmed publicly that its CIP-014 List consists of less than twenty stations and substations. Thus, the subset of Supplemental Projects to which Attachment M-4 will apply is limited to transmission projects needed to address the mitigation of risks associated with no more than twenty transmission stations or substations. And again, Attachment M-4 is time-limited; it will sunset five years after the Commission's issuance of an order approving its inclusion in the PJM OATT.

In addition to specifying the scope of projects to which it applies, proposed Attachment M-4 to the PJM OATT describes the steps that a PJM Transmission Owner will follow should it decide to undertake a CIP-014 Mitigation Project to reduce the criticality of a CIP-014 critical transmission station or substation within its system. Under Attachment M-4, a PJM Transmission Owner that decides to plan a CIP-014 Mitigation Project will submit to PJM²⁴ the potential means for eliminating a CIP-014 critical transmission station or

²⁴ With a few exceptions, PJM's role in the Attachment M-4 process is as the "unaffiliated third-party verifier" under CIP-014. All PJM Transmission Owners have named PJM as the unaffiliated third-party verifier under CIP-014. Since Attachment M-4 projects are Supplemental Projects planned by a PJM Transmission Owner, PJM's participation in the process is designed to verify that the projects planned under Attachment M-4 do, in fact, meet certain requirements such as ensuring that the project will remove one or more transmission stations or substations from the CIP-014 list. In other some instances, for example in the "do not harm" analysis, PJM acts as the Transmission Provider that has been assigned reliability planning responsibility pursuant to CTOA § 4.1.4 and OA, Schedule 6 § 1.2(e).

substation within its system from the CIP-014 List, and identify “from among the Potential Solutions the solution that in the view of the Transmission Owner constitutes the more efficient or cost effective solution to enable the transmission station or substation to be removed from the list of CIP-014 facilities.”²⁵ In so doing, the PJM Transmission Owner will explain the customer impact “taking into account any plans for recovering from the loss of the transmission station or substation that could help to restore all or some of the load that was lost, the amount of time that it would take for such load to be restored and the nature of the load to be recovered or not able to be recovered,” any potential distribution level solutions, and any right-of way requirements.²⁶

PJM will evaluate the above submissions and report in writing to the PJM Transmission Owner one of the following findings: “(i) advise that the Preferred Solution is the more efficient or cost effective solution from among the Preferred Solutions and Potential Solutions; (ii) suggest modifications to any of the Preferred Solution or Potential Solutions that will permit PJM to advise that one of them is the more efficient or cost effective solution, or (iii) advise that a CMP solution not be pursued.”²⁷ PJM shall further verify that the Proposed CMP “[w]ill result in removal of one or more transmission stations or substations from the CIP-014 List”; does not remove from the CIP-014 List a facility “that would otherwise be removed from the list through the current [RTEP] Process”; “[d]oes not also provide a solution . . . that would otherwise be addressed through the current RTEP Process”; “[w]ill not result in another transmission station or substation being added to the

²⁵ Attachment M-4, Section b, Step 3(B).

²⁶ Attachment M-4, Section b, Step 3(B)(i)(ii) and (iii).

²⁷ Attachment M-4, Section b, Step 4(A).

CIP-014 List”; and “[d]oes not result in reliability or operational performance criteria violations.”²⁸ A report of PJM’s assessment will be finalized after mutual consultation and “provided to the affected State Commission at that agency’s option.”²⁹

With “appropriate confidential safeguards,” the PJM Transmission Owner will consult with affected state commissions,³⁰ with PJM invited to participate, both after “having submitted to PJM a Preferred Solution and Potential Solutions” and again “[u]pon PJM’s completion of the review” described above.³¹ Among the matters that the PJM Transmission Owner will be prepared to discuss with the relevant state commission(s) regarding the proposal to construct a CMP, include “potential siting issues, particularly those that could affect the estimated project cost.”³² To further ensure ample consideration is provided, PJM will retain discretion to conduct unlimited periodic assessments of the continuing validity of the CMP and maintain continued consultation with state commission with or without the PJM Transmission Owner.³³

After consultation with the affected state commission, the PJM Transmission Owner will provide prior written, detailed notification to PJM of its intent to construct a CMP. The PJM Transmission Owner will make reasonable efforts to seek alternative funding to offset

²⁸ Attachment M-4, Section b, Step 4(B)(i)(ii)(iii)(iv) and (v).

²⁹ Attachment M-4, Section b, Step 4(B).

³⁰ Several PJM Transmission Zones cross state lines. Since the cost responsibility for Supplemental Projects is assigned to all transmission customers in the Zone of the Transmission Owner constructing the Supplemental Project, each state commission with jurisdiction over any part of the Zone will be consulted. Attachment M-4, Section b, Step 5(A).

³¹ Attachment M-4, Section b, Steps 5(A) and 5(B).

³² Attachment M-4, Section b, Step 5(C).

³³ Attachment M-4, Section b, Step 6.

project costs, including from the United States Department of Energy through grants for advancing national security, critical infrastructure, or resilience. Only after all these steps have been taken, may CMP construction commence and “[if] at any step in the Attachment M-4 process, the level of needed confidentiality is eliminated . . . such confidentiality shall be reduced or lifted.”³⁴ This lifting of confidentiality is a prerequisite for any rate recovery (including through a formula rate), because “[a]t no time prior to the existence of the CMP being made known to the public . . . shall the costs of any CMP be eligible for inclusion in rates.”³⁵ Any such rate recovery proceeding “shall be subject to discovery on all matters pursuant to the procedures applicable under the applicable Attachment H, the Federal Power Act, and the Commission’s regulations.”³⁶

E. Proposed Attachment M-4 is just and reasonable, balancing the competing needs to protect highly sensitive information about CIP-014 critical transmission stations and substations and to provide transparency into the PJM Transmission Owners’ development of CIP-014 Mitigation Projects.

The PJM Transmission Owners’ proposal to apply the planning procedures set forth in Attachment M-4 to the PJM OATT to CIP-014 Mitigation Projects for a five-year window is just and reasonable: it appropriately balances the need for protecting highly sensitive information about CIP-014 critical transmission stations and substations with the Commission’s policy of providing for transparency in transmission planning processes (as articulated in Order No. 890³⁷).

³⁴ Attachment M-4, Section b, Step 10.

³⁵ Attachment M-4, Section b, Step 11.

³⁶ Attachment M-4, Section b, Step 11.

³⁷ See *Preventing Undue Discrimination and Preference in Transmission System Service*, Order No. 890, FERC Stats. & Regs. ¶ 31,241, *order on reh’g*, Order No. 890-A, FERC Stats. & Regs. ¶ 31,261 (2007), *order on*

Proposed Attachment M-4 will support transmission system reliability and resilience by providing the PJM Transmission Owners with a means to plan CIP-014 Mitigation Projects, which will allow the PJM Transmission Owners to reduce the severity of the consequences of a physical attack on a critical transmission station or substation that is currently on the PJM CIP-014 List to the benefit and protection of their load served.³⁸ And it will do so without compromising highly sensitive information about CIP-014-2 critical transmission stations and substations, information that could be used to perpetrate the exact type of physical attacks against which CIP-014-2 is intended to protect. Planning CIP-014 Mitigation Projects pursuant to Attachment M-3 of the PJM OATT (the open and transparent planning procedures that apply to all other Supplemental Projects) would put this information at risk, creating a barrier to the development of these beneficial and resilience-enhancing projects. It is therefore just and reasonable for the Commission to entertain modified planning procedures for CIP-014 Mitigation Projects. Thus, the PJM Transmission Owners request that the Commission act expeditiously to approve Attachment M-4 to the PJM Tariff as proposed.

Moreover, the modified planning procedures in proposed Attachment M-4 are likewise just and reasonable. As an initial matter, they are limited in both scope and duration: (i) they apply only to transmission projects designed to mitigate the risk associated with the limited critical transmission stations or substations identified pursuant to NERC

reh'g, Order No. 890-B, 123 FERC ¶ 61,299 (2008), *order on reh'g*, Order No. 890- C, 126 FERC ¶ 61,228, *order on clarification*, Order No. 890-D, 129 FERC ¶ 61,126 (2009) (“Order No. 890”).

³⁸ While the CIP-014 standard addresses physical security of stations and substations, removing a station or substation from the CIP-014 list may also reduce the cyber security threat to the transmission system by eliminating a point of vulnerability.

CIP-014-2, (ii) there will be fewer than 20 CIP-014 Mitigation Projects in PJM, and (iii) the procedures are applicable only during a limited five-year window. The planning procedures in proposed Attachment M-4 also recognize the unique role that PJM plays as the unaffiliated third-party verifier of CIP-014-2 critical transmission stations and substations under CIP-014-2, specifying that “PJM shall assess and verify ... that the [CMP] [w]ill result in removal of one or more transmission stations or substations from the CIP-014 List.”³⁹ Finally, proposed Attachment M-4 provides as much transparency during the planning process as can reasonably be achieved without risking widespread disclosure of information concerning CIP-014-2 critical transmission stations and substations. Specifically, it requires a PJM Transmission Owner planning a CIP-014 Mitigation Project to consult with the affected state commissions, providing information including “the need for a CMP, the Potential Solutions submitted to PJM, and the Transmission Owner’s Preferred Solution.”⁴⁰ The PJM Transmission Owners emphasize that, after construction of a CIP-014 Mitigation Project is complete, public notice of the existence of the CMP will be provided “[a]s a precondition to any Transmission Owner being eligible for recovery of costs of the CMP.”⁴¹ Of course, any recovery of costs will be fully subject to applicable processes, including discovery, under the Transmission Owner’s formula rate protocols or, if the Transmission Owner has a stated rate, in Section 205 proceeding at the Commission to recover the costs.⁴²

³⁹ Attachment M-4, Section b, Step 4(B)(i).

⁴⁰ Attachment M-4, Section b, Step 5(A).

⁴¹ Attachment M-4, Section b, Step 10.

⁴² Attachment M-4, Section b, Step 11. All PJM Transmission Owner formula rate protocols specifically permit discovery into the prudence of costs recovered under the formula rate.

In sum, the PJM Transmission Owners' proposed planning procedures for CIP-014 Mitigation Projects are just and reasonable. The PJM Transmission Owners acknowledge that the Commission's policy (as set forth in Order No. 890) is that Transmission Owners must plan transmission expansions through open and transparent planning processes. Nevertheless, the PJM Transmission Owners believe that the modified planning procedures detailed in Attachment M-4 are just and reasonable as they protect highly sensitive information about CIP-014-2 critical transmission stations and substations by allowing the PJM Transmission Owners to plan CIP-014 Mitigation Projects through a confidential process that involves consultation with PJM and the affected state commissions. As such, they achieve an appropriate balance between (1) the security concerns driving the need for information protection and (2) the requirements of Order No. 890 that stakeholders have visibility into the PJM Transmission Owners' proposed transmission projects.⁴³ By approving proposed Attachment M-4 to the PJM OATT, the Commission will remove a barrier to the development of CIP-014 Mitigation Projects, enhancing both reliability and resilience while benefiting and protecting the loads that the PJM Transmission Owners serve.

⁴³ The Commission has engaged in a similar balancing in other contexts and has found it reasonable to limit transparency requirements to avoid compromising critical infrastructure information. For example, when considering PJM's uplift reporting compliance filing under Order No. 844, the Commission found it reasonable for PJM to exclude certain information related to black-start resources from the unit-specific uplift report in response to PJM's concerns that reporting the black-start information could disclose Critical Energy Infrastructure Information. *PJM Interconnection, L.L.C.*, 166 FERC ¶ 61,210, at PP 20 and 27 (2019); *see also Reliability Standards for Physical Security Measures*, 146 FERC ¶ 61,166, at P 10 (2014) ("NERC should include in the Reliability Standards a procedure that will ensure the confidential treatment of sensitive or confidential information but still allow for the Commission, NERC and the Regional Entities to review and inspect any information that is needed to ensure compliance with the Reliability Standards"). The Commission should engage in a similar balancing here.

III. CONTENTS OF FILING

The PJM Transmission Owners submit the following information in substantial compliance with relevant provisions of Section 35.13(B)(1):

- The instant Transmittal Letter;
- Attachment A: Proposed Attachment M-4, Marked Version; and
- Attachment B: Proposed Attachment M-4, Clean Version.

IV. LIST OF PERSONS RECEIVING A COPY OF THIS FILING

On behalf of the PJM Transmission Owners, PJM has served a copy of this filing on all PJM Members and on all state utility regulatory commissions in the PJM Region by posting this filing electronically. In accordance with the Commission's regulations,⁴⁴ PJM will post a copy of this filing to the FERC filings section of its internet site, located at the following link: <http://www.pjm.com/documents/ferc-manuals/ferc-filings.aspx> with a specific link to the newly-filed document, and will send an e-mail on the same date as this filing to all PJM Members and all state utility regulatory commissions in the PJM Region⁴⁵ alerting them that this filing has been made by PJM today and is available by following such link. If the document is not immediately available by using the referenced link, the document will be available through the referenced link within 24 hours of the filing. Also, a copy of this filing will be available on the Commission's eLibrary website located at the following link: <http://www.ferc.gov/docs-filing/elibrary.asp> in accordance with the Commission's regulations and Order No. 714.

⁴⁴ See 18 C.F.R. §§ 35.2(e) and 385.2010(f)(3).

⁴⁵ PJM already maintains, updates, and regularly uses e-mail lists for all PJM members and affected state commissions.

V. ADDITIONAL SUPPORTING INFORMATION

A. Description of Rate Schedule Change – Section 35.13(b)(4)

See discussion above.

B. Reasons for the Rate Schedule Change – Section 35.13(b)(5)

See discussion above.

C. Showing of Requisite Agreements – Section 35.13(b)(6)

Not applicable.

D. Costs or expenses that have been alleged or judged to be illegal, duplicative or unnecessary that are the product of discriminatory employment practices – Section 35.13(b)(7)

None.

VI. REQUESTED EFFECTIVE DATE

The PJM Transmission Owners request that the enclosed proposed tariff sheets be included in the PJM Tariff effective March 17, 2020 without suspension, or with a nominal one-day suspension period. The PJM Transmission Owners further request expedited action on this filing to effectuate remedial action against the physical security risks associated with these limited CIP-014-002 substation locations.

VII. REQUEST FOR WAIVERS

As no cost of service or rate design change is being made as part of this filing, the PJM Transmission Owners request that the Commission find good cause to waive Section 35.13 of the Commission's Regulations, 18 C.F.R. § 35.13, including any requirement that the filing contain Statements AA through BM in support of the filing; any Period I-Period II data requirements, and any requirement in Section 35.13(a)(2)(iv) to determine if and the extent to which a proposed change constitutes a rate increase based on Period I-Period II

rates and billing determinants. In addition, the PJM Transmission Owners hereby respectfully request a waiver, to the extent one is deemed necessary, of the requirement that it file an attestation pursuant to 18 C.F.R § 35.13(d) as inapplicable under the circumstances presented here, inasmuch as there are no costs contained in this filing to be attested to by any corporate official.

Although the PJM Transmission Owners have not identified any additional waivers of the Commission's Regulations that are necessary to permit this filing to be granted, the PJM Transmission Owners further request that the Commission grant any additional waivers of its rules and regulations it may deem necessary to approve this rate application by the requested effective date.

VIII. MISCELLANEOUS

No agreement is required by contract for the filing of this application. There are no costs included in this filing that have been alleged or adjudged in any administrative or judicial proceeding to be illegal, duplicative, or unnecessary costs, nor has any expense or cost been demonstrated to be the product of discriminatory or employment practices, within the meaning of Section 35.13(d)(3).

IX. NOTICE AND CORRESPONDENCE

The PJM Transmission Owners request that all communications regarding this filing be directed to the individuals listed below, and that their names be entered on the official service list maintained by the Secretary for this proceeding:

Takis Laios
Transmission Asset Strategy & Policy
American Electric Power
1 Riverside Plaza
Columbus, Ohio 43215
614-716-3462
tlaios@aep.com

Chair – CTOA Administrative Committee

Gary E. Guy
Assistant General Counsel
Exelon Corporation
Suite 9426
701 Ninth Street, N.W.
Washington, D.C. 20068
202-872-2576
gary.guy@exeloncorp.com

Stacey Burbure
Senior Counsel
American Electric Power Service Corp.
801 Pennsylvania Ave., N.W., Suite 735
202-383-3452
slburbure@aep.com

The PJM Transmission Owners request that the Commission waive the requirements of Rule 203 of its regulations⁴⁶ to the extent necessary to allow each of the listed persons to be included on the official service list for this proceeding.

⁴⁶ 18 C.F.R. § 385.203(b) (2013).

X. CONCLUSION

Wherefore, the PJM Transmission Owners respectfully request that, the Commission approve the proposed Attachment M-4 tariff sheet effective March 17, 2020.

Respectfully submitted,

/s/ Gary E. Guy

Gary E. Guy

Assistant General Counsel
Exelon Corporation
Suite 9426
701 Ninth Street, N.W.
Washington, D.C. 20068
202-872-2576
gary.guy@exeloncorp.com

[On Behalf of the PJM Transmission Owners](#)

Attachment A

PJM Open Access Transmission Tariff

(Redline)

ATTACHMENT M-4

SPECIAL PROCEDURES SOLELY APPLICABLE TO PLANNING OF CIP-014 MITIGATION SUPPLEMENTAL PROJECTS

a) Purpose, Limited Scope, Sunset, and Definitions. Under NERC Reliability Standard CIP-014-2 (“CIP-014”), as it may be redesignated from time to time, Transmission Owners are required to develop and implement physical security plans to protect certain critical transmission stations and substations. This Attachment M-4 is to identify an efficient and cost-effective process for the elimination of such stations and substations as CIP-014 facilities through Supplemental Projects without the level of public disclosure of the existence, location, exact number, and vulnerabilities associated with the CIP-014 facilities that would otherwise be required pursuant to Attachment M-3. The Supplemental Projects that are to be planned for the elimination of CIP-014 stations and substations in accordance with this Attachment M-4, defined below as CIP-014 mitigation projects (“CMP”) in Step 1 of this Attachment M-4, are removed from the Attachment M-3 public planning process in order to ensure that security is maintained while also providing reasonable transparency into the planning process and justification for CMPs. This Attachment M-4 mechanism is a limited alternative to the Attachment M-3 process both in scope and duration, is narrowly tailored to meet security needs, and provides for vital roles by both PJM Interconnection, L.L.C. (“PJM”) and State Commissions in all CMP Process Steps, as set forth below. Notwithstanding the procedures provided for in Attachment M-3 or other planning requirements with respect to all other Supplemental Projects, including proposed project reviews by the Transmission Expansion Advisory Committee or Subregional RTEP Committees and inclusion in the Local Plan, this Attachment M-4 provides special targeted procedures that the Transmission Owners and the unaffiliated verifying entity as defined in NERC CIP-014 (currently, PJM), shall follow in connection with CMPs, which have the specific purpose of removing transmission stations or substations from the list of CIP-014 facilities, within the limited period for which this Attachment M-4 shall be in effect pursuant to the Sunset provision and Step 1 of this Attachment M-4. Other than to the extent that CMP information is included in models maintained by the Transmission Provider, this information shall be made available to the public during the planning and construction of the CMP only under the confidentiality provisions described in Steps 8 and 10 below. Provisions for confidential consultations with State Commissions during this process are also included herein.

b) CMP Process Steps. The process under this Attachment M-4 consists of the following steps:

1. Definition of CMPs. For purposes of this Attachment M-4, a CMP shall mean a “Supplemental Project,” as defined in the Operating Agreement, Section 1.42A.02, that is (a) designed specifically to remove a transmission station or substation from

the list of CIP-014 facilities identified as of September 30, 2018 as requiring a documented physical security plan (“CIP-014 List”); and (b) reviewed by PJM in accordance with Step 4 of this Attachment M-4. The intent is to complete CMPs no later than five (5) years after the date that the Commission issues an Order accepting this Attachment M-4.

2. Limitation on the Number of CMPs. The number of stations and substations throughout the PJM region eligible for CMPs will not exceed 20, the maximum allowable under the finite list referred to in Step 1 of this Attachment M-4. The process set forth in this Attachment M-4 shall be in effect and available only as to CMPs designed specifically to remove a transmission station or substation from the list of CIP-014 facilities as it exists on September 30, 2018 and will cease to apply to any transmission station or substation if it is removed or eliminated from that list immediately upon such removal or elimination.
3. Transmission Owner Deliberative Process. A Transmission Owner will submit to PJM:
 - A. **Potential Solutions.** The potential alternative means of eliminating a transmission station or substation from the CIP-014 List; and
 - B. **Preferred Solution.** Identification from among the Potential Solutions the solution that in the view of the Transmission Owner constitutes the more efficient or cost-effective solution to enable the transmission station or substation to be removed from the list of CIP-014 facilities along with an explanation of its Preferred Solution that addresses the following:
 - i. The customer impact that would result from the loss of the transmission station or substation on the CIP-014 List, taking into account any plans for recovering from the loss of the transmission station or substation that could help to restore all or some of the load that was lost, the amount of time that it would take for such load to be restored and the nature of the load to be recovered or not able to be recovered;
 - ii. Whether there are distribution system-level solutions to eliminate the transmission station or substation from the CIP-014 List; and
 - iii. Whether the Preferred Solution requires new or expanded right-of-way.
4. PJM Review and Assessment.
 - A. PJM Review. Upon receiving the Preferred Solution and Potential Solutions from a Transmission Owner pursuant to Step 3 above, PJM (or consultants selected by PJM) shall evaluate those solutions. PJM shall report its findings to the

Transmission Owner in writing and either: (i) advise that the Preferred Solution is the more efficient or cost effective solution from among the Preferred Solutions and Potential Solutions; (ii) suggest modifications to any of the Preferred Solution or Potential Solutions that will permit PJM to advise that one of them is the more efficient or cost effective solution; or (iii) advise that a CMP solution not be pursued. PJM's report of its findings shall include an explanation of the basis for its advice.

B. PJM Assessment and Verification. For any CMP project ultimately selected for construction by the Transmission Owner ("Proposed CMP"), PJM shall assess and verify (or explain its inability to verify) that the project:

- i. Will result in removal of one or more transmission stations or substations from the CIP-014 List;
- ii. Does not remove transmission station(s) or substation(s) from the CIP-014 List that would otherwise be removed from the list through the current Regional Transmission Expansion Planning Process under the Operating Agreement, Schedule 6 ("RTEP Process");
- iii. Does not provide a solution to address a reliability, operational performance, market efficiency or public policy need that would otherwise be addressed through the current RTEP Process;
- iv. Will not result in another transmission station or substation being added to the CIP-014 List; and
- v. Does not result in reliability or operational performance criteria violations under the RTEP Process.

PJM shall report its assessment of these factors to the Transmission Owner in writing. No CMP solution shall proceed to another step in the Attachment M-4 process until this Step 4 has been completed. Once PJM and the Transmission Owner have agreed that the report is final, PJM's report will be provided to the affected State Commission, at that agency's option.

5. Consultation with State Commissions. The Transmission Owner shall ensure that all consultations with a State Commission as set forth in this Step 5, are subject to appropriate confidential safeguards. The Transmission Owner shall only be required to engage in consultations with a State Commission with respect to the planning and construction of a CMP under Step 5 and the Transmission Owner and PJM shall only consult with or provide information to a State Commission under Steps 5 or 6, if and to the extent that the Transmission Owner can ensure that such consultations and information will be subject to such appropriate confidential safeguards.

- A. Any Transmission Owner having submitted to PJM a Preferred Solution and Potential Solutions to eliminate a transmission station or substation from the CIP-014 List pursuant to Step 3 above shall seek to meet with any State Commission(s) with jurisdiction in the Transmission Zones in which a CMP is proposed to be located. PJM shall be invited to participate in any such meeting. Topics for discussion shall include, but not be limited to the considerations specified in CIP-014, including the need for a CMP, the Potential Solutions submitted to PJM, and the Transmission Owner's Preferred Solution.
- B. Upon PJM's completion of the review specified in Step 4 above, the Transmission Owner shall again seek to meet with any State Commission(s) with jurisdiction in the Transmission Zones in which a CMP is proposed to be located. PJM shall be invited to participate in any such meeting. Topics for discussion shall include, but not be limited to PJM's review and findings, including the efficiency and cost-effectiveness of any and all of PJM's recommendations.
- C. After identifying and selecting its Proposed CMP pursuant to completion of Step 4(B) above, but before construction is initiated, the Transmission Owner shall further seek to meet with any State Commission(s) with jurisdiction in the Transmission Zones in which the Proposed CMP is to be constructed. PJM shall be invited to participate in any such meeting. Topics for discussion shall include, but not be limited to PJM's assessment of the factors in Step 4(B)(i) through (v) above, the rationale for, location of, and specifications of the Proposed CMP and potential siting issues, particularly those that could affect the estimated project cost. To facilitate the discussion and enable an understanding of the benefits of costs assessed, the Transmission Owner shall be prepared to present an explanation of the reasons and rationale for its intention to proceed to construct its Proposed CMP and the reasonableness of that proposal. The Transmission Owner shall be prepared to address the following:
- i. The customer impact that would result from the loss of the transmission station or substation on the CIP-014 List, taking into account any plans for recovering from the loss of the transmission station or substation that could help to restore all or some of the load that was lost, the amount of time that it would take for such load to be restored and the nature of the load to be recovered or not able to be recovered, as compared to these same factors as they relate to that station or substation assuming that the Proposed CMP is constructed;
 - ii. Whether there exist distribution system-level solutions, or changes in operating procedures, or some combination, to eliminate the transmission station or substation from the CIP-014 List;
 - iii. Whether the Proposed CMP requires new or expanded right-of-way;

notice of the existence of a CMP has been provided by adherence to Step 10 of this Attachment M-4, the Transmission Owner may propose to recover its investment in the CMP and the associated costs from Responsible Customers in its Zone through a rate, including a formula rate, in effect under the applicable Tariff, Attachment H similar to the cost recovery process it follows for other Supplemental Projects. Any such proposal shall be subject to discovery on all matters pursuant to the procedures applicable under the applicable Attachment H, the Federal Power Act, and the Commission's regulations, including any applicable procedures for the protection against disclosure of commercially sensitive information and Critical Energy Infrastructure Information.

- c) Modifications.** This Attachment M-4 may be modified under Section 205 of the Federal Power Act only if the proposed modification has been authorized by the PJM Transmission Owners Agreement-Administrative Committee in accordance with Section 8.5 of the Consolidated Transmission Owners Agreement (“CTOA”).
- d) Sunset.** This Attachment M-4 terminates five years after the issuance date of an Order from the Federal Energy Regulatory Commission approving this Attachment M-4 for inclusion in the PJM Tariff; however, CMPs already under construction as of that date of termination may proceed and the conditions in Steps 8, 9, 10, and 11 shall remain in force. For any CMP construction occurring after the sunset date, quarterly status briefings shall be provided to any State Commission previously consulted under Step 5 until the CMP is placed in service pursuant to Step 9.

Attachment B

PJM Open Access Transmission Tariff

(Clean)

ATTACHMENT M-4

SPECIAL PROCEDURES SOLELY APPLICABLE TO PLANNING OF CIP-014 MITIGATION SUPPLEMENTAL PROJECTS

- a) **Purpose, Limited Scope, Sunset, and Definitions.** Under NERC Reliability Standard CIP-014-2 (“CIP-014”), as it may be redesignated from time to time, Transmission Owners are required to develop and implement physical security plans to protect certain critical transmission stations and substations. This Attachment M-4 is to identify an efficient and cost-effective process for the elimination of such stations and substations as CIP-014 facilities through Supplemental Projects without the level of public disclosure of the existence, location, exact number, and vulnerabilities associated with the CIP-014 facilities that would otherwise be required pursuant to Attachment M-3. The Supplemental Projects that are to be planned for the elimination of CIP-014 stations and substations in accordance with this Attachment M-4, defined below as CIP-014 mitigation projects (“CMP”) in Step 1 of this Attachment M-4, are removed from the Attachment M-3 public planning process in order to ensure that security is maintained while also providing reasonable transparency into the planning process and justification for CMPs. This Attachment M-4 mechanism is a limited alternative to the Attachment M-3 process both in scope and duration, is narrowly tailored to meet security needs, and provides for vital roles by both PJM Interconnection, L.L.C. (“PJM”) and State Commissions in all CMP Process Steps, as set forth below. Notwithstanding the procedures provided for in Attachment M-3 or other planning requirements with respect to all other Supplemental Projects, including proposed project reviews by the Transmission Expansion Advisory Committee or Subregional RTEP Committees and inclusion in the Local Plan, this Attachment M-4 provides special targeted procedures that the Transmission Owners and the unaffiliated verifying entity as defined in NERC CIP-014 (currently, PJM), shall follow in connection with CMPs, which have the specific purpose of removing transmission stations or substations from the list of CIP-014 facilities, within the limited period for which this Attachment M-4 shall be in effect pursuant to the Sunset provision and Step 1 of this Attachment M-4. Other than to the extent that CMP information is included in models maintained by the Transmission Provider, this information shall be made available to the public during the planning and construction of the CMP only under the confidentiality provisions described in Steps 8 and 10 below. Provisions for confidential consultations with State Commissions during this process are also included herein.
- b) **CMP Process Steps.** The process under this Attachment M-4 consists of the following steps:
1. **Definition of CMPs.** For purposes of this Attachment M-4, a CMP shall mean a “Supplemental Project,” as defined in the Operating Agreement, Section 1.42A.02, that is (a) designed specifically to remove a transmission station or substation from

the list of CIP-014 facilities identified as of September 30, 2018 as requiring a documented physical security plan (“CIP-014 List”); and (b) reviewed by PJM in accordance with Step 4 of this Attachment M-4. The intent is to complete CMPs no later than five (5) years after the date that the Commission issues an Order accepting this Attachment M-4.

2. **Limitation on the Number of CMPs.** The number of stations and substations throughout the PJM region eligible for CMPs will not exceed 20, the maximum allowable under the finite list referred to in Step 1 of this Attachment M-4. The process set forth in this Attachment M-4 shall be in effect and available only as to CMPs designed specifically to remove a transmission station or substation from the list of CIP-014 facilities as it exists on September 30, 2018 and will cease to apply to any transmission station or substation if it is removed or eliminated from that list immediately upon such removal or elimination.
3. **Transmission Owner Deliberative Process.** A Transmission Owner will submit to PJM:
 - A. **Potential Solutions.** The potential alternative means of eliminating a transmission station or substation from the CIP-014 List; and
 - B. **Preferred Solution.** Identification from among the Potential Solutions the solution that in the view of the Transmission Owner constitutes the more efficient or cost-effective solution to enable the transmission station or substation to be removed from the list of CIP-014 facilities along with an explanation of its Preferred Solution that addresses the following:
 - i. The customer impact that would result from the loss of the transmission station or substation on the CIP-014 List, taking into account any plans for recovering from the loss of the transmission station or substation that could help to restore all or some of the load that was lost, the amount of time that it would take for such load to be restored and the nature of the load to be recovered or not able to be recovered;
 - ii. Whether there are distribution system-level solutions to eliminate the transmission station or substation from the CIP-014 List; and
 - iii. Whether the Preferred Solution requires new or expanded right-of-way.
4. **PJM Review and Assessment.**
 - A. **PJM Review.** Upon receiving the Preferred Solution and Potential Solutions from a Transmission Owner pursuant to Step 3 above, PJM (or consultants selected by PJM) shall evaluate those solutions. PJM shall report its findings to the

Transmission Owner in writing and either: (i) advise that the Preferred Solution is the more efficient or cost effective solution from among the Preferred Solutions and Potential Solutions; (ii) suggest modifications to any of the Preferred Solution or Potential Solutions that will permit PJM to advise that one of them is the more efficient or cost effective solution; or (iii) advise that a CMP solution not be pursued. PJM's report of its findings shall include an explanation of the basis for its advice.

- B. PJM Assessment and Verification. For any CMP project ultimately selected for construction by the Transmission Owner ("Proposed CMP"), PJM shall assess and verify (or explain its inability to verify) that the project:
- i. Will result in removal of one or more transmission stations or substations from the CIP-014 List;
 - ii. Does not remove transmission station(s) or substation(s) from the CIP-014 List that would otherwise be removed from the list through the current Regional Transmission Expansion Planning Process under the Operating Agreement, Schedule 6 ("RTEP Process");
 - iii. Does not provide a solution to address a reliability, operational performance, market efficiency or public policy need that would otherwise be addressed through the current RTEP Process;
 - iv. Will not result in another transmission station or substation being added to the CIP-014 List; and
 - v. Does not result in reliability or operational performance criteria violations under the RTEP Process.

PJM shall report its assessment of these factors to the Transmission Owner in writing. No CMP solution shall proceed to another step in the Attachment M-4 process until this Step 4 has been completed. Once PJM and the Transmission Owner have agreed that the report is final, PJM's report will be provided to the affected State Commission, at that agency's option.

5. Consultation with State Commissions. The Transmission Owner shall ensure that all consultations with a State Commission as set forth in this Step 5, are subject to appropriate confidential safeguards. The Transmission Owner shall only be required to engage in consultations with a State Commission with respect to the planning and construction of a CMP under Step 5 and the Transmission Owner and PJM shall only consult with or provide information to a State Commission under Steps 5 or 6, if and to the extent that the Transmission Owner can ensure that such consultations and information will be subject to such appropriate confidential safeguards.

- A. Any Transmission Owner having submitted to PJM a Preferred Solution and Potential Solutions to eliminate a transmission station or substation from the CIP-014 List pursuant to Step 3 above shall seek to meet with any State Commission(s) with jurisdiction in the Transmission Zones in which a CMP is proposed to be located. PJM shall be invited to participate in any such meeting. Topics for discussion shall include, but not be limited to the considerations specified in CIP-014, including the need for a CMP, the Potential Solutions submitted to PJM, and the Transmission Owner's Preferred Solution.
- B. Upon PJM's completion of the review specified in Step 4 above, the Transmission Owner shall again seek to meet with any State Commission(s) with jurisdiction in the Transmission Zones in which a CMP is proposed to be located. PJM shall be invited to participate in any such meeting. Topics for discussion shall include, but not be limited to PJM's review and findings, including the efficiency and cost-effectiveness of any and all of PJM's recommendations.
- C. After identifying and selecting its Proposed CMP pursuant to completion of Step 4(B) above, but before construction is initiated, the Transmission Owner shall further seek to meet with any State Commission(s) with jurisdiction in the Transmission Zones in which the Proposed CMP is to be constructed. PJM shall be invited to participate in any such meeting. Topics for discussion shall include, but not be limited to PJM's assessment of the factors in Step 4(B)(i) through (v) above, the rationale for, location of, and specifications of the Proposed CMP and potential siting issues, particularly those that could affect the estimated project cost. To facilitate the discussion and enable an understanding of the benefits of costs assessed, the Transmission Owner shall be prepared to present an explanation of the reasons and rationale for its intention to proceed to construct its Proposed CMP and the reasonableness of that proposal. The Transmission Owner shall be prepared to address the following:
 - i. The customer impact that would result from the loss of the transmission station or substation on the CIP-014 List, taking into account any plans for recovering from the loss of the transmission station or substation that could help to restore all or some of the load that was lost, the amount of time that it would take for such load to be restored and the nature of the load to be recovered or not able to be recovered, as compared to these same factors as they relate to that station or substation assuming that the Proposed CMP is constructed;
 - ii. Whether there exist distribution system-level solutions, or changes in operating procedures, or some combination, to eliminate the transmission station or substation from the CIP-014 List;
 - iii. Whether the Proposed CMP requires new or expanded right-of-way;

- iv. Whether the Proposed CMP will displace costs associated with maintaining physical security for stations/substations on the CIP-014 List; and
 - v. The estimated cost of the Proposed CMP.
- 6. PJM Interim/Periodic Review and Interim Consultation with State Commissions. Nothing in this Attachment M-4 precludes PJM, at its sole discretion, from conducting additional periodic examinations to verify the continuing validity of its findings and assessment under Step 4, above. Similarly, nothing in this Attachment M-4 precludes PJM from consulting with State Commissions in addition to those consultations specified in Step 5 above, with or without the participation of the relevant Transmission Owner.
- 7. Project Notification and Compliance.
 - A. Transmission Owner Notification to PJM. Upon satisfaction of all parts of Step 5, the Transmission Owner shall notify PJM in writing that the Proposed CMP will be constructed and identify the location and specifications of the Proposed CMP selected. The Transmission Owner shall make a reasonable effort to seek alternative funding to offset project costs, including but not limited to U.S. Department of Energy grants associated with addressing national security, critical infrastructure or resilience.
 - B. Compliance. The Transmission Owner will comply with all applicable licensing, permitting, siting, or certification requirements as well as all applicable proceedings for eminent domain authority.
- 8. CMP Construction. During construction of a CMP, the Transmission Owner carrying out such construction shall continue to take safeguards to ensure necessary confidentiality until the CMP is placed in service.
- 9. CMP In-Service Placement. A Transmission Owner shall have complied with all of its obligations set forth in the CMP Process Steps above before the CMP may be placed in-service.
- 10. Confidentiality. If at any step in the Attachment M-4 process, the level of needed confidentiality is eliminated with respect to elements of CMP information, such confidentiality shall be reduced or lifted. As a precondition to any Transmission Owner being eligible for recovery of the costs of the CMP, the Transmission Owner shall provide public notice of the existence of the CMP.
- 11. Public Review of CMP. At no time prior to the existence of the CMP being made known to the public by adherence to Step 10 of this Attachment M-4 shall the costs of any CMP be eligible for inclusion in rates filed by any Transmission Owner. After

notice of the existence of a CMP has been provided by adherence to Step 10 of this Attachment M-4, the Transmission Owner may propose to recover its investment in the CMP and the associated costs from Responsible Customers in its Zone through a rate, including a formula rate, in effect under the applicable Tariff, Attachment H similar to the cost recovery process it follows for other Supplemental Projects. Any such proposal shall be subject to discovery on all matters pursuant to the procedures applicable under the applicable Attachment H, the Federal Power Act, and the Commission's regulations, including any applicable procedures for the protection against disclosure of commercially sensitive information and Critical Energy Infrastructure Information.

- c) **Modifications.** This Attachment M-4 may be modified under Section 205 of the Federal Power Act only if the proposed modification has been authorized by the PJM Transmission Owners Agreement-Administrative Committee in accordance with Section 8.5 of the Consolidated Transmission Owners Agreement (“CTOA”).
- d) **Sunset.** This Attachment M-4 terminates five years after the issuance date of an Order from the Federal Energy Regulatory Commission approving this Attachment M-4 for inclusion in the PJM Tariff; however, CMPs already under construction as of that date of termination may proceed and the conditions in Steps 8, 9, 10, and 11 shall remain in force. For any CMP construction occurring after the sunset date, quarterly status briefings shall be provided to any State Commission previously consulted under Step 5 until the CMP is placed in service pursuant to Step 9.