

**Notice of Transmission Owners Intent to File a New Attachment M-4 to the PJM
Tariff Solely Applicable to the Planning of CIP-014 Mitigation Projects (CMPs)
August 12, 2019**

The PJM Transmission Owners (TOs) are seeking comments from PJM stakeholders on the attached draft Attachment M-4 to the PJM Tariff. The new Attachment M-4 will govern the planning of CIP-014 Mitigation Projects (CMPs) which are a subset of Supplemental Projects.

Background

NERC Reliability Standard CIP-014-2 deals with physical security of certain critical transmission substations; under the standard, the location of these substations and the consequences of their loss should damage occur are highly confidential. The purpose of CIP-014-2 is to identify and protect transmission stations and substations that, if rendered inoperable or damaged due to physical attack, could result in significant grid concerns – widespread instability, uncontrolled separation, or cascading. The standard requires Transmission Owners to physically protect these transmission stations and substations, which are identified through a screening process set forth in the standard. However, the physical security enhancements that CIP-014-2 requires do not fully mitigate the risks associated with the loss of these critical substations. Thus, without additional mitigation measures, the electric system is still vulnerable to long-term loss of load and loss of service to critical infrastructure should these substations be damaged.

The construction of new transmission facilities may more effectively mitigate the risks associated with the loss of these critical substations than physical security enhancements alone. However, new transmission needs and proposed facilities must be discussed with stakeholders under the PJM Tariff and/or state rules. This, in short, creates a dilemma: A TO can propose a solution (i.e., a new transmission facility) to more effectively mitigate the risk associated with the loss of a critical substation, but cannot implement that solution without divulging highly sensitive information regarding the need for and location of the proposed project through applicable public processes. While the PJM Tariff and/or state processes offer some degree of protection of sensitive information through CEII requirements, the severity of potential system impact of divulging information about these critical substations warrants information protection beyond CEII. To address this concern, the TOs have developed an alternative process for vetting certain transmission projects that will mitigate critical vulnerabilities associated with a subset of substations identified through TO compliance with NERC Standard CIP-014-2.

CMP Concept and Proposed Implementation

Under the proposed vetting process, a CMP is defined as a transmission enhancement designed solely to remove a location identified as highly critical from the list of CIP-014 substations. CMPs are a subset of Supplemental Projects under the PJM Tariff, but are planned through a separate process (described below) to protect information critical to grid security. The CMP vetting process is contained in a new Attachment M-4 to the PJM Tariff, which would sunset five years after the issuance of a FERC order approving the tariff revisions.

The number of stations and substations throughout the PJM region eligible for CMPs is *finite and discrete*:

- It is the list of substations identified as of September 30, 2018 as requiring a documented physical security plan under CIP-014-2.
- It will not exceed 20.

In short, Attachment M-4, limited in scope and duration, will accommodate grid security considerations that were not considered as part of FERC Order No. 890 which required utilities to implement an open and transparent process for planning their transmission systems.

CMP Planning Process

A summary of the proposed CMP planning process follows:

1. A CMP is designed specifically to remove a substation from this list of CIP-014 facilities identified as of September 30, 2018. Due to the sunset provision, the CMP must be submitted to PJM for verification and review no later than five years after the Attachment M-4 effective date in order for it to be considered.
2. The number of substations eligible to be a CMP will not exceed 20.
3. TO Deliberative Process. TO determines need for CMP, submits possible alternatives to PJM, and identifies the more efficient or cost-effective alternative as the proposed solution.
4. PJM Review. PJM verifies that the CMP:
 - a. Will remove substation from the CIP-014 list; and
 - b. Does not provide a solution to a reliability, operational performance, economic criteria violation or public policy need already being addressed elsewhere; or that an RTEP project does not exist that will result in the removal of the subject transmission substation from the CIP-014 list; and
 - c. Does not result in reliability or operational performance criteria violations under the RTEP protocol.

5. Consultation with State Commissions. TO (and PJM, as appropriate) confers with State Commission(s) where CMP is to be constructed to provide an overview, including the need for a CMP, the alternatives considered, the recommended CMP, and PJM’s review findings.
 - a. TO shall take necessary safeguards to observe the strictest non-public classification allowable by law when conducting state outreach communications.
6. PJM Interim/Periodic Review. PJM conducts additional periodic examinations to verify the continuing validity of its verification and review findings, as needed.
7. TO Notification to PJM. TO notifies PJM in writing that a CMP will be constructed.
8. CMP Construction. TO constructs CMP.
9. CMP In-Service Placement. CMP is placed in service.
10. Lifting of Confidentiality. TO provides notice of the existence of the CMP.
11. Public Review of CMP. Costs are included in TO filed rates after the CMP is placed in service.
 - a. Proposed rate recovery is subject to all procedures applicable under Tariff Attachment H, the FPA, and FERC regulations, including any applicable procedures for the protection against disclosure of commercially sensitive information and CEII.
 - b. Costs are allocated 100% to TO zone just as for a Supplemental Project.

A Balanced Approach

The proposed process balances the need to protect critically-sensitive infrastructure information with Order No. 890 principles (transparency). Protection through a Non-Disclosure Agreement is insufficient to address the grid security concerns present with respect to CMPs. CIP-014 information should only be shared with those who “need” to know due to security concerns.

Under the M-4 process, planning outreach is conducted to the extent reasonable and information is shared with the stakeholder community as soon as possible. In summary, under the proposed approach:

- PJM provides independent verification that the project removes the substation from the CIP-014 list and does not result in reliability or operational performance planning criteria violations.
- PJM also validates that the CMP does not provide a solution to a reliability, operational performance, economic criteria violation or public policy need already being addressed elsewhere and that other projects under evaluation would not mitigate the substation to avoid “front-running” competitive projects.

- The TO (and PJM, as appropriate) meets with impacted state(s) early on to discuss the need, mitigation alternatives, and proposed solution.
- Notice of the project's existence is provided to stakeholders once the project is placed in service, i.e., substation is no longer CIP-014 critical.
- Project prudency is considered in the relevant TO's formula rate protocols or stated rate filing requirements just like any other Supplemental Project.

Written comments on the draft Attachment M-4 may be submitted for consideration by email to: (Comments_for_Transmission_Owners@pjm.com) on or before Monday, September 16, 2019.

ATTACHMENT M-4**SPECIAL PROCEDURES SOLELY APPLICABLE TO PLANNING OF CIP-014
MITIGATION SUPPLEMENTAL PROJECTS**

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 facilities. The purpose of this Attachment M-4 is to provide Transmission Owners with an alternative mechanism to planning Supplemental Projects that fall within the subset of CIP-014 mitigation projects (“CMP”) as defined in Step 1 of this Attachment M-4. This alternative mechanism is necessary to ensure that security is maintained relative to CMPs needed to remove specific transmission stations or substations from the list of CIP-014 facilities while also providing reasonable transparency into the planning process for CMPs. 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 Transmission Provider may follow in connection with CMPs, which have the specific purpose of removing transmission stations or substations from the list of CIP-014 facilities, for 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 PJM models, this information shall not be made available to the public under the confidentiality provisions of the Operating Agreement or under Critical Energy Infrastructure Information protection procedures during the planning and construction of the CMP as described in Steps 3 through 8 below.

The M-4 process consists of the following steps:

1. For purposes of this Attachment M-4, a CMP shall mean a “Supplemental Project”, as defined in the Operating Agreement, Schedule 6, 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; and (b) submitted to PJM for verification and review in accordance with Step 4 of this Attachment M-4 no later than five (5) years after the date this Attachment M-4 takes effect in accordance with an order of the Commission.
2. 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.
3. **Transmission Owner Deliberative Process.** A Transmission Owner will submit to PJM:
 - a. **Potential Solutions.** The potential alternate means of eliminating a transmission station or substation from the list of CIP-014 facilities; and

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 Attachment H of this Tariff. Any such proposal shall be subject to all 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.

Modifications. This Attachment M-4 may only be modified under Section 205 of the Federal Power Act 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.

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 underway as of that date of termination shall be completed.