Executive Summary

This solution package is intended to address PJM and stakeholder concerns based on feedback received from seven phase 2 MEPETF meetings and a set of responses from non-binding poll questions. Package A is a PJM proposal to enhance the timing and structure of the Market Efficiency cycle and Long-term window, to define conditions for enhancing the Market Efficiency project reevaluation process, and to address an existing gap with how significant historical gross congestion is incorporated in the Market Efficiency analysis. This document describes each component of the solution Package A.

Design Components

Reevaluation Criteria

The PJM Operating Agreement requires PJM to review the costs and benefits of constructing new economic based enhancements or expansions included in the Regional Transmission Expansion Plan on an annual basis. Due to the increasing number of projects PJM must reevaluate and the ambiguity involved with how and under what assumptions projects are studied, PJM recommends added structure to enhance transparency and efficiency of the reevaluation process.

With the Package A proposal, PJM will review the updated costs for all approved Market Efficiency projects. Whether or not a project is reevaluated will depend on two factors: 1. Total capital cost, and 2. Current status of project.

1. Any project with a capital cost of $20M or more will be reevaluated. For approved Market Efficiency projects with a capital cost under $20M: if the updated costs causes the B/C ratio to fall below 1.25, given the original benefits, PJM will reevaluate the need for the project. Projects with a capital cost under $20M will not be reevaluated if the updated costs do not cause the B/C ratio to fall below 1.25, given the original benefits.

2. PJM will not reevaluate projects that meet the above criteria once the project has completed 20% of its construction within the Engineering and Procurement status as described on PJM transmission construction status page or once the CPCN certificate or equivalent state approval is received (approved), as applicable.

Market Efficiency Mid-Cycle Assumption and Model Update

PJM’s existing Market Efficiency process includes post-window mid-cycle base case updates prior to the evaluation of Market Efficiency window proposals. The objective of these mid-cycle updates is to capture most up-to-date input assumptions such as updated transmission topology (baseline, network and supplemental upgrades), load forecast, fuel and emission prices, and generator deactivations. Generally, this process happens during the proposal window.

In order to assist with reducing the impacts of an annual mid-cycle update during a 24-month Market Efficiency cycle, PJM is proposing to shift the Long-term window back two months, from November-February to January-April. This shift into the end of April will allow project proposers extra time to analyze their projects on a retooled case, complete with some aspects of
the mid-cycle update, prior to a final submission. Additionally, shifting the Long-term window back two months will better align with MISO processes, where both RTOs will post economic drivers in the January timeframe.

To align with this Long-term window shift and to allow for sufficient time to study project proposals, PJM is proposing to shift the Market Efficiency cycle start/end times back from January year 0 - December year 1, to March year 0 – February year 2.

**Significant Historical Gross Congestion**

In order to better incorporate significant historical gross congestion in the Market Efficiency analysis, PJM is proposing to formalize a process that tracks causes of DA and RT congestion and to develop a process that better informs the PROMOD model to ensure these drivers are seen in the forward looking simulations. Historical economic drivers that are not seen in the PROMOD simulations for the up-coming window will be reviewed by PJM Planning, Markets, and Operations personnel and results will be presented to the TEAC for further consideration prior to the window opening. An economic driver resulting from significant historical gross congestion must be simulated in the PROMOD model in order to be posted as a valid economic driver for the corresponding Market Efficiency window.

**Effective Dates**

Market Efficiency mid-cycle assumption and model updates and significant historical gross congestion process changes will be implemented for the 2020/2021 Market Efficiency cycle which will begin on March 1, 2020. Project reevaluation processes will be implemented for the 2019 calendar year.