

### Reactive Rate Process

This work is intended to evaluate the standards for the provision of reactive service and the mechanism that provides for the opportunity to be compensated for reactive service. Under Schedule 2 of the PJM Tariff, generation owners may submit for filing at FERC pursuant to Section 205 of the Federal Power Act and Part 35 of the Commission's regulations a rate schedule for Reactive Supply and Voltage Control from Generation Sources Service for VAR capability. The Rate Schedule specifies the generator's revenue requirement for Reactive Supply and Voltage Control from Generation Sources Service from the generating facility.

#### Issue Source

Dominion Energy

#### Key Work Activities

It is recommended that the MIC complete the following key work activities:

- 1) Provide education on topics, but not limited to:
    - a) Existing FERC Reactive Rate filing process, including but not limited to the following:
      - i) the fundamentals and origins of the relevant parts of OATT Schedule 2;
      - ii) the requirements for ensuring adequate reactive capability;
      - iii) the basics of the AEP method and its rationale;
      - iv) the current treatment of reactive costs and revenues in the capacity market;
      - v) the requirements for reactive capability from resources on the transmission, subtransmission and distribution systems;
    - b) Examination of Reactive Rate recovery mechanism in other RTOs and ISOs.
    - c) Provide clarification on:
      - i) The role of PJM in procuring reactive capability;
      - ii) The definition of reactive demand and supply;
      - iii) The precise meaning of reactive capability;
      - iv) The quality and quantity of reactive capability PJM requires;
      - v) The quality and quantity of reactive capability required to obtain interconnection service;
      - vi) Resource eligibility based on type;
      - vii) Resource eligibility based on location;
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## Issue Charge

- viii) Identify and clarify the opportunity costs of providing reactive power in real time for each resource type;
  - ix) Evaluate the procedures for measurement and verification of reactive capability;
  - x) Identify performance requirements for reactive power;
  - xi) Evaluate the economic basis for the distribution of reactive charges among zones;
  - d) Identify potential market power and/or manipulation risks.
  - e) Review the inputs for the determination of reactive revenues.
- 2) Discuss improvements to the Reactive Power cost recovery process and examine alternative Reactive Power Rate recovery mechanisms.
- a) Examine alternative Reactive Power cost recovery mechanisms.
  - b) Determine the documentation required to be submitted by generation owners and developers to PJM, the IMM, and the FERC if necessary, to support the opportunity for rate recovery.
  - c) Examine PJM market mechanisms that would provide the opportunity to recover Reactive Rates.
  - d) Identify potential market power and/or manipulation risks and develop protective provisions to be included in any cost recovery mechanism, if necessary.
- 3) Discuss the possibility of expanding resource eligibility for LOC revenue due to provision of reactive power
- a) Examine the expansion of Lost Opportunity Cost (LOC) revenue rules to other resources (e.g. solar), which currently are only available to combustion turbine units, combined cycle units, steam electric generating units, storage resources, and hydro units.

### Out of Scope:

- 1) Modifications to cost-based energy offers, fuel cost policies, and capacity offers beyond those needed to reflect the cost of reactive service.
- ~~2) Any existing FERC-approved or pending reactive service rates.~~

### Expected Deliverables

- 1) A recommendation to the MRC on a proposed market rule change that would establish a rate mechanism or market mechanism that would reduce the procedural risks and costs associated with existing methodology, if appropriate.
    - a) If the stakeholders determine that a Reactive Power rate mechanism or market mechanism should be modified/created, updates to the PJM Manuals, Operating Agreement and Tariff to reflect the proposed changes.
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# Issue Charge

## Decision-Making Method

Tier 2 decision-making will be used.

Identify the decision-making method adopted for this issue: Tier 1, consensus (unanimity) on a single proposal (preferred default option), or Tier 2, multiple alternatives.

## Stakeholder Group Assignment

This Group will be assigned to a new task force

## Expected Duration of Work Timeline

It is expected that the work be completed in 9 months. The timeline may be modified as necessary.

Start Date	Priority Level	Timing	Meeting Frequency
10/1/2021	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	<input type="checkbox"/> Immediate <input checked="" type="checkbox"/> Near Term <input type="checkbox"/> Far Term	<input type="checkbox"/> Weekly <input checked="" type="checkbox"/> Monthly <input type="checkbox"/> Quarterly

## Charter

(check one box)

<input checked="" type="checkbox"/>	This document will serve as the Charter for a new group created by its approval.
<input type="checkbox"/>	This work will be handled in an existing group with its own Charter (and applicable amendments).

More detail available in M34; Section 6

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