

## Phasor Measurement Unit (PMU) Placement Plan in RTEP Planning Process

### Solution

The Planning Committee (PC) will **approve** the following modification to M14B Attachment B, Section B.3:

- The 5-year plan will specify the level of budget commitments which must be made in order to meet scheduled in-service dates. The commitment may include facility engineering and design, siting and permitting of facilities, **installation or modification of metering system(s) required by Manual 01**, or arrangements to construct transmission enhancements or expansions.

The Planning Committee (PC) will **recommend** that the Operating Committee (OC) take the following action:

- Consider and approve the following language in Manual 01:

Document	Section	Language
Manual 01: Control Center and Data Exchange Requirements	3.6	<p><b>Required Synchrophasor Data*:</b></p> <p>For substations with three or more non-radial transmission lines at 100 kV or above, Synchrophasor measurement signals are required for the following equipment locations:</p> <ul style="list-style-type: none"> <li>• Bus voltages at 100 kV and above</li> <li>• Line-terminal voltage and current values for transmission lines at 100 kV and above</li> <li>• High-side / low-side voltage and current values for transformers at 100kV and above</li> <li>• Dynamic reactive device power output (SVC, STATCOM, Synchronous Condenser, etc.)</li> </ul> <p>*These requirements shall only apply to new baseline and supplemental projects presented to the PJM Transmission Expansion Advisory Committee (TEAC) and/or the Sub Regional RTEP Committees (SRRTEP) for inclusion in the RTEP after June 1, 2021. In situations where the installation of a Synchrophasor device would cause technical challenges resulting in unusually high installation costs, PJM may approve on a case-by-case basis an alternative Synchrophasor device installation plan proposed by the Transmission Owner or Designated Entity.</p>

- Include the following device configuration and data quality requirements in supporting documents:
  - PMU devices installed per this requirement shall include necessary design and configuration to make the device 'CIP ready'.
  - PMU devices installed per this requirement shall comply to additional data quality requirements stipulated in M01.