TPL-001-4
Transmission System Planning Performance Requirements
Spare Equipment Strategy

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Planning Committee
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• TPL-001-4 Requirement 2.1.5:
  – When an entity’s spare equipment strategy could result in the unavailability of major Transmission equipment that has a lead time of one year or more (such as a transformer), the impact of this possible unavailability on System performance shall be studied. The studies shall be performed for the P0, P1, and P2 categories identified in Table 1 with the conditions that the System is expected to experience during the possible unavailability of the long lead time equipment.

• Manual 14B: 2.3.12 Spare Equipment Strategy Review:

  2.3.12 Spare Equipment Strategy Review

  PJM will annually evaluate the spare equipment strategy that could result in the unavailability of major transmission equipment that has a lead time of one year or more (such as a transformer) and assess the impact of this possible unavailability on system performance using NERC category P0, P1 and P2 contingency categories identified in Table 1 of NERC TPL-001-4. This assessment will consider the conditions that the system is expected to experience during the possible unavailability of the long lead time equipment.
PJM sent annual questionnaire to Transmission Owners asking about current Spare Equipment strategy on June 30th.

- Email distributed to Primary compliance contacts listed on PJM’s website:
  - http://www.pjm.com/~/media/library/whitepapers/compliance/to-compliance-contact-list.ashx

  - Question: Does the TO have a Spare Equipment Strategy in place for equipment with a lead time of ≥ 1 year?

  - If NO, PJM is requesting information on the type of equipment, the unique identifier (TX 1, TX2, etc.) and substation location

  • PJM will study unavailability for P0, P1 & P2 categories
  • Questionnaire responses are due by July 22nd
Suggested List of Long-Lead Transmission Equipment

• Synchronous Condensers
• Gas Insulated Substations
• Transformers (Auto, Phase-Shifting)
• HVDC Transformers for HVDC Facilities
• Thyristors/IGBTs for HVDC Facilities/FACTS Installations
• Interconnection Transformers for FACTS (e.g., SVC) Installations
• Other
Questions?