

Transmission and Substation Subcommittee Updates

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Planning Committee
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- TSS is a technical advisory subcommittee under PC
<https://www.pjm.com/-/media/committees-groups/subcommittees/tss/tss-charter.ashx?la=en>
 - TSS Chair starting March 2020: Mr. Shashi Patel, PSE&G
 - Secretaries: Jay Liu, PJM and Joe Hay, PJM
- Maintain technical guidelines for transmission facilities
 - Investigate new technologies and develop associated design guidelines
 - Track best practices of the industry
- Monthly meetings

- New Sections in TSS Guideline:
 - Section VI.i. on Gas Insulated Substation Rating Methodology
 - Section V.q. on STATCOM
 - Section V.s. on Wildlife Mitigation on Transmission Lines
- Utility Practices workshops
 - Wildlife Mitigation on Transmission Lines (BGE)
 - System Hardening toward Grid Resilience (PSE&G)
- Technical Workshops by vendors
 - Smart Wires (March 18, 2020)
 - Siemens SVC and STATCOM (Dec. 2020)

- Joint technical discussions with PJM Operation and Planning
 - Flow CBs and associated substation rating methodology
 - PJM Operation feed backs
 - Technical survey to TOs
 - SVC and STATCOM Reactive Power Model and Operational Performance
 - PJM Operation feed backs and recommendations
 - Further technical discussions with TOs and Manufactures
 - Synchrophasor (PMU) installation and maintenance
 - Add PMU language to Section V.o. RELAY AND CONTROL BUILDING REQUIREMENTS

- Review and Modification of TSS Guidelines
- New Chapter and Sections
 - Design and Maintenance Philosophy on Grid Resilience and System Hardening
 - Design and Maintenance Guidelines on GIS and GIL Facilities
 - Dynamic Line Rating Methodologies
- Other topics
 - Transmission facility design challenges associated with large scale renewable integration
 - Resilience related design issues: GMD/EMP; system hardening, etc.
 - New transmission line and substation materials and designs
 - FACTS and HVDC facilities

Presenter:
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Transmission and Substation Subcommittee Update



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