

Transmission and Substation Subcommittee Updates

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Planning Committee
December 14th, 2021

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- TSS is a technical advisory subcommittee under PC <u>https://www.pjm.com/-/media/committees-</u> groups/subcommittees/tss/tss-charter.ashx?la=en
 - TSS Chair: 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



2021 Activities – TSS Guideline Review and Updates

- New Section(s)/supporting document in TSS Guideline posted
 - Section I.c on Recommendations of Resilience and System Hardening Practices
 - Section V.s on Wildlife Mitigation on Transmission Lines
 - Section VI.c on Circuit Breaker Emergency Rating Calculation Spreadsheet
 - Section VI.i. on Gas Insulated Substation Rating Methodology
- New Sections in TSS Guideline under development:
 - Section V.q on STATCOM
 - New Section on Gas Insulated Substations
- Periodic review of TSS Guideline, Chapter VI. Rating Guides
 - Special Session on Section VI.a Bare Overhead Transmission Conductor Ratings
 - Review and updates of other sections are in progress.

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2021 Activities – TSS Technical Surveys

- Joint technical discussions with PJM Operation and Planning
 - Flow CBs and associated substation rating methodology
 - SVC and STATCOM Reactive Power Model and Operational Performance
- TSS Survey on wind speed associated design criteria for transmission facilities
- TO's participations are the key of success of these surveys.

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- TSS will investigate technology evolutions and develop/update the following TSS Guideline Sections:
 - Winterization of substations and transmission lines
 - Design and Maintenance Guidelines on GIS and GIL Facilities
 - Dynamic Line Rating technologies
 - 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



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Transmission and Substation Subcommittee Update



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