

Designated Entity Design Standards Task Force – Underground Lines



Anisha Fernandes
PJM Planning Committee
November 9th 2017

- Issue Charge/Problem Statement:
 - Develop minimum engineering design standards, which would take into consideration geography, physical and other local needs (noise level, undergrounding requirements, etc.) of the project. The design standards would apply to projects that are competitively solicited and address the following areas:
 - Transmission Lines
 - Substations
 - System Protection and Control Design and Coordination
 - <http://pjm.com/~media/committees-groups/task-forces/dedstf/postings/20150818-dedstf-issue-charge.ashx>

- Q1 2016 the DEDSTF elected via informal poll to divide into the following three subgroups to focus attention on specific minimum design standards:
 - Transmission Lines
 - Substations
 - System Protection and Control Design and Coordination

- Transmission Lines
 - Overhead Transmission Lines – All work activities completed
 - Underground Lines – First Read October Planning Committee
 - HVDC – Revisit in 1-2 years to re-evaluate need for minimum standards
- Substation
 - Review of HVDC at 10/19/2017 meeting
- Protection
 - All work activities completed

- DEDSTF members developed a set of minimum standards required for proposals that include underground lines
- Standards were developed within Transmission Lines sub-group
- PJM applied formatting and style guidelines to combine sub-group work into a single document
- DEDSTF requirements must be followed for all proposals that will require the signing of a Designated Entity Agreement

- **Red text** – as brought to October PC
- **Purple text** – additional revisions as discussed at 10/19/2017 DEDSTF
- **Blue text** – additional revisions per post October PC/DEDSTF comments (as approved by DEDSTF Underground stakeholders)

Additional revision requested with endorsement

- Add as new paragraph

3.7.4.14 Testing solid dielectric transmission cables and accessories is required to qualify cable and cable components for design and qualification/acceptance. Test standards and procedures developed by organizations such as the Association of Edison Illuminating Companies (AEIC), the Insulated Conductors Committee (ICC) of the IEEE, the International Electrotechnical Commission (IEC), and the Insulated Cable Engineers Association (ICEA) shall be applied to the cable testing.

- (Subsequent paragraphs will be re-numbered accordingly).

- PC First Read: October 12, 2017
- **Seek PC Endorsement: November 9, 2017**

- Task Force Final Report to Planning Committee
- Updates to DEDSTF charter to reflect biennial review
- Convert Task Force to Subcommittee

- Please direct all questions to the PJM DEDSTF facilitation team:
 - Facilitator: Michael.Herman@pjm.com
 - Secretary: Anisha.Fernandes@pjm.com
 - Lead SME: Suzanne.Glatz@pjm.com

- Revision History
 - Ver 1, November 2, 2017 Original posted
 - Ver 2, November 9, 2017, Added slide 7 to add additional revision