Tutorial IEEE 1427 – Electrical Clearances & Insulation Levels in Air-Insutaled Electric Power Substation

May 18<sup>th</sup>, 2014, Sunday 8:00 am – noon

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This tutorial covers IEEE 1427 with emphasis on the following topics:

• Electrical operating & safety clearances in air-insulated substation for three phase AC system,

1 kV to 800 kV

- Selection of Basic lightning impulse insulation level (BIL) and Basic switching impulse insulation level (BSL)
- Design procedures for insulation coordination related to clearances
- National Electric Safety Code requirements
- Reduce clearances for compact substation and voltage uprating applications
- Criteria for insulation coordination, procedures and examples