Standby Generators

TE237

Course Overview:

The course is intended to provide electric engineers with collective and recent knowledge aboutStandby Generators including: operation, maintenance, testing and protection. The informationincludes both theoretical and practical aspects and will be enhanced with computer software inappropriate sections.

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Course Outline:

1. GENERATORS AND PRIME MOVERS· Overview: Generator Purpose, Operation and Control· Types of Prime Movers· Generator Basic Electrical Fundamentals· Grounding Types and Construction· UPS System Fundamentals2. PROTECTION AND TRANSFER OF ELECTRICAL POWER· Circuit Breakers· Switchgear· Transfer Switches· Parallel Operation3. GENERATORS AND ENGINE CONTROLS· Governors· Voltage Regulators· Engine Protection· Onsite Generator Controls including PLC's and SCADA Systems4. AUXILIARY SYSTEMS· Fuel Systems· Cooling Systems· Exhaust Systems· Vibration Attenuation· Sound Attenuation· Engine Starting Systems· Load Banks· Emissions Control5. GENERATOR APPLICATIONS GENERATOR APPLICATIONS· Cogeneration· Emergency Power Systems· Legally Required Standby Systems· Optional Standby Systems· Applicable Codes and Standards6. TROUBLESHOOTING AND MAINTENANCE OF ONSITE POWER GENERATION SYSTEMS· Developing a Logical Systematic Approach to Troubleshooting· Common Generator Problems· Recommended Generator Maintenance Practices

Who Should Attend:

Electric utility engineers in various departments deal with interconnected generators testing,protection, operation, stability and control. The course is also suitable for all engineers deal withemergency generators and local generation.

Training Language:

EN

Training Methodology:

-Presentation & Slides
-Audio Visual Aids
-Interactive Discussion
-Participatory Exercise
-Action Learning
-Class Activities
-Case Studies
-Workshops
-Simulation