Classifications

1. Generation
- 1.1. Hydro
- 1.2. Fossil plants
- 1.3. Nuclear
- 1.4. Solar and Wind
- 1.5. Storage Systems and Hydrogen
- 1.6. Fuel cells

2. Transmission
- 2.1. HVDC and FACTS
- 2.2. Insulation coordination
- 2.3. Lightning and electromagnetic transients
- 2.4. Supergrids, Smart Grids, WAMS, PMU
- 2.5. Transformers

3. Distribution
- 3.1. Smart Grids
- 3.2. EMC/Power Quality
- 3.3. Distributed generation/Integration of renewables
- 3.4. Lightning induced effects

4. Utilization and Appliances

5. System Planning and Operation
- 5.1. Optimal Power Flow
- 5.2. Static and Dynamic Security Assessment

6. System Dynamics and Control
- 6.1. Transient stability
- 6.2. Voltage stability
- 6.3. Oscillatory stability
- 6.4. Blackout and Restoration
- 6.5. Modelling and simulation

7. Protection, Relaying and Automation

8. Information Systems and Telecommunication

9. Diagnostics and Reliability

10. Electricity Markets and Regulation

11. Rotating Electrical Machines and Drives

12. Power Electronics

13. Artificial intelligence techniques

13.1. Neural Networks
13.2. Fuzzy Logic