All Participants - Fundamentals

Fundamentals

1.1 Australian Networks and Elements of Electrical Power Systems
1.2 Renewables and Emerging Technologies
1.3 Communication Technologies
1.4 Legislation and Regulation Overview
1.5 Electrical Fundamentals – DC
1.6 Electrical Fundamentals – AC
1.7 Electrical Fundamentals – Use Drawings, Schedules, Codes and Specifications
1.8 Electrical Fundamentals – Electromagnetics
1.9 Electrical Fundamentals – Basic Electrical
1.10 Computational Problems
1.11 Electrical Fundamentals – Electrical Measurements
1.12 Protection Fundamentals
1.13 Switching Fundamentals
1.14 Management and Coordination of Work Parties and Field Operators
1.15 Voltage Control and Reactive Power
1.16 Reliability Operating Limits and Reliability
1.17 Power Control and the Energy Market
1.18 Energy Market Power
1.19 Resource and Demand Balancing
1.20 Human Factors – Effective Communications
1.21 Human Factors – Fatigue and Fatigue Management
1.22 Human Factors – Human Machine Interface
1.23 Human Factors – Decision Making and Degradation Factors

	Transmission	Distribution	Generation
Intermediate	2.1 System Ride Through 2.2 Power System Disturbance and Contingency Response 2.3 Coordination 2.4 Power System Stability 2.5 Fault Finding and Management 2.6 Monitor and Control Field Staff 2.7 Respond to Protection Operations 2.8 Develop Switching Programs 2.9 Operate and Monitor System SCADA	3.1 System Ride Through 3.2 Power System Disturbance and Contingency Response 3.3 Coordination 3.4 Power System Stability 3.5 Fault Finding and Management 3.6 Transmission Operations 3.7 Monitor and Control Field Staff 3.8 Respond to Protection Operations 3.9 Develop Switching Programs 3.10 Operate and Monitor System SCADA	4.1 System Ride Through 4.2 Power System Disturbance and Contingency Response 4.3 Coordination 4.4 Energy Market Services 4.5 Fault Finding and Management 4.6 Monitor and Control Operations Staff 4.7 Respond to Protection Operations 4.8 Operate and Monitor Generation System Thermal Wind Solar Hydro
Advanced	5.1 Synchrophases 5.2 Transmission Planning 5.3 Facilities Design, Connections and Maintenance 5.4 Power System Simulation 5.5 Power System Restoration 5.6 Cyber Infrastructure and Security 5.7 Respond to Complex Protection Operations 5.8 Lead and Coordinate a Control Room	6.1 Power System Simulation 6.2 Power System Restoration 6.3 Cyber Infrastructure and Security 6.4 Respond to Complex Protection Operations 6.5 Lead and Coordinate a Control Room	7.1 Transmission Congestion 7.2 Power System Restoration 7.3 Cyber Infrastructure and Security 7.4 Respond to Complex Protection Operations 7.5 Lead and Coordinate a Control Room