

Power Electrician POA (2000) Subtask to Unit Comparison

NOA Subtask		Manitoba Unit(s)
Task 1 - Participates in workplace health and safety practices.		
1.01	Demonstrates basic safety awareness.	A5 Communications with Co-workers and Others A6 Trade Safety Awareness
1.02	Uses safety gear and personal protective equipment.	A5 Communications with Co-workers and Others A6 Trade Safety Awareness
1.03	Maintains a safe workplace environment.	A5 Communications with Co-workers and Others A6 Trade Safety Awareness
1.04	Follows Safety/Health Acts and regulations.	A5 Communications with Co-workers and Others A6 Trade Safety Awareness
Task 2 - Uses equipment, hand/power tools, instruments, and wiring methods.		
2.01	Uses hand tools.	Throughout
2.02	Uses power tools.	Throughout
2.03	Uses powder-actuated tools.	Throughout
2.04	Uses technical instruments, and testers.	Throughout
2.05	Operates bucket-truck and other lift-trucks.	Throughout
2.06	Follows approved wiring methods.	Throughout
2.07	Solders.	Throughout
Task 3 - Reads/interprets prints, and manuals.		
3.01	Reads/interprets codes, company policies, company maintenance manuals, and manufacturer manuals.	A5 Communications with Co-workers and Others A6 Trade Safety Awareness
3.02	Reads/interprets drawings (e.g., electrical, hydraulic and pneumatic, mechanical and civil, block diagrams, and PLC logic drawings).	A5 Communications with Co-workers and Others A6 Trade Safety Awareness B3 Control Systems
3.03	Reads/interprets Canadian Electrical Code and the Manitoba Regulation.	A1 Electrical Code I A6 Trade Safety Awareness B1 Electrical Code II C1 Electrical Code III D1 Electrical Code IV
Task 4 - Communicates on the job.		
4.01	Establishes and maintains effective communications with co-workers and others.	A5 Communications with Co-workers and Others
4.02	Uses computers.	A4 Computers D9 Provincial Electrical Requirements
4.03	Uses telephone and fax.	A5 Communications with Co-workers and Others

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4.04	Uses hand-signals and two-way radios.	A5 Communications with Co-workers and Others
4.05	Uses diagrams, schedules, and charts to communicate.	A5 Communications with Co-workers and Others
4.06	Completes documentation/reports.	A5 Communications with Co-workers and Others
Task 5 - Trains personnel.		
5.01	Conducts orientation.	A5 Communications with Co-workers and Others D9 Provincial Electrical Requirements A6 Trade Safety Awareness
5.02	Assesses capabilities.	A5 Communications with Co-workers and Others D9 Provincial Electrical Requirements A6 Trade Safety Awareness
5.03	Provides direction, guidance.	A5 Communications with Co-workers and Others D9 Provincial Electrical Requirements A6 Trade Safety Awareness
5.04	Supervises, monitors.	A5 Communications with Co-workers and Others D9 Provincial Electrical Requirements A6 Trade Safety Awareness
5.05	Evaluates performance.	A5 Communications with Co-workers and Others D9 Provincial Electrical Requirements A6 Trade Safety Awareness
Task 6 - Uses mathematical and scientific methods fundamental to the power electrician's trade.		
6.01	Performs mathematical operations required to solve technical problems.	A3 Mathematics and Sciences C4 PLCs/Control Systems (includes Maths) D9 Provincial Electrical Requirements
6.02	Applies scientific principles to the solution of technical problems.	A3 Mathematics and Sciences C4 PLCs/Control Systems (includes Maths) D9 Provincial Electrical Requirements
Task 7 - Uses basic electrical, electronic, and digital devices and circuits.		
7.01	Applies electrical concepts to job-related tasks.	A2 DC and Electrical Fundamentals B2 AC Fundamentals D9 Provincial Electrical Requirements
7.02	Applies electronic concepts to job-related tasks.	B4 Electronic Concepts I C3 Electronic Concepts II
7.03	Applies digital logic concepts to job-related tasks.	B4 Electronic Concepts I C3 Electronic Concepts II D5 Digital Logic Concepts D9 Provincial Electrical Requirements
7.04	Uses fibre-optic equipment.	C3 Electronic Concepts II D5 Digital Logic Concepts D9 Provincial Electrical Requirements
7.05	Analyzes three-phase systems.	C1 Electrical Code III C2 Three Phase Theory and Transformers (excludes Power Quality) C3 Electronic Concepts II D5 Digital Logic Concepts D9 Provincial Electrical Requirements
Task 8 – Analyzes system requirements.		
8.01	Calculates loading, ensures alternate feed, and coordinates with customers.	A3 Mathematics and Sciences C4 PLCs/Control Systems (includes Maths)

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		D9 Provincial Electrical Requirements
8.02	Performs switching.	A3 Mathematics and Sciences
		C4 PLCs/Control Systems (includes Maths)
		D9 Provincial Electrical Requirements
Task 9 - Installs/removes and maintains high-voltage equipment.		
9.01	Installs/removes and maintains transformers and reactors.	C2 Three Phase Theory and Transformers (excludes Power Quality)
		D9 Provincial Electrical Requirements
9.02	Installs/removes and maintains oil-circuit reclosers (OCRs).	C5 Breakers/Fuses/Disconnects/Bus
		D9 Provincial Electrical Requirements
9.03	Installs/removes and maintains breakers.	C5 Breakers/Fuses/Disconnects/Bus
		D9 Provincial Electrical Requirements
9.04	Installs/removes and maintains disconnects.	C5 Breakers/Fuses/Disconnects/Bus
9.05	Installs/removes and maintains regulating equipment.	D9 Provincial Electrical Requirements
9.06	Installs/removes and maintains grounding, bonding and temporary grounding systems.	D9 Provincial Electrical Requirements
9.07	Installs/removes and maintains buswork.	C5 Breakers/Fuses/Disconnects/Bus/Preventive Maintenance
		D9 Provincial Electrical Requirements
9.08	Installs/removes and maintains lightning/surge arrestors.	C1 Electrical Code III
		D9 Provincial Electrical Requirements
9.09	Installs/removes and maintains high-voltage direct current (HVDC) equipment.	D9 Provincial Electrical Requirements
Task 10 - Installs/removes and maintains low-voltage equipment.		
10.01	Installs/removes and maintains lighting equipment.	A1 Electrical Code I
		B1 Electrical Code II
		B3 Control Systems
		C1 Electrical Code III
		D1 Electrical Code IV
		D9 Provincial Electrical Requirements
10.02	Installs/removes and maintains Heating Ventilation and Air-Conditioning (HVAC) equipment.	B3 Control Systems
		C1 Electrical Code III
		D1 Electrical Code IV
		D9 Provincial Electrical Requirements
10.03	Installs/removes and maintains equipment-cooling systems.	A1 Electrical Code I
		B1 Electrical Code II
		C1 Electrical Code III
		D1 Electrical Code IV
		D9 Provincial Electrical Requirements
10.04	Installs/removes and maintains AC/DC distribution equipment.	A2 DC and Electrical Fundamentals
		B2 AC Fundamentals
		B5 DC Machines/Controls
		C6 AC Machines
		D9 Provincial Electrical Requirements

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Task 11 - Installs/removes and maintains rotating machines.		
11.01	Installs/removes and maintains motors.	A2 DC and Electrical Fundamentals
		B2 AC Fundamentals
		B5 DC Machines/Controls
		C6 AC Machines
		D9 Provincial Electrical Requirements
11.02	Installs/removes and maintains generators.	A2 DC and Electrical Fundamentals
		B2 AC Fundamentals
		B5 DC Machines/Controls
		D9 Provincial Electrical Requirements
11.03	Installs/removes and maintains excitation equipment.	D7 Governor/Excitation Equipment
		D9 Provincial Electrical Requirements
11.04	Installs/removes and maintains governor equipment.	D7 Governor/Excitation Equipment
		D9 Provincial Electrical Requirements
Task 12 - Installs/removes and maintains control, protection, and monitoring systems.		
12.01	Installs/removes and maintains control systems.	B3 Control Systems
		B5 DC Machines/Controls
		C4 PLCs/Control Systems (includes Maths)
		D2 Microprocessor-based Control and Monitoring Systems (PLCs) and Control Systems
		D9 Provincial Electrical Requirements
12.02	Installs, removes and maintains microprocessor-based control and monitoring systems (PLCs).	C5 Breakers/Fuses/Disconnects/Bus/Preventive Maintenance
		D2 Microprocessor-based Control and Monitoring Systems (PLCs) and Control Systems
		D6 Relay and Protection Systems
		D9 Provincial Electrical Requirements
12.03	Installs/removes and maintains battery banks/chargers and power supplies.	C1 Electrical Code III
		D9 Provincial Electrical Requirements
12.04	Installs/removes and maintains AC and DC motor-controls.	A2 DC and Electrical Fundamentals
		B2 AC Fundamentals
		B3 Control Systems
		B5 DC Machines/Controls
		C4 PLCs/Control Systems (includes Maths)
		C6 AC Machines
		D2 Microprocessor-based Control and Monitoring Systems (PLCs) and Control Systems
		D9 Provincial Electrical Requirements
12.05	Installs/removes and maintains metering systems.	D8 Metering
		D9 Provincial Electrical Requirements
12.06	Installs/removes and maintains fire-detection/suppression equipment.	A1 Electrical Code I
		B1 Electrical Code II
		C1 Electrical Code III
		D1 Electrical Code IV
		D9 Provincial Electrical Requirements
12.07	Installs/removes and maintains building-security systems.	A1 Electrical Code I
		B1 Electrical Code II

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		C1 Electrical Code III
		D1 Electrical Code IV
		D9 Provincial Electrical Requirements
12.08	Installs/removes and maintains instrumentation and devices.	A1 Electrical Code I
		B1 Electrical Code II
		C1 Electrical Code III
		D1 Electrical Code IV
		D9 Provincial Electrical Requirements
12.09	Installs/removes and maintains relay and protection systems.	D6 Relay and Protection Systems
		D9 Provincial Electrical Requirements
12.10	Installs/removes and maintains annunciation (monitoring systems).	D2 Microprocessor-based Control and Monitoring Systems (PLCs) and Control Systems
		D9 Provincial Electrical Requirements
Task 13 - Troubleshoots.		
13.01	Recognizes and analyzes problem.	A1 Electrical Code I
		B1 Electrical Code II
		C1 Electrical Code III
		D1 Electrical Code IV
		D9 Provincial Electrical Requirements
13.02	Selects tools, equipment, and personnel to address problem.	A1 Electrical Code I
		B1 Electrical Code II
		C1 Electrical Code III
		D1 Electrical Code IV
		D9 Provincial Electrical Requirements
13.03	Resolves problem.	A1 Electrical Code I
		B1 Electrical Code II
		C1 Electrical Code III
		D1 Electrical Code IV
		D9 Provincial Electrical Requirements
13.04	Verifies problem has been resolved.	A1 Electrical Code I
		B1 Electrical Code II
		C1 Electrical Code III
		D1 Electrical Code IV
		D9 Provincial Electrical Requirements
Task 14 - Plans and organizes project requirements.		
14.01	Participates in project requirements.	A1 Electrical Code I
		B1 Electrical Code II
		C1 Electrical Code III
		D1 Electrical Code IV
		D9 Provincial Electrical Requirements
14.02	Estimates budget and cost-control.	A1 Electrical Code I
		B1 Electrical Code II
		C1 Electrical Code III
		D1 Electrical Code IV
		D9 Provincial Electrical Requirements
14.03	Schedules activities.	A1 Electrical Code I
		B1 Electrical Code II
		C1 Electrical Code III
		D1 Electrical Code IV
		D9 Provincial Electrical Requirements
14.04	Organizes materials and tools.	A1 Electrical Code I
		B1 Electrical Code II
		C1 Electrical Code III
		D1 Electrical Code IV

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		D9 Provincial Electrical Requirements
14.05	Coordinates labour and other trades' requirements.	A1 Electrical Code I
		A5 Communications with Co-workers and Others
		A6 Trade Safety Awareness
		B1 Electrical Code II
		C1 Electrical Code III
		D1 Electrical Code IV
		D9 Provincial Electrical Requirements