| 1. Title | Master the performance requirements for power generation or transmission and distribution network to perform operation, repair and maintenance |
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| 2. Code | EMELOR502A |
| 3. Range | Applicable to operation, repair and maintenance of power generation or transmission and distribution network equipment. Master the performance specification requirements for the operation, repair and maintenance techniques for installations of various levels of power generation or transmission and distribution network, and organize and perform inspection, testing and commissioning. |
| 4. Level | 5 |
| 5. Credit | 9 |
| 6. Competency | Performance Requirements |
| | 6.1 Master power generation or transmission and distribution system performance requirements, manufacturer's technical specification requirements on operation, repair and maintenance and the operation of the Safety Rules (Electrical) Master engineering performance requirements for generation or transmission and distribution network, including contract's general specifications, contract's particular specifications, relevant international standards, project schedules, details and implementation of work procedures, engineering quotation checklist, tender drawings, etc. Master the operation of the Safety Rules (Electrical) including operation, repair and maintenance, etc. Master manufacturer's technical specifications for operation, repair and maintenance of power generation or transmission and distribution network equipment Master a series of operational performance requirements on operation, repair and maintenance of power generation installations and transmission and distribution network equipment |
| | 6.2 Implement operation, repair and maintenance tasks for power generation or transmission and distribution network equipment in order to improve power system performance Selecting materials, tools and instruments that meet the technical requirements on operation, repair and maintenance of power facilities and devices, such as spare parts, hand tools, lifting appliances, insulation impedance tester and high voltage capacity tester Considering the characteristics and constraints of the work site to use tools that meet the technical requirements on operation, repair and maintenance |

• Using appropriate computer control system software and hardware control and protection circuit to assist in performing operation, repair and maintenance Implementing the arrangement of operation, repair and maintenance of power generation or transmission and distribution network equipment Completing approved record documents on operation, repair and maintenance and assessing test results Implementing emergency procedures and contingency measures Follow manufacturer's technical specification requirements on operation, repair and maintenance to implement operation, repair and maintenance for installations of various levels of power generation or transmission and distribution network Follow the performance requirements on operation, repair and maintenance to implement operation, repair and maintenance of various levels of generation installations and transmission and distribution network equipment, including active power and non-active power control, voltage regulation control, stability, synchronous speed control, etc., and the application of repair and maintenance such as preventive maintenance management concept, mean time failure rate, repair and maintenance spare parts management, etc. Compare different system performance information according to relevant standards, re-formulate operation, repair and maintenance plans in order to perform improvements for operation, repair and maintenance 6.3 Professionalism in the Follow the regulations and safety guidelines for the industry to ensure that power network equipment operation, repair and maintenance of power operation, repair and maintenance is implemented safely generation or transmission and the power generation or transmission and distribution and distribution network network is safe to use equipment

| 7. Assessment Criteria | The integrated outcome requirements of this unit of competency are: |
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| | (i) Capable to master the operation of the Safety Rules (Electrical) in order to perform repair and |
| | maintenance for power generation or transmission and distribution network equipment; |
| | (ii) Capable to follow manufacturer's technical specifications for operation, repair and |
| | maintenance to understand the key points of the operation, repair and maintenance of |
| | installations of various levels of power generation or transmission and distribution network |
| | and |
| | (iii) Capable to formulate suitable improvement plans on operation, repair and maintenance |
| | according to different power system performance information and relevant standards. |
| 8. Remarks | |