

1. Title	Inspect, commission and test power recovery systems
2. Code	EMRAIT507A
3. Range	Analyze the design of railway overhead feeder system and the circuit configuration logic; inspect, commission and test the power recovery system control interlocking and protection functions according to the conclusions of analysis.
4. Level	5
5. Credits	5
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Working principles of railway overhead feeder system and power recovery system</p> <ul style="list-style-type: none"> ◆ Be familiar with the working principles of railway overhead feeder system ◆ Be familiar with the operation and working principles of power recovery system ◆ Understand the requirements and procedures of resuming the power of railway overhead feeder system <p>6.2 Methods and procedures of inspecting, commissioning and testing power recovery system</p> <ul style="list-style-type: none"> ◆ Capable to analyze the railway overhead feeder system design and the circuit configuration logic; inspect, commission and test the controlling functions of the power recovery system, including the circuit switching logic, the PLC controlling function and the control circuit, according to the conclusions of analysis ◆ Capable to inspect, commission and test the interlocking functions of the power recovery system, including the circuit logic, the PLC function and the circuit, according to the circuit configuration logic ◆ Capable to inspect, commission and test the protective functions of the power recovery system, including the circuit logic, the PLC function and the circuit, according to the circuit configuration logic and protection logic ◆ Capable to analyze all test results and confirm the commissioning of the power recovery system of railway overhead feeder system <p>6.3 Professionalism in inspecting, commissioning and testing power recovery system equipment of railway overhead system</p> <ul style="list-style-type: none"> ◆ Inspect, test and commission the power recovery system equipment of railway overhead system according to the standards and requirements for work safety, health, environmental protection and quality management of railway works ◆ Understand the safety guidelines as required by the law and codes of practice in inspecting, testing and commissioning the power recovery system equipment

7. Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is:</p> <ul style="list-style-type: none"> (i) Capable to draft a set of instructions and standards for inspecting, testing and commissioning the controlling, interlocking and protection functions of the power recovery system effectively; and (ii) Capable to analyze all test results effectively and commission the power recovery system of railway overhead feeder system.
8. Remarks	<p>The credit value of this unit of competency is set on the presumption that the person already possesses the professional knowledge of power supply system and equipment.</p>