



**Electrical Networks Roles**

Lineworker 1	Lineworker 2	Overhead Safety Observer	Substation Electrician	SCADA Technician	Substation Tester	Excavation Applicant (NAE)	Electrical/Substation OEM	Permit to Work Recipient	Earthing & Bonding	Cable Joints & Terminations
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**Medical Assessment Requirements**

Category 1 Health Assessment	M	M	M	M	M			M	M	M
Category 3 Health Assessment			M					M		

**Qualifications**

Certificate III in Electrotechnology/Electrician				M (1)	M (1)					M (1)	M (1)
Certificate III in Power Systems - Rail Traction	M (1)									M (1)	
Certificate III in Power Systems - Powerline	M (1)									M (1)	
Certificate III in Power Systems - Distribution Overhead	M (1)										
Certificate IV in Power Systems Substations				M (1)	M (1)					M (1)	
Certificate III in Distribution Underground						M (1)				M (1)	M (1)
Certificate IV in Industrial Electronics and Control											
Advanced Diploma of ES - Power Systems						M (1)				M (1)	
Advanced Diploma of Industrial Data Communication, Networking and IT					M (1)						

**Frequency**

**Licences / Registration**

5 Year	ESV Line Worker License	M									
5 Year	ESV Line Worker License - Rail (S)		M (7)								
5 Year	ESV Line Worker License - Cable Jointing										M (8)
3 Year	ESV Spotters Registration			M							
5 Year	Electricians Licence				M	M	M				M (8)
5 Year	Licence to perform dogging				M (1)						
5 Year	Licence to perform rigging				M (1)						

**Frequency**

**Additional Training Requirements**

1 Year	Provide Cardiopulmonary Resuscitation	M	M	M	M	M	M			M	M	M
1 Year	Perform Rescue from a Live LV panel	M	M		M	M	M					
1 Year	Provide First Aid in ESI Environment	M	M	M	M	M	M				M	M
3 Year	Provide First Aid	M	M	M	M	M	M			M	M	M
1 Year	Perform EWP Controlled Descent Escape	M (4)	M (4)									
1 Year	Perform EWP Rescue	M (4)	M (4)									
1 Year	Perform P86 Top Release	M (4)	M (4)									
3 Year	MTM Overhead Safety Observer Training	M (4)	M (4)		M							
3 Year	MTM Permit to Work Course										M	
2 Year	Certificate of Currency - Track Force Protection Coordinator - Level 3.2										M (1)	
2 Year	Certificate of Currency - Track Force Protection Coordinator - Level 3.3										M (1)	
3 Year	Workplace Spotting for Service Assets			M								
	MTM Notification and Approval for Excavation (NAE) Applicant							M				
	Licence/Certificate to maintain/service manufacturers equipment									M (3)		
3 Year	Record of relevant experience - Earthing & Bonding											M
3 Year	Record of relevant experience - Cable Joints & Terminations											M

**National / Network Job Roles that must be added to a RIW Cardholders Profile**

	EWP >11m (National)	M (4)	M (4)									
	MTM Authorised Person - Substation Entry (EE) (S)					#						
	MTM Authorised Electrical Tester (ET) (S)							M				
	MTM - Track Force Protection Coordinator - Level 3.2										M (2)	
	MTM - Track Force Protection Coordinator - Level 3.3										M (2)	
	Around The Track Person National (Construction and Maintenance) - National	M	M	M	M	M	M			M	M	M
	MTM - Operator	M	M	M	M	M	M			M	M	M

**Legend**

# - If the RIW Cardholder is not an ER, EO or ET Authorised Person and is required to enter a substation

M - Mandatory

**Notes**

- Either qualification.
- A valid TFPC 3.2 or TFPC 3.3 role must be valid on a RIW Cardholder's profile when performing PTW Recipient tasks.
- Licence/Certificate required as evidence to maintain/service relevant manufacturers equipment.
- Only mandatory if you are utilising an EWP >11m. These competencies are not linked to the Lineworker 1 job role as these competencies are managed through network based competencies.
- Whilst other HV Authorisations exist, Substation Entry is the only HV Authorisation a Third Party is permitted to hold on their RIW profile. Other HV Authorisations in the RIW System will only be valid if the RIW Cardholder is an MTM Employee.
- RIW Cardholders wishing to apply for Access Authorities must also hold MTM - Operator and Around The Track Person (Construction & Maintenance) - National.
- Competency is for MTM employees only.
- Either licence.

Refer to Page 2 for Authorisation Job Role Requirements

**NOTE: These are to be used as a guide only. If you are unsure which role applied to you, please seek clarification from the operator with whom you propose to work as to what role is required for your intended duties. It is the individual's responsibility to ensure that the appropriate role is held before work is carried out.**

Job Role	Definition
Lineworker 1	A Lineworker 1 is an Electrical Lineworker who's work carries out the following works on the traction supply network: the installation, maintenance, modification, stringing, tensioning, terminating, securing, connection and disconnection of overhead electrical conductors, catenary wires and conductor support wires; and the installation, maintenance, modification, securing, connection and disconnection of associated electrical traction equipment.
Lineworker 2	A Lineworker 2 or overhead trade assistants have been working in the railway operations for many years under the supervision of fully qualified traction lineworker. The work undertaken by Lineworker 2's includes some tasks that now require a lineworker licence, however they do not generally hold the qualifications and experience required to obtain a Lineworker Licence.
Substation Electrician	A Substation Electrician will undertake corrective, preventative maintenance and renew activities of electrical network assets, in accordance with relevant standards when working on the traction substations and substation network infrastructure.
SCADA Technician	To assist the Senior Control and Indication Officer in the maintenance (routine and reactive), renewals and additions required on the Train Supervisory Control and Data Acquisition (SCADA) System to meet the requirements of the Electrical Network Asset Management Plan.
Excavation Applicant (NAE)	All persons submitting Notification for Excavation Applications are required to have completed the MTM NAE Application Training course. The MTM NAE training course is available in an online format.
Overhead Safety Observer	An Overhead Safety Observer performs Overhead Safety Observing within the MTM rail network. The position also exists to undertake the duty of observing and warning against unsafe approach to electrical HV aerial apparatus.
Electrical/Substation OEM	Individuals who provide support generally to complete Fault finding/maintain equipment as the Original Equipment Manufacturer.
Substation Tester	A Substation tester is responsible for routine maintenance, fault investigations, commissioning and acceptance testing of all equipment associated with traction substations, tie-stations, industrial substations and signal power systems.
Permit to Work Recipient	For Metro Trains Melbourne employees, Alliance Partners, and Contractors who are required to work under the Permit to Work Near (PTWN) Conditions as set out by the MTM procedures. The PTWN course is available in a face-to-face format through Thomson Bridge.
Earthing & Bonding	For Metro Trains Melbourne employees, Alliance Partners, and Contractors who are required to perform Earthing & Bonding works on MTM network.
Cable Joints & Terminations	For Metro Trains Melbourne employees, Alliance Partners, and Contractors who are required to perform Cable Joints and Termination works on MTM network.



Electrical Networks Roles		MTM - Authorised Applicant - AA	MTM - Instructed Person - Substation	MTM - Authorised Person - Substation Entry - EE	MTM - Authorised Electrical Recipient - in Training - ER in Training*	MTM - Authorised Electrical Recipient - ER*	MTM - Authorised Electrical Operator - in Training - EO in Training*	MTM - Authorised Electrical Operator - EO*	MTM - Authorised Electrical Tester - ET*	MTM - Authorised Overhead Recipient - in Training - OR in Training*	MTM - Authorised Overhead Recipient - OR*	MTM - Authorised Live HV Worker - in Training - OL in Training*	MTM - Authorised Live HV Worker - OL*	MTM - Authorised Overhead Operator - OO*	MTM - Authorised Signals Recipient - SR	MTM - Authorised Signals Operator - in Training - SO in Training*	MTM - Authorised Signals Operator - SO*	MTM - Authorised Signals Tester - ST*

Frequency	RiW Competency Requirements	MTM - Operator	MTM - Instructed Person - National	MTM - Track Force Protection Coordinator - Level 3.2	MTM - Track Force Protection Coordinator - Level 4.3	MTM - Authorised Applicant - AA	MTM - Instructed Person - Substation	MTM - Authorised Person - Substation Entry - EE	MTM - Authorised Electrical Recipient - in Training - ER in Training*	MTM - Authorised Electrical Recipient - ER*	MTM - Authorised Electrical Operator - in Training - EO in Training*	MTM - Authorised Electrical Operator - EO*	MTM - Authorised Electrical Tester - ET*	MTM - Authorised Overhead Recipient - in Training - OR in Training*	MTM - Authorised Overhead Recipient - OR*	MTM - Authorised Live HV Worker - in Training - OL in Training*	MTM - Authorised Live HV Worker - OL*	MTM - Authorised Overhead Operator - OO*	MTM - Authorised Signals Recipient - SR	MTM - Authorised Signals Operator - in Training - SO in Training*	MTM - Authorised Signals Operator - SO*	MTM - Authorised Signals Tester - ST*
1 Year	Provide cardiopulmonary resuscitation																					
3 Year	Provide First Aid																					
3 Year	Perform Rescue from a Live LV Panel																					
1 Year	Provide first aid in an ES environment																					
1 Year	Certificate of Completion MTM Authorised Applicant																					
3 Year	Certificate of Authorisation MTM Instructed Person - Substation																					
3 Year	Certificate of Authorisation MTM Substation Entry - EE Authorisation																					
3 Year	MTM - Authorised Electrical Recipient - in Training - ER in Training																					
3 Year	Certificate of Authorisation MTM Electrical Recipient - ER Authorisation																					
3 Year	Certificate of Completion MTM Electrical Operator - EO in Training																					
3 Year	Certificate of Authorisation MTM Electrical Operator - EO Authorisation																					
3 Year	Certificate of Authorisation MTM Electrical Tester - ET Authorisation																					
3 Year	Certificate of Authorisation MTM Overhead Recipient - OR Authorisation																					
3 Year	Certificate of Completion MTM Live HV Worker - OL in Training																					
3 Year	Certificate of Authorisation MTM Live HV Worker - OL Authorisation																					
3 Year	Certificate of Completion MTM Overhead Operator - OO Authorisation																					
3 Year	Certificate of Authorisation MTM Signals Recipient - SR Authorisation																					
3 Year	Certificate of Completion MTM Signals Operator - SO in Training																					
3 Year	Certificate of Authorisation MTM Signals Operator - SO Authorisation																					

National / Network Job Roles that must be added to a RiW Cardholders Profile		MTM - Operator	MTM - Instructed Person - National	MTM - Track Force Protection Coordinator - Level 3.2	MTM - Track Force Protection Coordinator - Level 4.3
	MTM - Operator				
	Around The Track Person National (Construction and Maintenance) - National				
	MTM - Track Force Protection Coordinator - Level 3.2				
	MTM - Track Force Protection Coordinator - Level 4.3				

**Legend**  
**M** - Mandatory  
 \* - Only MTM employees can hold these job roles

**Notes**  
 1. Person holding authorisation should be competency assessed at no more than intervals of 3 years  
 2. A valid TTPC 3.2 or TTPC 3.3 role must be valid on a RiW Cardholder's profile when holding this authorisation.

**RiW cardholders wishing to apply for Access Authorities must also hold MTM - Operator and Around The Track Personnel (Construction & Maintenance) - National**  
 Refer to A4563 Training and Authorisation Procedure

Job Role	Definition
MTM - Authorised Applicant - AA	Authorised to make application for Access Authorities on MTM high voltage or traction electrical apparatus.
MTM - Instructed Person - Substation	Authorised to Enter MTM substations under supervision by an Authorised Person.
MTM - Authorised Person - Substation Entry - EE	Authorised to Enter MTM substations unaccompanied.
MTM - Authorised Electrical Recipient - in Training - ER in Training*	This is the role that will be held during ER Authorisation training, while in field log book is being completed.
MTM - Authorised Electrical Recipient - ER*	On all MTM high voltage or traction electrical apparatus, authorised to: Enter MTM Substations unaccompanied, Receive Electrical Access Permits, and Receive Permits to Work Near Electrical Apparatus.
MTM - Authorised Electrical Operator - in Training - EO in Training*	This is the role that will be held during EO Authorisation training, while in field log book is being completed.
MTM - Authorised Electrical Operator - EO*	On all MTM high voltage or traction electrical apparatus, authorised to: Enter MTM Substations unaccompanied, Operate, earth and short circuit, issue, receive and cancel Electrical Access Permits, issue, receive and cancel Permits to Work Near Electrical Apparatus, issue, receive and relinquish SCAPs, issue and cancel Sanctions for Testing, and Receive Sanctions for Testing for RE11 DCBR maintenance purposes only.
MTM - Authorised Electrical Tester - ET*	On all MTM high voltage or traction electrical apparatus, authorised to: Enter MTM Substations unaccompanied, Operate, earth and short circuit, issue, receive and cancel Electrical Access Permits, issue, receive and cancel Permits to Work Near Electrical Apparatus, issue, receive and relinquish SCAPs, issue, receive and cancel Sanctions for Testing, Undertake High Voltage testing including testing above normal operating voltage.
MTM - Authorised Overhead Recipient - in Training - OR in Training*	This is the role that will be held during OR Authorisation training, while in field log book is being completed.
MTM - Authorised Overhead Recipient - OR*	On aerial electrical apparatus outside of a substation, authorised to: Receive Electrical Access Permits, and Receive Permits to Work Near Electrical Apparatus.
MTM - Authorised Live HV Worker - in Training - OL in Training*	This is the role that will be held during OL Authorisation training, while in field log book is being completed.
MTM - Authorised Live HV Worker - OL*	On aerial electrical apparatus outside of a substation, authorised to: Operate, earth and short circuit, issue, receive and cancel Electrical Access Permits, issue, receive and cancel Permits to Work Near Electrical Apparatus, issue, receive and relinquish SCAPs, Undertake particular work on or near exposed live high voltage conductors.
MTM - Authorised Overhead Operator - OO*	On aerial electrical apparatus outside of a substation, authorised to: Operate, earth and short circuit, issue, receive and cancel Electrical Access Permits, issue, receive and cancel Permits to Work Near Electrical Apparatus, and issue, receive and relinquish SCAPs.
MTM - Authorised Signals Recipient - in Training - SR in Training	This is the role that will be held during SR Authorisation training, while in field log book is being completed.
MTM - Authorised Signals Recipient - SR	On all MTM Signal/Essential Services Supply electrical apparatus, authorised to: Receive Electrical Access Permits, and Receive Permits to Work Near Electrical Apparatus.
MTM - Authorised Signals Operator - in Training - SO in Training*	This is the role that will be held during SO Authorisation training, while in field log book is being completed.
MTM - Authorised Signals Operator - SO*	On MTM Signal/Essential Services Supply electrical apparatus, authorised to: Operate, earth and short circuit, issue, receive and cancel Electrical Access Permits, issue, receive and cancel Permits to Work Near Electrical Apparatus, and issue and cancel Sanctions for Testing.
MTM - Authorised Signals Tester - ST*	On MTM Signal/Essential Services Supply electrical apparatus, authorised to: Operate, earth and short circuit, issue, receive and cancel Electrical Access Permits, issue, receive and cancel Permits to Work Near Electrical Apparatus, issue, receive and cancel Sanctions for Testing, Undertake High Voltage testing for Signal HV cables only including testing above normal operating voltage.