Engineering System Integrity

Engineering Guideline
Electrical Distribution Unit

GL D 79101

Contractors Assessment Guide for AES13 Accredited Cable Jointer (Polymeric Cables)

Version 1.2

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Transport Sydney Trains

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Document control

Version	Date	Author/ Prin. Eng.	Summary of change
1.0	10 August 2017	Brian Lidbetter	First version
1.1	23 April 2021	Peter Woods	Update roles and position names to reflect the current organisation
1.2	07 March 2022	Joanna Santos	Updated document references

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1 Introduction

As an operator of the electrical system, Sydney Trains is defined in the Electricity Supply Act (1995) NSW as a Distribution Network Service Provider (DNSP) and, as a DNSP, has the obligation to ensure that sound processes are in place to govern its practices. This document defines the requirements and expectations of contractors requesting electrical authorisation to carry out electrical works on Sydney Trains' electrical infrastructure.

Sydney Trains *SP D 79055 Electrical Competency Specific Certifications* outlines the Sydney Trains process for accreditation/re-accreditation of AES13 Accredited Cable Jointers (Polymeric Cables).

2 Scope

The following information is provided as further guidance material to develop an assessment tool to meet SP D 79055 Table 8 requirement F. This information will directly refer to requirements out of SP D 79055 and reference to that document should be made while reading this information.

2.1 Requirements

AES13 Accredited Cable Jointer Accreditation/Re-Accreditation (SP D 79055 Section 5.7 Table 8):

1. Re Requirement A, a copy of Certificate.
2. Re Requirement B, written advice from Transport for NSW (TfNSW) Training must be provided to the certifying authority that the person has successfully completed either the accreditation or re-accreditation ENSR examination as applicable.
3. Re Requirement C, written advice from TfNSW Training or an RTO must be provided to the certifying authority.
4. Re Requirement D, written advice from TfNSW Training or an RTO must be provided to the certifying authority.
5. Re Requirement E, written advice from TfNSW Training or an RTO must be provided to the certifying authority.
6. Re Requirement F, the assessment by the supervisor and assessor must include on-the-job assessment of the person’s ongoing ability to perform the duties of a Cable Jointer. For the purposes of this assessment, in order for the Contracting Company’s assessment material to receive consideration as being deemed suitable to the Sydney Trains Associate Director Electrical Distribution Unit, it must give detail on how this assessment will be performed in the following activities: Section 3 Assessment Content.
7. Re Requirement of Note 2, a copy of Certificate issued by the manufacture of the jointing/termination kit that has been approved for use by TfNSW Asset Management Branch (AMB).

3 Assessment Content

Minimum assessment content to comply with Requirement F of Table 8

	On-the-job assessment for Accredited Cable Jointer – Activities Description
(a)	**Appropriate use of SWMs and SWIs and pre-work briefs**
(b)	**Works in the vicinity of running lines safely**
	Valid Rail Industry Workers card
(c)	**Applies excavation and earthworks policies**
(d)	**Works around electrical equipment safely**
	Appropriate use of mobile plant around RailCorp's Electrical System
	Sydney Trains Pole hazard assessment form usage
	Compliance with Safe Approach Distances
	Complies with requirements of Sydney Trains Electrical Permits
(e)	**Works aloft safely**
	Appropriate use of harness
	Appropriate attached climbing
	Appropriate use of rescue kit
	Appropriate pole chair usage
	Appropriate EWP usage
	Appropriate ladder usage
	Appropriate rigging procedures
	Correct on site handling of tools, material and equipment
	Inspects safety equipment before use
	Displays the appropriate attitude to their duties to their co-workers, the public and themselves
(f)	**Wears appropriate safety equipment and PPE**
	Correct clothing
	Safety glasses
	Hard hat
(g)	**Follows the instructions of supervisors**
(h)	**Demonstrated knowledge of their own QA system and the Accredited Cable Jointer's role in this system**
	What are the important issues to consider for reliability and safety?
	Checklist

	On-the-job assessment for Accredited Cable Jointer – Activities Description
(i)	**Trenches**
	Excavation of cable trench and joint bay
	Need for trench and joint bay shoring
	Prevention of unauthorised entry to trench and joint bays
	Trench and joint bay illumination at night
(j)	**Install/Maintain cable routes**
	Use correct methods
	Install LV/HV Polymeric cables
(k)	**Joint/Terminate Polymeric LV/HV cables**
	Use TfNSW approved jointing and termination kits
	Joint and terminate using approved methods
	Joint and terminate 1500v Positive screened cables
	Joint and terminate 1500v Negative unscreened cables
(l)	**Joint Polymeric to Paper Insulated**
	Use TfNSW approved jointing kits
	Joint using approved methods
(m)	**Dealing with an unplanned event by drawing on essential knowledge and associated skills to provide appropriate solutions incorporated in the holistic assessment with the above items**