

Engineering Guideline  
Electrical Distribution Unit

GL D 79101

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

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Guideline

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## Document control

Version	Date	Author/ Prin. Eng.	Summary of change
1.0	23 August 2017	Brian Lidbetter	First version

## Summary of changes from previous version

Summary of change	Section

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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 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 guide PR D 78701 "Personnel Certifications – Electrical Authorisations" outlines 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 so to develop an assessment tool to meet Table 8 requirement F of PR D 78701. This information will directly refer to requirements out of PR D 78701 and reference to that document should be made whilst reading this information

### 2.1 Requirements

AES13 Accredited Cable Jointer Accreditation / Re-Accreditation (Section 11.7 Table 8 of PR D 78701)

1. Re Requirement A, Copy of Certificate.
2. Re Requirement B, written advice from 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 Professional Head Electrical Engineering ESI, 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, Copy of certificate issued by the manufacture of the jointing / termination kit that has been approved for use by TfNSW Asset Standards Authority (ASA).

### 3 Assessment Content

Minimum assessment content to comply with Requirement F in Table 8 of PR D 78701.

<b>On the Job assessment for Accredited Cable Jointer- Activities Description</b>	
<b>(a)</b>	<b>Appropriate use of SWMS and SWI's and pre work briefs</b>
<b>(b)</b>	<b>Works in the vicinity of running lines safely</b>
	Valid Rail Industry Workers card
<b>(c)</b>	<b>Applies excavation and earthworks policies</b>
<b>(d)</b>	<b>Works around electrical equipment safely</b>
	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
<b>(e)</b>	<b>Works aloft safely</b>
	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 his duties to his co-workers, the public and himself
<b>(f)</b>	<b>Wears appropriate safety equipment and PPE</b>
	Correct clothing
	Safety glasses
	Hard Hat
<b>(g)</b>	<b>Follows the instructions of supervisors</b>
<b>(h)</b>	<b>Demonstrated knowledge of their own QA system and the Accredited Cable Jointers role in this system</b>
	What are the important issues to consider for reliability and safety
	Checklist
<b>(i)</b>	<b>Trenches</b>
	Excavation of cable trench & joint bay
	Need for trench & joint bay shoring
	Prevention of unauthorised entry to trench & joint bays
	Trench & joint bay illumination at night

<b>On the Job assessment for Accredited Cable Jointer- Activities Description</b>	
<b>(j)</b>	<b>Install/Maintain cable routes</b>
	Use correct methods
	Install LV/HV Polymeric cables
<b>(k)</b>	<b>Joint/Terminate Polymeric LV/HV cables</b>
	Use ASA 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
<b>(l)</b>	<b>Joint Polymeric to Paper Insulated</b>
	Use ASA approved jointing kits
	Joint using approved methods
<b>(m)</b>	<b>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</b>