DISTRIBUTION COMMISSIONING FORM (DCF) 1.3 – Low voltage aerial bundled conductor

Purpose: This instruction covers the testing and commissioning of replacement or new installation of low voltage aerial bundled conductor.

For more information refer to the *Distribution Commissioning Manual (EDM 34137510)*

Parameters

Ensure that no customer supplies will be energised during the commissioning/connection process.

Address/Pole No:			**Work Package No:**		
SPIDAWeb Pick ID/Pole No(s):	**From**		**Cal Date:**		

1. Conductor Tension Test

Tension the conductors as per the conductor tension table and record the details.	Date tensioned			Conductors at correct tension
	Conductor size	150 mm ☐	95 mm ☐	
	Conductor temperature	°C		
	Average bay length	metres		
	Tension (dynamometer)	kg		

2. Continuity Test

	Test connections	Test results	Resistor values
Use a resistor box and 500 V insulation resistance tester to positively distinguish cable ends.	Red to neutral	Ω	Ω
	White to neutral	Ω	Ω
	Blue to neutral	Ω	Ω

3. Insulation Resistance Test

	Test connections	Test results	Acceptable values
Use a 500 V insulation resistance tester for a minimum of 1 minute.	Red to white	Ω	100 M Ω or higher for new cables 10 M Ω or higher for aged cables
	White to blue	Ω	
	Blue to red	Ω	
	Red to neutral	Ω	
	White to neutral	Ω	
	Blue to neutral	Ω	

4. Installation and Construction Checks

Checks	Check that the construction complies with the distribution construction standards and applicable design drawings.	
	Check that the structures are numbered and labelled correctly.	
	Check the conductor arrangement and ensure correct clearances from the ground, buildings and trees.	
	Check the conductor for damage and ensure it is secured correctly.	
	Check that all Insulation piercing connectors (IPC), line taps and neutral connections are completed correctly and secured.	
	Check that all the groundwork is completed.	

5. Energisation

Checks	Ensure that all short-circuiting equipment has been removed, and EAP cancelled	
	Check that the low voltage fuses are correct rating (if applicable).	
	Energise the circuit in accordance with the low voltage switching program.	
	If the LV network is to be interconnected, phase out across open points; otherwise phase out as required.	
	Record the switching program number.	
	Conduct a service connection test on all installations where the service connections have been disturbed.	

6. Handover

I hereby certify that all items have been completed with satisfactory results and transfer control to the network operating authority.			
Commissioned by		BNA	
Signature		Date & Time	

1. Ensure the work area is left tidy with no hazards to the public.
2. Hand over responsibility to the operating authority.
3. The completed form must be returned to the project file/work pack.