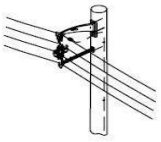
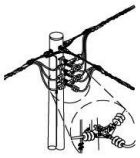
DISTRIBUTION COMMISSIONING FORM (DCF)1.4 – High Voltage Aerial Bundled Connection and Hendrix Spacer Cable



Purpose: This instruction covers the testing and commissioning of new or replacement high voltage aerial bundled conductor and Hendrix spacer cable. These tests must be performed after installation, alteration, repair or jointing and before the cable is put into service.



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

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

1. Catenary/Messenger Tension Check

Tension the conductors as per the conductor tension table and record the details.	Date tensioned		Conductors at correct tension
	Conductor size and type		
	Conductor temperature	°C	
	Average bay length	meters	
	Tension (dynamometer)	kg	
	Hendrix cable sag	cm	

2. Continuity Test

	Test Connections	Test Results	Resistor Box 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 5 kV insulation resistance tester for a minimum of 1 minute.	Red to white	Ω	10,000 MΩ or higher for new cables
	White to blue	Ω	
	Blue to red	Ω	
	Red to earth	Ω	100 MΩ or higher for aged cables
	White to earth	Ω	
	Blue to earth	Ω	

4. Installation and Construction Checks

Inspect the constructed line and carry out the following checks:	Ensure that the earth resistance test results at all earth points are acceptable.	
	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 line taps and earth connections are completed correctly and secured.	
	Check lightning arresters and earthing bars are in place where applicable.	
	Check that all the ground work is completed.	
	Ensure that all construction team leaders have transferred control of the project to the switching officer.	

5. Energisation

High voltage aerial bundle conductor or Hendrix spacer cable.	Confirm all program working/program earths removed and permit cancelled	
	Energise according to switching program:	
	Phase out under NOCC switching schedules across open points, if applicable.	
	Complete the switching program	

6. Handover

I hereby certify that all items have been completed with satisfactory results and transfer control to the network operating authority.			
Commissioned by		NAC	
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.