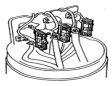
DISTRIBUTION COMMISSIONING FORM (DCF) 2.8 – Spuds Single Phase to Three Phase Pillar

Purpose: This instruction covers the testing and commissioning of a SPUDS single-phase pillar that has been converted to a standard three-phase pillar.

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

Note: The following tests must be carried out at the time of conversion. If the circuit contains more than 10 pillars, use another set of test sheets.

Work Package No:		**Test Site/Location:**	

1. Location of Pillars (Lot No. and Road Name

A		F	
B		G	
C		H	
D		I	
E		J	

2. Visual Inspection and Safety Check

	Description	A	B	C	D	E	F	G	H	I	J
1	Check that the construction complies with the distribution construction standards and applicable design drawings.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
2	Ensure ALL the customers associated with the changeover have been identified and their supplies isolated. (Check that the meter has stopped recording.)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
3	Separate the customers' load neutral from the meter and use the "Do Not Operate Danger" tag on the meter box to indicate that work is being undertaken.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
4	At the point of supply isolate the single-phase cable and ensure all bridged conductors are removed.	Yes ☐					No ☐				
5	Remove **ALL** the customers' connections from the pillars and ensure that they are positively identified. **See note 1 below**.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
6	Remove all the bridging links from the pillars: red to white and blue to neutral.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
7	At the point of supply, undertake the cable reconfiguration to three phases as per the work package requirements.	Yes ☐					No ☐				

3. Insulation Resistance Test

Use a 1 kV insulation resistance tester for 1 minute at the point of supply between phase to neutral, phase to earth, and neutral to earth.	Phase to neutral	Phase to earth	Neutral to earth
	MΩ	MΩ	MΩ

4. Energisation

1	Ensure that all persons and equipment are clear of the circuit and all pillars and units are secured. Energise the circuit in accordance with the LV switching program			Yes					No					
2	Check luminaire TPS cable active and neutral wires are in the correct load terminals and the screws are tight.	Phasing		V	V	V	V	V	V	V	V	V	V	
		Red – white	**376 V – 440 V**	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
		White – blue		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
		Blue – red		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
		Red – neutral	**216 V – 253 V**	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
		White –neutral		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
		Blue – neutral		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
3	Reconnect the customers' installations in accordance with the work package phasing requirements and complete the Service Connection Test Form for each connection. Treat all as new connections.			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	

5. Phase Out Tests

Phase out at the feeder pillars, mini-pillars and LV connection points, because cross-phasing is likely to occur at these points.		
Red – red	V	Acceptable results (0–10V)
White – white	V	
Blue – blue	V	

6. Handover of Responsibility

The person responsible for commissioning must ensure that checks are completed and test results comply with the minimum standards

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	

Note 1: In accordance with section 3.8 of the WA Electrical Requirements, label all underground mains of consumers at the point of supply.

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.