

LV SERVICE CONNECTION TEST FORM



Service Address: _____

Date: ___/___/___

Meter Number: _____

Reading : *Import* _____ *Export* _____

- This form must be completed in accordance with the requirements in the AS 4741: 2010 and in conjunction with Horizon Power's Testing Low Voltage Service Connections FI 7.5
- If there are any suspicions that the installation has been tampered with, **DO NOT** continue, change or alter the installation, and immediately report it to your Formal Leader.
- If voltage and impedance values cannot be achieved as per the SCT, **DO NOT** connect. Inform your Formal Leader.

TESTING

1. Identify Phase Rotation before isolating supply (existing 3 phase connections). Circle **CORRECT** **INCORRECT** for part power, or non 3 Phase tick n/a
2. Turn Customers **Main Switch Off** and **remove or isolate Service Protection Device(s) (SPD)**. For remote main switch installation remove or isolate Service Protection Device(s). Prove Meter terminals **de-energised** and remove load phase(s) tails from meter.
3. Remove line neutral from meter terminal, for Multiple Master Metering and CT installations, remove line neutral from MEN link / Neutral bar (**NEW Connections Only**)
4. Install independent temporary earth stake a minimum of 2 metres away from the installation
5. Connect Network Analyser earth lead to the temporary earth stake and the Network Analyser neutral lead to the removed neutral tail
6. Check the Network Analyser **LIT** screen, if **RED** light and 2 x **GREEN** lights = **REVERSED POLARITY**, stop work, rectify fault and **re-test** from step 2.
7. **Reinstate supply** place Network Analyser probe onto line phase(s) at the meter terminals or phase links, push start and record sequenced test results on table below
8. Place Network Analyser neutral lead onto metal meter enclosure and test and record V-> Line to metal meter enclosure on table below
9. Test between V->Line and Load Neutral with Network Analyser and record the results on table below
10. Using an approved volt meter, test and record the voltage between line neutral and load neutral and record the results on the table below
11. Using an approved volt meter record phase to phase voltages and record the results on table below.

<i>Test</i>	<i>Acceptable Range</i>	RED	WHITE	BLUE
V- Line – Neutral	228v to 254v	= volts	= volts	= volts
V- Line – Earth	228v to 254v	= volts	= volts	= volts
Z- Line – Earth	<2000 Ω	= Ω	Only enter values in the relevant sections and N/A all others not required	
Z- Line - Neutral	<1.0 Ω	= Ω	= Ω	= Ω
Z- Neutral Wire	<0.8 Ω	= Ω	= Ω	= Ω
V- Line to Metal Meter Enclosure	228v to 254v	= volts	For multi master metering installations where there is already a meter connected only carry out voltage and load tests NO IMPEDANCE TEST required	
V- Line – Load Neutral	228v to 254v	= volts		
V- Line Neutral – Load Neutral	<6v	= volts		
Split Phase to Phase Volts	451v to 509v	R-B = volts		
Phase to Phase Volts	390v to 440v	R-W = volts	R-B = volts	W-B = volts

12. Standard connections confirm phase rotation the same as step 1, Circle **CORRECT** **INCORRECT** **N/A**
13. **Isolate Supply**, reinstate neutral at meter or neutral link and ensure integrity of **ALL** connections (**TUG TEST**)
14. **Reinstate Supply**, perform meter function test (**LOAD TEST**) confirm supply and turn main switch **ON**
15. For remote main switch installation, and new connections if the customer is **NOT** home, the **AMI** meter must be left in a **de-energised state** and customer card left

I the undersigned, hereby certify that I have performed the tests listed above, and confirm that the service connection is safe and correctly connected to the network:

Name of Tester: _____ Pay #: _____ Signature: _____ Date: _____

Customer Service Overhead Attachment (CUSA) Datasheet (and Work Request)

*POLE SHORT PLANT ID:			
*INSTALLED DATE (dd/mm/yy)			
*STREET:			
*SUBURB:			
*LOCATION IN STREET:			
Please tick one - applicable: √			
NOTE: * Indicates you must fill in the field. Do not use highlighters.			
*CARRY OVER POLE (HP Structure):	<input type="checkbox"/> Existing	<input type="checkbox"/> Replaced	<input type="checkbox"/> No Carry Over Pole
	<input type="checkbox"/> New Installed		
*CARRY OVER POLE (Clamp Type):	<input type="checkbox"/> Helical Clamp	<input type="checkbox"/> Roller Clamp	<input type="checkbox"/> Insulated Open Aerial
	<input type="checkbox"/> Wedge Clamp	<input type="checkbox"/> Bare Open Aerial	<input type="checkbox"/> N/A
	<input type="checkbox"/> Other (Specify):		
*CONSUMER POLE (Clamp Type):	<input type="checkbox"/> Helical Clamp	<input type="checkbox"/> Roller Clamp	<input type="checkbox"/> Insulated Open Aerial
	<input type="checkbox"/> Wedge Clamp	<input type="checkbox"/> Bare Open Aerial	<input type="checkbox"/> N/A
	<input type="checkbox"/> Other (Specify):		
*CONSUMER POLE (Structure):	<input type="checkbox"/> Wood	<input type="checkbox"/> Metal (Round)	<input type="checkbox"/> No Consumer Pole
	<input type="checkbox"/> Concrete	<input type="checkbox"/> Metal (Lattice)	
	<input type="checkbox"/> Other (Specify):		
*LVCL PHASE CONNECTION	<input type="checkbox"/> Red	<input type="checkbox"/> White	<input type="checkbox"/> Blue
	<input type="checkbox"/> Red/White	<input type="checkbox"/> Red/Blue	<input type="checkbox"/> White/Blue
	<input type="checkbox"/> Red/White/Blue		
*MAINS CONNECTION BOX (Fixed To):	<input type="checkbox"/> Barge Board	<input type="checkbox"/> Gooseneck	<input type="checkbox"/> Shed
	<input type="checkbox"/> Raiser Bracket	<input type="checkbox"/> Brick wall	<input type="checkbox"/> Pole
	<input type="checkbox"/> No MCB Gooseneck (crimped)	<input type="checkbox"/> Metal Fascia	<input type="checkbox"/> No MCB
	<input type="checkbox"/> Other (Specify):		
*MCB (Service Cable Clamp at POA):	<input type="checkbox"/> Helical Clamp	<input type="checkbox"/> Roller Clamp	<input type="checkbox"/> Insulated Open Aerial
	<input type="checkbox"/> Wedge Clamp	<input type="checkbox"/> Bare Open Aerial	
	<input type="checkbox"/> Other (Specify):		
*NUMBER OF PHASES SUPPLYING CUSTOMER:	<input type="checkbox"/> Single	<input type="checkbox"/> Three	<input type="checkbox"/> Two
*NUMBER OF SPANS			
*SEPARATE / SPLIT CORES	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
*SERVICE CABLE (Carrier Type):	<input type="checkbox"/> 6MM PVC Flat 2-Core	<input type="checkbox"/> 16MM 2-Core	
	<input type="checkbox"/> 6MM PVC Twisted 2-Core	<input type="checkbox"/> 16MM 3-Core	
	<input type="checkbox"/> 6MM PVC 3-Core	<input type="checkbox"/> 16MM 4-Core	
	<input type="checkbox"/> 6MM XLPE 2-Core	<input type="checkbox"/> 16MM PVC Flat 2-Core	
	<input type="checkbox"/> 6MM XLPE 3-Core	<input type="checkbox"/> 16MM PVC Twisted 2-Core	
	<input type="checkbox"/> 6MM XLPE 4-Core	<input type="checkbox"/> 16MM PVC 4-Core	
	<input type="checkbox"/> 6MM PVC 4-Core	<input type="checkbox"/> 16MM XLPE 2-Core	
	<input type="checkbox"/> 95MM LV ABC	<input type="checkbox"/> 16MM XLPE 4-Core	
	<input type="checkbox"/> 150MM LV ABC		
	<input type="checkbox"/> Other (Specify):		
*SERVICE CROSSES LAND USED BY VEHICLES	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
*SERVICE CROSSES ROAD	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
*SERVICE HEIGHT -			

- Centre of Road (5.5m)	Metres	
- Land Used by Vehicles (3.0m)	Metres	
- Point of Attachment (2.7m)	Metres	
*SERVICE PROTECTION DEVICE:	<input type="checkbox"/> Nilcrome 30 AMP Fuse Box	<input type="checkbox"/> Nilcrome 60 AMP Fuse Box
	<input type="checkbox"/> Flowline Fuse Box	<input type="checkbox"/> Circuit Breaker
	<input type="checkbox"/> Meter Fuse	<input type="checkbox"/> Fascia Fuse
	<input type="checkbox"/> Pole + Meter/Fascia Fuse	<input type="checkbox"/> None
	<input type="checkbox"/> Other (Specify):	
*SPAN LENGTHS between structures starting at street mains pole & ending at POA:	Section 1:	Metres
	Section 2:	Metres
	Section 3:	Metres
*STREET MAINS SERVICE TAP:	<input type="checkbox"/> Wrapped Conductors	<input type="checkbox"/> Bolted Clamp
	<input type="checkbox"/> Insulated Piercing Connector	<input type="checkbox"/> Split Bolt
	<input type="checkbox"/> Other (Specify):	
*MAINS CONNECTION BOX LOCATION (MCB):	<input type="checkbox"/> Consumer Pole with Meter	<input type="checkbox"/> Building
	<input type="checkbox"/> Consumer Pole no Meter	<input type="checkbox"/> No MCB – crimped at building
	<input type="checkbox"/> No MCB - crimped at consumer pole	<input type="checkbox"/> No MCB - open wire to building
	<input type="checkbox"/> No MCB - open wire to consumer pole	
	<input type="checkbox"/> Other (Specify):	
*METER # AT INSPECTION:		
*SERVICE CONNECTION INSPECTION COMPLETED:	<input type="checkbox"/> YES	<input type="checkbox"/> NO
*YOUR NAME:		
*PAY / CONTRACT # :		
OFFICE PHONE # :		
MOBILE # :		
*SIGNATURE / DATE:		

Instructions:

- **POLE SHORT PLANT ID** - Id of Pole where LVCL (Low Voltage Customer Line) is attached to – typically starts with 'S' or 'U'.
- **MAINS CONNECTION BOX** - This is the location of the MCB. Although where there is no MCB this is the point where the service cable connects (on the customer side).
- **MAINS CONNECTION BOX** - The location where the MCB is attached or location of the POA in the absence of a MCB.
- **SERVICE PROTECTION DEVICE** - The type of service protection device used for the service.
- **SERVICE HEIGHT - Centre of Road (m)** -The height of the service cable at the centre of the road.
- **SERVICE HEIGHT - Land Used by Vehicles (m)** - The lowest service height measurement on any land traversable by vehicles (other than road).
- **SPAN LENGTHS (METRES) - Part of Carrier – LVCL** - The length of the service cable between any two supporting structures.