Service Connection Test Form

All tests must be carried out in accordance with the *Service connection testing work instruction*

Failure to follow the steps in this form could cause hazardous voltages in the installation resulting in a Fatality Risk.

Installation Address		**DATE:**	
Job Description:			
Existing meter number	**New meter number**	**W/O#**	

Direct ☐	**MMM** ☐	**Distributed** ☑	**CT** ☐	**UMS (no meter)** ☐	**Pre-76 Earth Wire** ☐
Single Phase - ANNA ☐		**Three Phase - AA AA AA NN** ☐		**Split Phase - AA XX AA NN** ☐	
Service connection test point		**Meter terminals (Direct)** ☐		**SPD for installation (MMM)** ☐	

Test Instrument type	PAT ID or Serial No	Calibration date

Disconnection

Only enter values in the relevant sections and N/A all others not required.

1.	Prove test instrument function. Conduct a touch voltage test from independent earth (>2.0m from the installation/meter box/earthed equipment) to the customer earth test point. If meter box is non-metallic, record test location below. *Refer to Work Instruction if result >6V AC and capture in comments section.*				**V**	
	Customer's neutral link or Neutral bar (consumers side) ☐	Customer's earth stake (check it is connected to the earth wire) ☐	Metallic (water) pipe (check it is connected to the earth wire) ☐	Other: Please write location here ☐		
2.	**Direct only:** Z-Line loop impedance (Z line) – Line Active to Customer Earth Test Point. If result is >1Ω, refer to Work Instruction and capture in comments section.				**Ω**	
3.	**Direct only:** Record position of customer's main switch(es) (ON/OFF) if accessible. Note position of additional switches in 'Comments' below. **Switch customer's main switch(es) (including EG main switches) OFF.**				ON ☐	OFF ☐ Remote ☐
4.	Confirm voltage(s) are within supply limits and record 3-phase rotation (e.g., 1;2;3)			Phase rotation:		
5.	**Direct:** Isolate SPD. Confirm no voltage. Apply "Do not access or alter" tag. **OR** **MMM, DMM, CT, UMS:** Isolate SPD. Confirm no voltage on load side of SPD. Apply "Do not access or alter" tag to the SPD				☐ **OR** ☐	
6.	**Direct**: Remove L1 and LOAD active(s) first, then LOAD neutral and Pre 1976 earth wire from the meter terminals. **OR** **MMM, DMM, CT, UMS**: Remove and secure the LINE neutral from the MEN/Neutral link bar.				☐ **OR** ☐	

I certify that I have performed all the above tests in sequence and confirm that the service is correctly disconnected from the network.

Name:		**Signature**	
BNA:		**Date & Time:**	
Comments:			

Service Connection Test Form

RECONNECTION		
Test Instrument Type	PAT ID or Serial No	Calibration date

7.	**Direct:** Confirm all Main Switches, including EG, are in the **OFF** position as instructed in SCT form step 3, including additional switch positions in comments. Confirm that only the LINE neutral and the LINE active/s are connected to the meter. **MMM, DMM, CT, UMS**: confirm SPD switched off**.**	☐
8.	**Prove test instrument function. Direct:** Install SPD. Confirm voltage(s). Remove "Do not access or alter" label. **OR** **Prove test instrument function. MMM, DMM, CT, UMS**: Confirm voltage to line side of SPD. **Leave SPD switched OFF.**	☐ OR ☐
9.	Confirm phase rotation is the same as found in STEP 4 (e.g., 1;2;3)	Phase rotation:
10.	**Line impedance, polarity, and voltage test (at meter position or SPD)**. Record results in the table below:	

Test	Acceptable Range	Red (Or single-phase)	White	Blue
a) V - 3-Phase Voltages (if applicable)	360V - 440V	U1-2 **V**	U1-3 **V**	U2-3 **V**
b) Z - Line loop impedance (Z Line)	<1.0Ω	**Ω**	**Ω**	**Ω**
c) Z- R - Earth (RE)	<10kΩ	**kΩ**	**kΩ**	**kΩ**
d) V - Line Active – Line/Reference Neutral	207V - 254V	**V**	**V**	**V**
e) V- Line Active – Independent Earth	207V - 254V	**V**	**V**	**V**
f) V- Line/Reference Neutral – Independent Earth	<6V	**V**		
g) V - Split Phase to Phase Volts (if applicable)	451V to 509V	**V**		
h) V - Line Active to Customer Earth Point	Within 5V of test d)	**V**		
i) V - Line Active – Pre-1976 earth wire/ Load Neutral/Neutral bar	Within 5V of test d)	**V**		

11.	**Direct**: Isolate SPD. Confirm no voltage. **OR** **MMM, DMM, CT, UMS**: Confirm voltage between LINE neutral and Neutral bar is <6V.	☐ OR ☐
12.	**Direct**: Reconnect LOAD neutral/pre-76 earth wire first, and then LOAD active(s) and L1. **OR** **MMM, DMM, CT, UMS**: Reconnect the LINE neutral to the Neutral bar.	☐ OR ☐
13.	**PULL TEST ALL CONNECTIONS WITH PLIERS AND RETIGHTEN**	☐
14.	**Direct only:** Install SPD. Using a load tester prove the meter function.	☐
15.	**Direct only:** (repeat step 2): Z - Line loop impedance (Z line) – Line Active to Customer Earth Test Point.	**Ω**
16.	**Direct:** Confirm customer's Main Switch as found in STEP 3 (including EG main switches) ON ☐ OFF ☐ Remote ☐ **OR** **MMM, DMM, CT, UMS**: Remove "Do not access or alter" label. Switch SPD ON, confirm voltage.	☐
17.	Repeat step 1: Touch voltage test from independent earth to the customer's earth test point. Expected result <6V AC. *If result is >6V AC, Refer to Work Instruction and capture in comments*.	**V**
18.	**Direct:** Photograph the meter panel showing the meter number and confirming all tails connected correctly. **MMM**, also photograph the Line Neutral connected to the customer's neutral bar.	☐

I certify that I have performed all the above tests in sequence and confirm that the service connection is safe and correctly connected to the network.

Name		**Signature**	
BNA		**Date & Time:**	
Comments:			