

Burdening of Metering Installation requirements



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When do we add burden

Metering installations where the Current Transformers (CT) on site require certification as a component by an Approved Testhouse (ATH), meeting the following criteria

1. Metering installations with measured burdens of less than 25% of CT's VA rating
2. Where Non-TWS/Energy Control's manufactured CT's have been installed
3. TWS/Energy Control manufactured CT's with ratio's less than 500/5 have been installed

Note: site certification under Part 10 Schedule 10.7 Clause 12 Comparative Recertification and Clause 32 Alternative Certification do not require CT's to be certified as a component.

What is used to increase burden

- Where additional burden is calculated during site certification testing as being required then additional lengths of conductor are added to the Current circuit wiring.
- Length and size of the additional conductor required can be calculated

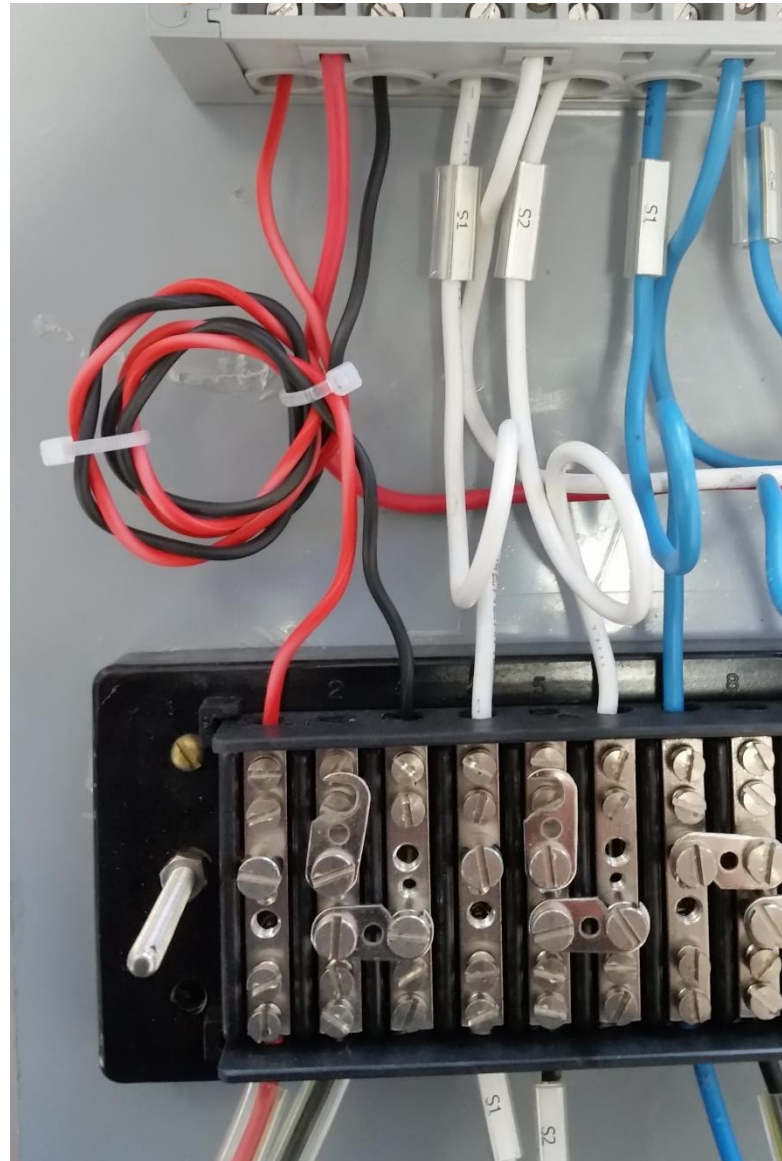
Conductor cross sectional area (mm ²)	Resistance per metre run (ohms/m)
1.5	0.0121
2.5	0.00741



Example: 1.5mm conduit, total length 1 metre added to circuit.

Where do we place the added resistance

The additional conductor length is added between the Testblock and the meter terminals



Why this method

Placement

- Safer to add the additional burdening at the testblock than working within a CT live CT chamber

Material used

- Reduces the risk of failures which could lead to unmeasured loads not being detected i.e component failure or additional terminations in the circuit.
- Doesn't require an additional component to be carried by the Metering Technicians