

30 April 2019

MEP and ATH forum Management of Burden

Chair - Steve Woods, Veritek

Agenda for Session

- Clarification of Code requirements
- Consequences of not addressing burden
- Proposed solutions
- Discussion and agreement on best practice
- Status of certification
- Questions

Background

- Primarily concerned about low burden leading to over recording of kWh in CT metered installations.
- Non-compliance has been recorded in many ATH and MEP audit reports because low burden has not been addressed.
- Debate has centered around the fact that installations are still within 2.5%
- Is it really a problem?
 - Test results demonstrate that some CT makes and models over record when the burden is low
 - TWS stated in 2013: *“For a non-compensated CT, as detailed above, as the burden on it is reduced, the errors approach zero but always remain negative. This will not ever result in the CT going out of class. However, for a compensated CT, because the errors can become positive, there is the very real chance that the CT will go out of class in the positive direction when under-burdened.”*

Compliance

- Ron's presentation will cover compliance
- ATH Code considerations for solutions:
 - Clause 10.41: *An ATH must ... exercise a degree of skill ... determined by reference to good industry practice ... that would reasonably be expected from a skilled and experienced ATH.*
 - Clause 6(2)(c) of 10.8: *"...ensure that the wiring between metering components in the metering installation ... does not, to the extent practicable, include intermediate joints for any measuring transformer circuits."*
 - Clause 28(4) of 10.7: *"... ensure that ... the measuring transformer is connected to a meter through a test facility ..."*
 - Definition of test facility: *"test facility means a device that permits access to voltage and current circuits for testing purposes while the metering installation is in normal service"*
 - Clause 28(4)(i) of 10.7: *"ensure that the total burden ... does not exceed..."*
Burden must be measured.

Industry presentations

- Industry presentations on burdening from
 - Leith Robertson and Graham Wells, Wells
 - Grant Batchelor, Vircom EMS
 - Chris Chambers, Metrix Limited

Discussions

COMPETITION • RELIABILITY • EFFICIENCY

Questions

- Is the Code clear, are more stringent Code requirements necessary?
- Who pays for losses and errors associated with metering installations?
- Are there different burdening requirements for different categories of metering installations?
- What is best practice for installing burdening resistors
- Why are burdening resistors not being installed currently?
- Are best practice guidelines necessary? If so, what form?
- Are test blocks still necessary?