

separate dead band to each analogue point, which shall apply to all four associated thresholds.

1.3.23.19 Profile Alarms

Profile alarms shall be provided to test analogue values against diurnal profiles, i.e. a series of thresholds variable with time. The facility shall test analogue values (e.g. a level) against a profile of thresholds and shall report alarms when the value transgresses the threshold after a value and time dead band period. Alarms inhibiting shall be available.

1.3.23.20 Rate of Change Alarms

- A. The facility to generate alarms on exceeding a pre-set rate of change value shall also be included. It shall be possible to define an alarm on any of the following:
- a. Rate of rise.
 - b. Rate of fall.
 - c. No change, i.e. an instrument has failed and is not responding to process conditions.
 - d. Rate of change alarms shall also be definable for pulse count values.

1.3.23.21 Alarm Suppression

- A. A privileged user shall be able to suppress “nuisance” or spurious alarms for a single point and the complete RTU. The SCADA system shall have facilities within the RTU to prevent the occurrence and subsequent reporting.
- B. RTU’s shall record failed attempts at communications with a corresponding control centre. This data shall be part of the RTU data polled by the corresponding control centre and used to report and record communications failures to the system manager.

1.3.23.22 Mains Failure

In the event of a mains failure and after expiry of the battery backup, the RTU operating software shall provide an orderly shutdown of the RTU.

Upon restoration of the supply, the RTU shall restart in an orderly, and operationally safe manner without intervention, the RTU shall also send an appropriate message to the corresponding control centre.