

**CI-0703****TAB 7: TECHNICAL DISCIPLINES**

Electrical

**INSTRUMENT TRANSFORMERS****Current Transformers (CT)**

Current Transformers shall have 5 ampere secondary's, and primary rating as specified on the attached single line diagrams. Current transformers shall not saturate (i.e. reach the knee of the saturation curve) at short circuit currents of  $K_{Aic}$  asymmetrical. Saturation curves shall be supplied.

Accuracy shall be in accordance with ANSI C37.20 and CSA C13 for the metering or relay applications for which they are being used. The manufacturer shall stake the CT accuracy in the quotation.

All taps from multi-ratio and dual-ratio CT's shall be wired out to shorting terminals

**Voltage Transformers (VT)**

Voltage transformers shall be mounted in a separate draw out compartment.

With the compartment closed, the transformers shall be completely isolated and the primary and secondary disconnect contacts engaged with their respective stationary contacts to complete the circuit. On opening the compartment, the contacts shall automatically withdraw (breaking the primary and secondary connections and grounding the primary for inspection and maintenance. PT and CPT compartments and drawers shall have ability to be padlocked in the open or drawn out position.

VT shall be protected with fuses on primary and secondary sides and shall be designed to withstand the basic impulse level of switchgear. Main switchgear requires its own control power transformer c/w fuses and terminal strip distribution. These systems must be readily accessible from front of switch board.

**SELECTION OF BREAKERS (TBD)****PANEL REQUIREMENTS (TBD)****TRANSFORMERS (TBD)****MOULDED CASE CIRCUIT BREAKERS (TBD)****POWER FACTOR CORRECTOR (TBD)****MOTOR CONTROL**

In general, circuit breaker type combination starters in Motor Control Centres shall be used for 600 volt motors. However, individually mounted circuit breaker type combination starters may be used where practicable. All starters shall be magnetic, full voltage start, single speed, non-reversing type (except when the driven equipment characteristics or power company limitations require other types), and shall