BASIS—The average tripping time-current characteristic curves shown above are applicable to both 50-Hz and 60-Hz systems. In addition, these curves are applicable over the entire S&C Vista Underground Distribution Switchgear operating temperature range of -40°C to +40°C. No adjustments need to be made to these curves for ambient temperatures within this temperature range.

TOLERANCES—Curves are plotted to average test points. Time-overcurrent tolerance, expressed in terms of current, is ±5 amperes plus ±5% of the selected pickup setting. Tolerance, expressed in terms of time, is ±1.5 cycles plus ±10% of the time indicated on the selected curve at a specified value of current between 2 and 30 multiples of the pickup setting.

Instantaneous pickup current tolerance is -0% to +10% of the selected instantaneous pickup current level.

Definite-time response tolerance is 0 to 8 milliseconds.

I2t SECURITY CHARACTERISTIC—To protect the relay from exceeding its thermal limits, for faults above 14.5 kA up to the maximum sensing current of 25 kA, the I2t security characteristic may implement a definite-time tripping characteristic of 0.25 second for any current magnitude above 14.5 kA, depending on the time-dial setting and the minimum-pickup current selected. Refer to Instruction Sheet 681-015, Appendix D, "Coordination".

APPLICATION—The maximum continuous current-carrying capability of S&C Vista Underground Distribution Switchgear is 1200 amperes. The overcurrent control is capable of sensing currents in the range of 50 to 25,000 amperes RMS.

Since the tripping time-current characteristics are electronically derived, they are not subject to change due to aging, transient overcurrents, or fault currents. It is, therefore, only necessary to reset the fault interrupters following a fault-clearing operation.

CONTROL SETTINGS—Curves are set using a laptop computer.