V. Design, Application, Maintenance & Operation Technical Requirements

V.M PJM Design & Application of Carrier Current Line Traps

1.0 General Requirements

1.1 The nominal voltage ratings of the effectively grounded transmission systems are typically 69 kV, 115 kV, 138 kV, 230 kV, 345 kV, 500 kV, and 765 kV. Line Traps and all parts shall be capable of operating at the maximum voltage at the associated voltage levels listed above, within established limits of RIV and corona discharge.

2.0 Specification

- 2.1 All Carrier Current Line Traps shall meet or exceed the latest applicable ANSI, IEEE, NEMA, ASME and ASTM Standards, and Loading Guides. In case of conflict, these standards shall govern in the order stated.
- 2.2 Carrier Current Line Traps shall be designed with adequate electrical and mechanical characteristics for the specific circuit on which it is installed and for the application for which it is intended. These include but shall not be limited to: continuous current rating, short-circuit capability (short time current rating), Load Dump Current Rating, operating voltage, and environmental conditions.
- 2.3 Detailed Line Trap rating is discussed in Chapter VI, Section G.
- 2.4 The ambient temperature range shall be -40° C to $+40^{\circ}$ C

3.0 Maintenance

See section V.L.2.M for maintenance requirements.