

## 443.4 Overvoltage control

### 443.4.1 Transient overvoltages due to the effects of indirect lightning strokes

Protection against transient overvoltages shall be provided where the consequence caused by the overvoltage could result in:

- (i) serious injury to, or loss of, human life.

**NOTE 1:** For protection against transient overvoltages due to direct lightning strikes, see [Regulation 443.1.1](#) .

- (ii) significant financial or data loss.

**NOTE 2:** The installation of SPDs is intended to provide voltage limitation in order to facilitate insulation coordination and protect against damage to current-using equipment.

**NOTE 3:** This includes electrical systems associated with safety services as defined in [Part 2](#) .

Except for single dwelling units, in all cases where the consequences of an overvoltage of atmospheric origin are considered to be intolerable, a risk assessment according to [Regulation 443.5](#) shall be performed in order to determine if protection against transient overvoltages is required.

**NOTE 4:** A discussion will need to take place between the designer, installer and any other relevant parties, such as the installation owner and/or end-user, to determine what is considered to be intolerable, or in the case of dwelling units to determine the total value of loss.

Protection against transient overvoltages is not required for single dwelling units where the total value of loss therein does not justify such protection.

**NOTE 5:** In practice, most single dwelling units will have current-using equipment rated to overvoltage category level I and/or II connected to the fixed installation; see [Regulation 443.6.1](#) . This equipment, therefore, is potentially at risk from the effects of transient overvoltages.