



EAC Decision on Request for Interpretation 2008-10 (Electrical Fast Transient) 2005 VVSG Vol. I, Section 4.1.2.6 2005 VVSG Vol. II, Section 4.8

Date:

August 28, 2008

Question:

Why does the 2005 VVSG Volume I, Section 4.1.2.6(c) note that the repetition rate for all transient pulses will be 100kHz, as required by IEC 61000-4-4 (2004-02), but Volume II, Section 4.8 sites IEC 61000-4-4 (1995-01) which actually requires testing at 5 kHz?

Section of Standards or Guidelines:

**2005 VVSG Vol. I, Section 4.1.2.6, Electrical Fast Transient
2005 VVSG Vol. I Section 4.8, Other Environmental Tests**

Background:

4.1.2.6 Electrical Fast Transient

Vote scanning and counting equipment for paper-based systems, and all DRE equipment, shall be able to withstand, without disruption of normal operation or loss of data, electrical fast transients of:

- a. + 2 kV and - 2 kV on External Power lines (both AC and DC)
- b. + 1 kV and - 1 kV on Input/Output lines (signal, data, and control lines) longer than 3 meters
- c. Repetition Rate for all transient pulses will be 100 kHz

4.8 Other Environmental Tests

This section addresses a range of tests for all voting system equipment, including equipment for both precinct count and central count systems.

The test for electrical fast transient protection shall be conducted in compliance with the test specified in IEC 61000-4-4 (1995-01).

Conclusion:

The Standard specified in Volume II Section 4.8 is mistakenly cited as IEC 61000-4-4 (1995-01), and should instead properly be cited as IEC 61000-4-4 (2004-07) Ed. 2.0 which supports the 100 kHz repetition rate for all transient pulses specified in Volume I, Section 4.1.2.6(c).

Effective Date:

Upon publication.