

EAC Decision on Request for Interpretation 2020-01 VVSG 1.1 Volume I, Section 3.2.8.2 Safety and Appendix B.2

Date:

August 10, 2020

Question(s):

Can safety studies in support of VVSG 1.1 clause 3.2.8.2 be performed, and would be accepted by the EAC, if performed under either of UL/IEC 60950-1 or IEC/UL 62368-1?

Sections of Standards or Guidelines:

VVSG 1.1 Volume I Section 3.2.8.2 Safety and Appendix B.2 Other Documents Used in Developing the Guidelines

All voting systems and their components must be designed so as to eliminate hazards to personnel or to the equipment itself. Hazards include, but are not limited to:

- fire hazards:
- electrical hazards;
- potential for equipment tip-over (stability);
- potential for cuts and scrapes (e.g., sharp edges);
- potential for pinching (e.g., tight, spring-loaded closures); and
- potential for hair or clothing entanglement.
- a. Devices associated with the voting system shall be certified in accordance with the requirements of UL 60950-1, Information Technology Equipment Safety Part 1 by a certification organization accredited by the Department of Labor, Occupational Safety and Health Administration's Nationally Recognized Testing Laboratory program.

 b. The certification organization's scope of accreditation shall include IEC/UL 60950-1.

Discussion: IEC/UL 60950 is a comprehensive standard for IT equipment and addresses all the hazards discussed above under Safety.

Discussion:

IEC/UL 60950 is expiring on December 20, 2020 and will be replaced by IEC/UL 62368-1. IEC/UL 62368-1 is a product safety standard that was developed using a hazard-based safety engineering approach. This approach offers greater flexibility in product design and makes it easier for manufacturers to introduce new technology. This standard applies to a broad range of products from consumer electronics to office equipment.

According to the scope of IEC/UL 62368-1:

"This standard is applicable to mains-powered or battery-powered information technology equipment, including electrical business equipment and associated equipment, with a RATED VOLTAGE not exceeding 600 V and designed to be installed in

accordance with the Canadian Electrical Code, Part I, CSA C22.1-12; General Requirements - Canadian Electrical Code, Part II, CSA C22.2 No. 0-10; the National Electrical Code, NFPA 70-2014; and the National Electrical Safety Code, IEEE C2-2012.

The standard is also applicable to equipment, unless otherwise identified by a marking or instructions, designed to be installed in accordance with Article 645 of the National Electrical Code, ANSI/NFPA 70, and the Standard for the Protection of Information Technology Equipment, NFPA 75-2013.

This standard is also applicable to such information technology equipment:

- designed for use as telecommunication terminal equipment and TELECOMMUNICATION NETWORK infrastructure equipment, regardless of the source of power;
- designed and intended to be connected directly to, or used as infrastructure equipment in, a CABLE DISTRIBUTION SYSTEM, regardless of the source of power;
- designed to use the AC MAINS SUPPLY as a communication transmission medium (see Clause 6, Note 4 and 7.1, Note 4).

This part of IEC 60950 is also applicable to:

- components and subassemblies intended for incorporation in this equipment. Such components and subassemblies need not comply with every requirement of the standard, provided that the complete equipment, incorporating such components and subassemblies, does comply;
- external power supply units intended to supply other equipment within the scope of this part of IEC 60950;
- accessories intended to be used with equipment within the scope of this part of IEC 60950."

Conclusion:

Upon additional review of IEC/UL 62368-1, the EAC has determined that Voluntary Voting System Guidelines Version 1.1, Volume 1, Section 3.2.8.2 and Appendix B.2 must be updated to include references to IEC/UL 62368-1. The EAC has also determined that all new voting systems manufactured after December 20, 2020 must comply with IEC/UL 62368-1. Voting systems that have been certified on or before December 20, 2020 may still comply with IEC/UL 60950-1.

Effective Date:

Effective immediately for all new voting systems.