



U. S. ELECTION ASSISTANCE COMMISSION
VOTING SYSTEM TESTING AND CERTIFICATION PROGRAM
1225 New York Avenue, NW, Suite 1100
Washington, DC. 20005

Notice of Clarification

NOC 08-001: Validity of Prior Non-Core Hardware Environmental and EMC Testing

Issued by Program Director, March 26, 2008:

A handwritten signature in black ink, appearing to read "Bruce J. Hancock".

This notice addresses a question raised by a voting system test laboratory regarding the use of prior non-core environmental and EMC tests that were completed prior to the initiation of the EAC certification program.

As noted in EAC Notice of Clarification 07-005, under the EAC's Testing and Certification Program VSTLs may contract or otherwise provide for the testing of voting systems by third parties. However, consistent with NIST Handbook 150-22, the lead VSTL **shall be responsible for the accuracy, quality assurance, and results of all tests** performed on the voting systems submitted to them by the manufacturers under the EAC's Testing and Certification Program. **Any procedural or substantive irregularities or errors which occur during the third party testing process will be imputed to the lead VSTL.** (Emphasis added)

As outlined in the current draft EAC Laboratory Accreditation Program Manual:

2.10.5. Validity and Use of Prior Testing. Generally, a valid test performed on a voting system by a VSTL may be reused consistent with the requirements below.

2.10.5.1. *Validity.* Tests previously conducted by a VSTL (while accredited by the EAC) shall be presumed valid. Similarly, tests conducted by a third party laboratory while under the direction of a VSTL, consistent with Section 2.10.3 of this Manual, shall be presumed valid. These presumptions may be rebutted. VSTL's must review and adopt any prior testing before use. VSTL's will be held responsible for all testing adopted as valid in the same manner as if they had performed the testing.

2.10.5.2. *Use.* When feasible, valid prior testing should be reused by VSTLs to fulfill current certification testing requirements. Use of valid prior testing is authorized only when:

2.10.5.2.1. The discrete software or hardware component previously tested is demonstrably identical to that presently offered for testing. VSTLs must examine the components to ensure no change has taken place consistent with all documentation. When valid prior testing is used, the system presented must be subject to regression testing, functional testing and system integration testing;

2.10.5.2.2. The voting system standards applicable to the prior and current testing are identical;

2.10.5.2.3. the test methods used are substantially identical to current test methods approved by the EAC; and

2.10.5.2.4. The adoption and use of valid prior testing is noted in the test plan and test report. Like all testing, prior testing is subject to EAC review and approval.

Therefore, the EAC concludes that to insure voting systems subject to certification are tested in the most thorough manner possible, the integrity of the program requires that prior testing is only presumed valid when conducted by a third party laboratory while under the direction of an EAC accredited VSTL.

In order, however, to allow voting systems currently in the testing process to move forward during this critical time, the EAC will allow the use of non-core environmental and EMC testing undertaken and completed within one year prior to the implementation of our program (January 1, 2005 to December 31, 2006) under the following conditions:

1. VSTL's must submit all such non-core environmental and EMC testing to the EAC for review.
2. In order to check for potential problems with prior tests, for each voting system seeking the approval of prior testing, the VSTL or its designated sub contractor laboratory shall re-run the electrostatic disruption test noted below under Section 4.1.2.8 of the 2005 VVSG.¹ The test is to be run with the unit under test processing ballots and saving cast vote records while the ESD is applied and that

¹ **4.1.2.8 Electrostatic Disruption**

Vote scanning and counting equipment for paper-based systems, and all DRE equipment, shall be able to withstand ± 15 kV air discharge and ± 8 kV contact discharge without damage or loss of data. The equipment may reset or have momentary interruption so long as normal operation is resumed without human intervention or loss of data. Loss of data means votes that have been completed and confirmed to the voter.

those records be examined and confirmed to be accurate and not corrupted during the test.

3. The results of this ESD test shall be submitted to the EAC for review and approval prior to the EAC accepting any prior environmental or EMC testing.