



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

July 24, 2009

Mr. Jack A. Blaine  
President & CEO  
Sequoia Voting Systems

**Sent via e-mail**

Mr. Blaine:

This letter is being sent in response to your July 13, 2009 letter (attached) regarding the reuse of hardware testing for the Sequoia WinEDS 4.0.34 test campaign. Specifically your letter requested the reuse of Safety Title 29, Part 1910 of the following test reports:

- Wyle Laboratories Report No. 50932-03 Qualification Testing of the Memorypack receiver dated 10 May 2005.
- Wyle Laboratories Report No. 52125-02 Hardware Qualification Testing of the Optech Insight/Insight Plus dated 16 March 2006.
- Wyle Laboratories Report No. 52125-04 Hardware Qualification Testing of the Sequoia Optech 400-C Ballot Counter with WinETP dated 16 March 2006.

In addition, your letter requests the reuse of testing conducted pursuant to Mil-Std 810D excluding the 501 and 502 Temperature and Power Variation test which includes the data accuracy test. As you note in your letter, all of this reuse is restricted by the timeframes outlined in the EAC's Notice of Clarification 2008-01 (attached).

Based on the EAC's review of the test reports provided and the prior testing conducted the EAC has reached the decision to allow reuse of all requested hardware testing. As part of this reuse the EAC will request that iBeta, the lead VSTL on this test campaign, document the EAC's approval of reuse of this testing in the test report to be submitted for this test campaign.

The EAC thanks Sequoia and iBeta for their cooperation during this review process. If you should have any questions regarding this letter or the WinEDS 4.0.34 test campaign please do not hesitate to contact me or Matt Masterson. Thank you.

Brian Hancock  
Director  
Testing and Certification Program



July 13, 2009

Mr. Matthew Masterson  
Testing and Certification Program Associate  
The United States Election Assistance Commission  
1225 New York Ave. NW  
Washington, DC 20005

*sent via email to mmasterson@eac.gov*

Dear Mr. Masterson:

I am sending this letter as a follow-up and official report reuse request based on the conference call you participated in earlier this week with Sequoia management team members Eric Coomer, Michelle Shafer and Waldeep Singh, and Gail Audette and Mike Stark of iBeta.

This reuse request is for the Mil-Std 810D testing excluding the 501 and 502 Temperature and Power Variation test which includes the data accuracy test. This request is also for reuse of the associated Safety Title 29, Part 1910 of the following test reports:

- Wyle Laboratories Report No. 50932-03 Qualification Testing of the Memorypack Receiver dated 10 May 2005\*
- Wyle Laboratories Report No. 52125-02 Hardware Qualification Testing of the Optech Insight/Insight Plus dated 16 March 2006\*
- Wyle Laboratories Report No. 52125-04 Hardware Qualification Testing of the Sequoia Optech 400-C Ballot Counter with WinETP dated 16 March 2006\*

*\* within the NOC 2008-01 allowed time frame*

Our request is based on our understanding that for the NOC 08-001 Validity of Prior Non-Core Hardware Environmental and EMC testing, the EAC allowed the use of non-core environmental and EMC testing undertaken and completed within one year prior to the implementation of the EAC program (testing conducted after January 1, 2005) with conditions that the testing must be submitted to the EAC for review and that the ESD be run (and results accepted by the EAC).

Since that NOC release, the EAC has accepted hardware test reports for other manufacturers based on an EAC assessment and audit of the third-party test laboratories which were not A2LA or NVLAP accredited at the time of testing. Sequoia would like to petition the EAC to grant the same assessment and audit of third-party test labs as applicable as well as review oversight on the proposed re-use of accredited lab testing conducted during the 2002 VSS hardware testing under the NASED by an accredited lab.

At the time of that NOC decision (March 26, 2008), the Sequoia Test Plan was in-work under the assumption that all testing would need to be completed. The NOC resulted in the re-use of the Criterion Lab testing for a number of components and is documented in the approved Sequoia Test Plan as posted on the EAC website.

The last certification that Sequoia obtained under the NASED program (as listed at <http://www.nased.org/certification.html>) for WinEDS 3.1.074 was also certified to the 2002 VSS and was granted on 10/23/2006 (N-1-07-22-22-004). iBeta and Sequoia previously agreed not to reuse the aforementioned documents based on the impacts of the RFIs 2008-01 and 2008-02. However, since that decision the modifications to the hardware based on those RFIs have been made, reviewed, and determined to not impact the reuse of the Mil-Std 810D tests.

The reuse of Wyle Laboratories Report No. 52125-06 Edge Model II DRE Voting Machines with VeriVote Printer is not being requested at this time pending review of the Engineering Changes. Should that review indicate that the hardware modifications do not impact the previous test results, a separate request for reuse will be provided. In addition, the modifications to the Edge2Plus and the testing of the HAAT units are under investigation at this time to determine if the Engineering Changes (ECs) impact the Mil-Std 810D testing.

The status of Sequoia's current testing is that the EMI/EMC testing for the scanners (400-C and Insights) is complete as well as the MemoryPack Receiver. This equipment has been delivered to Wyle Labs for the Mil-Std 810D testing. We respectfully request your timely determination on the acceptance of the test reports described above so that iBeta can appropriately direct Wyle regarding the necessary Mil-Std 810D testing of our products and move forward with the EAC certification process.

If you have any questions, please do not hesitate to contact Mr. Waldeep Singh at [wsingh@sequoiavote.com](mailto:wsingh@sequoiavote.com) or 916.803.6769 or Ms. Michelle Shafer at [mshafer@sequoiavote.com](mailto:mshafer@sequoiavote.com) or 800.347.4702.

Thank you for your consideration of our request.

Best regards,



Jack A. Blaine  
President & CEO  
Sequoia Voting Systems

encl:

- Sequoia Voting Systems 50932-03 Rev. A MPR
- Sequoia 52125-02 Insight APX K2.08 HPX K1.42
- Sequoia 52125-04 400C

cc: Mr. Waldeep Singh, Vice President of U.S. Operations, Sequoia Voting Systems  
Mr. Eric Coomer, Vice President, Development, Sequoia Voting Systems  
Ms. Michelle M. Shafer, Vice President, Communications, Sequoia Voting Systems  
Ms. Judy Sargent, Quality Assurance Director, Sequoia Voting Systems  
Ms. Gail Audette, Quality Manager, iBeta Assurance



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## 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.<sup>1</sup> 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

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<sup>1</sup> **4.1.2.8 Electrostatic Disruption**

Vote scanning and counting equipment for paper-based systems, and all DRE equipment, shall be able to withstand  $\pm 15$  kV air discharge and  $\pm 8$  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.