



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

September 11, 2007

Mr. James Nilius
Vice President of Compliance Services
SysTest Labs, LLC.
216 16th Street, Suite 700
Denver, CO 80202

Dear Mr. Nilius,

This letter is to inform you of the Notice of Non-Compliance EAC issued to Sequoia based upon the information provided by SysTest Labs on September 6, 2007. Please find a copy of the notice, attached.

As you will see, this notice finds that Sequoia contracted with more than one Voting System Test Laboratory (VSTL) for the testing of its Sequoia Voting System-WinEDS version 4.0.34. This action was inconsistent with the disclosure made on its *Application for Voting System Testing* and violated the requirements and procedures of the EAC Testing and Certification Program. To remedy the situation Sequoia will be required to (1) provide EAC information, (2) develop a cure plan to remedy the non-conformance, and (3) agree to cooperate with the EAC by enabling any laboratory that conducted certification testing under contract with Sequoia to provide its lead laboratory all information, results and documentation necessary to determine whether such testing was properly and independently performed.

At this time, we request that you provide the EAC with a detailed description of all contracts or agreements with Sequoia regarding the testing of its WinEDS version 4.0.34 for EAC certification. Additionally, we request a description of any testing performed on this system, including status and results. Any testing not completed should be halted until this matter has been brought into compliance with program requirements. As noted in the letter, you may also be requested to submit detailed information on all testing completed on the system to Sequoia's lead laboratory (iBeta).

Finally, I would like to address some concerns with statements made in your September 6, 2007 letter. First, you suggest that prior to EAC's issuance of NOC 07-005, *Voting System Test Laboratory (VSTL) Responsibilities in the Management and Oversight of Third Party Testing*, the certification program did not address the issue at hand (Sequoia's direct contracting with multiple VSTLs). This assertion is without merit. As noted in the attached letter to Sequoia, the Certification Program Manual at Section 4.3.1.2., *Selection of Accredited Laboratory*, specifically requires that all Manufacturers select one VSTL to perform testing under EAC's Program. This selection requires notice

to and approval by the EAC. Manufacturers may not select another VSTL without express permission from the EAC. Sequoia selected iBeta as its lead laboratory. It has made no request to amend this choice. This information was publicly available on EAC's website. Furthermore, you should have been familiar with EAC's lead laboratory concept, as we discussed the matter as early as May 1, 2007 when EAC met with SysTest staff at your offices in Denver, CO. In the end, if SysTest had questions concerning this requirement or Sequoia's application, you should have contacted EAC's Program Director.

Your letter had many specific questions regarding how EAC's Certification Program addresses the situation where a manufacturer is directly engaging two VSTLs to perform testing. In fact, you imply that the program fails to address this matter. As noted above, the issue is directly addressed. The situation is explicitly prohibited under the program. Furthermore, as reflected in NOC 07-005 and in the documents which serve as the basis of your accreditation, lead VSTLs are responsible for all testing performed by subcontractors. To this end, the EAC will only accept a test report where the lead VSTL has either performed or accepted (after review or supervision) all testing.¹

Finally, your letter pointed to past practices of the National Association of State Election Director (NASED) as precedent for SysTest "assumptions." EAC must reiterate the policy we have outlined since the inception of our program, that the prior practices and procedures of the NASED Voting System Qualification Program are completely immaterial and have no precedential value regarding EAC's Certification Program. The concept that an unfunded program which had few written policies or procedures should be upheld as a precedent for the current Federal program is unacceptable and should be laid to rest permanently.

The EAC understands that you take your role as an EAC VSTL seriously and appreciates you bringing this matter to our attention. However, in the future we encourage you to coordinate more closely with the agency so that we may avoid problems rather than reporting them. Please contact me if you have questions regarding this letter.



Brian Hancock
Director, Testing and Certification

Attachments: Sequoia Letter 9-11-07

SysTest Letter to EAC

Endnote:

¹ Once a lead laboratory is selected, there is considerable guidance regarding the lead laboratories responsibilities regarding appropriate third-party subcontracting. Each of the documents which serve as the basis of your accreditation (ISO/IEC 17025, *General requirements for the competence of testing and*

calibration laboratories, §4.5; National Institute of Technology and Standards (NIST) Handbook 150, *General Procedures and Requirements*, §4.5; and NIST Handbook 150-22, *Voting System Testing*. make it clear that the lead laboratory is responsible for the work of its subcontractors. NIST Handbook 150-22, Section 4.5.4 states:

4.5.4 When a VSTL subcontracts to another laboratory, the VSTL is responsible for ensuring that setup, configuration, testing, and reporting is competent, appropriate, and conducted by qualified people. The VSTL shall ensure that there are no gaps in the knowledge required to conduct the testing. For example, a VSTL subcontracting with another laboratory to conduct temperature cycling tests should conduct the functional testing itself rather than allowing the subcontractor to do so. The VSTL is responsible for ensuring that the entire voting system is properly tested.



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

September 11, 2007

Mr. Edwin B. Smith,
VP, Compliance, Quality and Certification
Sequoia Voting Systems
1800 Glenarm Place, Suite 500
Denver, CO 80202

RE: Notice of Non-compliance

Dear Mr. Smith:

It has come to the EAC's attention that Sequoia Voting Systems has contracted with more than one Voting System Test Laboratory (VSTL) for the testing of its Sequoia Voting System-WinEDS version 4.0.34. This practice is inconsistent with the disclosure made on your *Application for Voting System Testing* and violates the requirements and procedures of the EAC Testing and Certification Program.

As you know, EAC's Certification Program requires manufacturers to identify the EAC VSTL it has selected to perform testing. The selection of a VSTL is performed at the start of the certification process and must be noticed to the EAC on the *Application for Voting System Testing* (Form EAC 002C). Specifically, the Manufacturer's application must provide for the "[s]election and identification of the VSTL that will perform voting system testing and other prescribed laboratory action consistent with the requirements of this Manual." (Certification Program Manual, Section 4.3.1.2., *Selection of Accredited Laboratory*). Additionally, the Manual states that "[o]nce selected, a Manufacturer may NOT replace the selected VSTL without the express written consent of the Program Director. Such permission will be granted solely at the discretion of the Program Director and only upon demonstration of good cause." (Certification Program Manual, Section 4.3.1.2., *Selection of Accredited Laboratory* (emphasis in original)).

Section 4.3.1.2. encompasses four basic principles: (1) a manufacturer must select one accredited VSTL responsible for the testing of a particular system under EAC's program; (2) this selection must be noticed on a system's application form and is subject to review and approval by the EAC program Director pursuant to Section 4.3.3. of the Manual; (3) the selected VSTL will be the entity responsible to "perform voting system testing and other prescribed laboratory action consistent with the requirements of [the] Manual;" and (4) manufacturers are strictly prohibited from contracting or directly employing another VSTL without the "express written consent of the Program Director."

In Sequoia's August 9, 2007 application for the testing of its WinEDS version 4.0.34 voting system, you identify iBeta Quality Assurance as your "lead VSTL." You also identify,

although it is not required, two laboratories “subcontracted to iBeta.”¹ To the extent Sequoia had entered into an agreement for certification testing with any laboratory other than iBeta, its actions are inconsistent with its application form and not in compliance with EAC’s certification program.

It is important to understand that the purpose behind these requirements is to protect the independence of EAC VSTLs. As you recognized in your application, EAC’s laboratory program operates under the “lead laboratory” concept. VSTLs perform testing consistent with their accreditation, EAC’s Programs and EAC monitoring. Testing decisions are made by VSTLs, independent of the Manufacturer. Even the appearance of manufacturer influence over the testing process is unacceptable. A situation where a manufacturer is contracting directly with multiple laboratories to perform various parts of the certification process creates the appearance that the manufacturer is influencing the certification of its own product. This is not acceptable.

Consistent with Section 2.3.1.7 of EAC’s Testing and Certification Program Manual, you must either respond to this notice of non-compliance with an explanation demonstrating that the information presented in this notice is erroneous and you are, in fact, in compliance **or** cure your non-compliance within 30 days. To cure non-compliance Sequoia must:

- (1) Provide EAC a detailed description of all contracts or agreements with any laboratory (other than iBeta) regarding the testing of Sequoia Voting System-WinEDS version 4.0.34 as well as a narrative chronicling Sequoia’s knowledge of the events leading up to the present contract structure. The EAC will coordinate directly with the laboratories to acquire additional information;
- (2) Develop, for EAC approval, a cure plan which will ensure the independence of EAC VSTLs by conforming Sequoia’s practices to the EAC’s lead laboratory requirement; and
- (3) Agree to cooperate with the EAC by enabling any laboratory that conducted certification testing under contract with Sequoia to provide iBeta (as Sequoia’s identified lead VSTL) all information, results and documentation necessary to determine whether such testing was performed independently, consistent with EAC Certification Program requirements and consistent with VSS standards. Such testing and results must be accepted by both iBeta and the EAC to serve as a basis of certification.

Failure to timely comply with this notice will result in the suspension of your organization’s registration pursuant to Section 2.6 of EAC Testing and Certification Manual. Please contact me if you have questions.

Sincerely,



Brian Hancock
Director of Testing and Certification

Attachment: *Application for Voting System Testing*

¹ The EAC has already clarified (in NOC 07-005) that the VSTL identified by a manufacturer on its system application form (the lead VSTL) is solely and independently responsible for the decision to use and the selection of a subcontractor.



Application for Voting System Testing

OMB Control # 3265-0004

- 1. **Manufacturer Name:** Sequoia Voting Systems
- 2. **Manufacturer Code:** SEQ
- 3. **Version of Standards to be Used for Testing:** FEC 2002
- 4. **Voting System Name:** Sequoia Voting Systems - WinEDS version 4.0.34
- 5. **System Model/Version Number:** See number 8 below for details
- 6. **EAC Accredited VSTL:** iBeta Quality Assurance as lead VSTL, SysTest Labs and Wyle Labs subcontracted to iBeta
- 7. **Requested EAC Certification number:** SEQ-40-2007-W1

8. Brief Description of System or system modification:

Note: Version numbers (last digit(s)) may increment as last minute changes are made to address coding changes required by iBeta.

- WinEDS Workstation - v 4.0.034 - WinEDS Client Application
- WinEDS Server - v 4.0.034 - WinEDS Server Application
- Extended Services - 1.08 - Functionality includes manual data entry and database backup/restore
- Election Reporting - 4.0.12 - Election Night Reporting Application
- HAAT Listener - 1.5.5 - Receives results transmissions from the HAAT
- WFR - 1.0.17 - WinEDS Flash Recorder - used in conjunction with batch cartridge creation and tally, supports multi-port USB hub
- WinETP - 1.16.1 - Tally software for the 400C
- Ballot Wizard - 1.2 - Creates Optech ballot layouts. Used in MI only
- Insight - APX - 2.16 - Pack Logic
- Insight HPX - 1.44 - Insight Firmware
- Insight - CPX - 1.14 - Communications Firmware
- Edge II - 2.1.12, HAAT - 2.5.16, Edge II Plus - 2.1.40, Advantage Plus 1.2.17, Advantage D10 - 10.4.3, Card Activator - 2.1.12

Signature:

Edwin B. Smith III

Digitally signed by Edwin B. Smith III
DN: CN = Edwin B. Smith III, C = US, O = Sequoia Voting Systems, OU = Compliance/Certification
Date: 2007.08.09 11:07:01 -06'00'

Date:

8-09-2007



September 6, 2007

Brian Hancock,
Director of Voting System Testing & Certification
U.S. Election Assistance Commission
1225 New York Avenue, NW, Ste. 1100
Washington, DC 20005

Dear Mr. Hancock,

In advance of our scheduled conference call set for this Friday at 9:30 PM, EDT, I would like to add our thoughts to the current ongoing dialog of VSTLs requiring subcontracting agreements be in place to perform Certification Testing.

We would like to address our concerns regarding the current situation we now have involving separate contracts between Sequoia and iBeta, and between Sequoia and SysTest Labs for Certification Testing of different segments of the same product. Secondly some other concerns and questions regarding the recently issued *NOC 07-005: Voting System Test Laboratory (VSTL) responsibilities in the Management and Oversight of third party testing.*

The current situation was created when the Manufacturer, Sequoia, decided to split the testing of its voting system and signed contracts with two VSTLs, SysTest Labs and iBeta, simultaneously. Sequoias understanding that this would help balance the work load and be able to take advantage of having multiple VSTL's approved in the EAC program. This has been Sequoia's model in previous certification efforts.

The following are our main points regarding this situation:

- The NOC is published after the current situation was already underway and cannot effectively apply in retrospect to the circumstances.
 - Several of the guidelines have already occurred and do not adhere to the NOC parameters.
- There was no direction or guidance provided by the EAC VS Test & Certification Program Manual, or either of the NIST NVLAP Handbook 150 and 15-22 which directs or guides the current situation when the activities involved originally occurred.
 - The NOC addresses the situation for future activities and has not addressed the current situation as it was already in process prior to the requirements being defined.
- SysTest Labs has a signed contract with Sequoia for the WinEDS 4.0 engagement.
 - A significant level of effort has been expended towards this project; more than 1450 hours towards PCA and FCA activities.
- How does the NOC 07-005 impact this situation as several of the items discussed in the clarification have already been passed?

- The Lead VSTL is fully responsible for all contracting with third party laboratories for testing under the EAC's Certification Program. Manufacturers shall not directly manage, control or compensate a subcontracted laboratory.
 - Contracts with third party labs are already in place and payments have already been made for services rendered.
- The use of or selection of third party laboratories is at the sole discretion of the lead VSTL. Third party laboratories are subcontractors to the lead VSTL.
 - The Vendor has already contracted a third party lab, and it was not a decision of the Lead VSTL.
- The lead VSTL shall directly manage the testing project, including the intake and distribution of the manufacturer's documentation, management of units under test, and the assessment and management of the testing process.
 - Work has already been performed in documentation and source code review, test reviews and the development of test plans and cases has begun. None under the direct management of the Lead VSTL.

Please keep in mind that Sequoia has a signed SOW with SysTest Labs to perform testing of some of its voting system hardware components. This includes several hardware components that form a segment of the WinEDS 4.0 Voting System that it has submitted for certification.

The components include:

- Edge2Plus
- HAAT
- Edge 1 & 2
- Advantage D10, Plus
- Insight and 400C scanners

When I review all of the documents that detail and guide the current EAC program, I find nothing that speaks specifically to the current situation; where a Manufacturer has two outstanding contracts with different VST Labs. So, the current program did not address this situation in advance of this happening and it appears that this is now being addressed while we are already in the process of testing the equipment in good faith of the contract that was entered into by the Manufacturer and ourselves.

We have already performed a significant level of certification work for these components. This includes initial passes of PCA source code and documentation reviews, some have even completed a second pass review. We have started the FCA test reviews for several components and have started the creation of the test plans for these components. We are into this work for over 1,450 hours thus far.

Trying to define and/or change the rules while we are already into this testing is going to place a significant burden on the labs and the manufacturer.

Entering into this arrangement, the assumption was that there would need to be a 'lead lab' that was responsible for the Certification Report for the voting system. When we were informed that iBeta had been designated the lead lab, we assumed that it would be the recipient of our testing

and outputs. There is precedent for our assumption, much in the same manner that occurred with Ciber under the prior program when this same situation presented itself. Then Ciber had the opportunity to review our test results and accept or reject the work.

Specifically, we have the following concerns for which we are respectfully requesting your consideration:

- Will the EAC demand that Sequoia and SysTest Labs cancel the current contract that had been negotiated in good faith? Moreover, does the EAC have such authority? If so, what will happen with the completed work product?
- Does the EAC demand that SysTest Labs enter into an agreement with a competitor and risk exposure of our intellectual properties and proprietary Test Methods and Procedures? And again, does it have such authority?

These are interesting questions relating to future scenarios as the rules of engagement are being defined and applied to the currently moving train.

When I reviewed the guidance materials approved and in existence for the EAC Voting System Test and Certification program, which includes the EAC Test & Certification Program Manual, the NIST Handbook 150 and 150-22, I find the following in regards to the current circumstances:

- EAC VS Test & Certification Manual, Section 4.3.1.2, *Selection of Accredited Laboratory*. Selection and identification of the VSTL that will perform voting system testing and other prescribed laboratory action consistent with the requirements of this manual. Once selected, a Manufacturer may NOT replace the selected VSTL without the express written consent of the Program Director. Such permission will be granted solely at the discretion of the Program Director and only upon demonstration of good cause.
 - What affect does this section have on the current situation? There are two contracts between Sequoia and the VST Labs. Does the fact that there are two contracts signed by the Manufacturer have any bearing on this program requirement? Does it come down to what contract was signed with whom and when?
 - What demonstrable 'good cause' will facilitate your decision to eliminate one of the labs from this situation and the Manufacturer from this requirement of the program?
 - Nowhere is it specified in the program manual that the Manufacturer may not contract with multiple VST Labs. Nor is there a definition of how these labs must work together.
- There is nothing formally in place that addresses the situation in which the EAC program now finds itself.
- We are currently under contract to Sequoia.
- We are not on any 'register' of subcontractors for any VSTL. If we are, we were never informed of it nor had we agreed to it. (NIST 150, 4.5.4)

- The NIST 150 manual only speaks to a lab subcontracting another lab, nothing about a Manufacturer using multiple labs.
 - NIST 150, Section 4.5.3 The laboratory is responsible to the customer for the subcontractor's work, *except in the case where the customer or a regulatory authority specifies which subcontractor is to be used.*
 - The Customer has by signing two contracts with the VSTL. This may completely go against the EAC expectations; however the NIST 150 & 150-22 are the documents in affect at this time.
- The NIST 150-22 is very confusing in the area of subcontracting with another VSTL.
 - 4.5.2 If the VSTL subcontracts testing for any test within its scope of accreditation, the subcontracted laboratory shall also be an EAC-accredited VSTL. All core voting system testing shall be conducted by a VSTL.
 - It then goes on to say:
 - 4.5.4 When a VSTL subcontracts to another laboratory, the VSTL is responsible for ensuring that setup, configuration, testing, and reporting is competent, appropriate, and conducted by qualified people. The VSTL shall ensure that there are no gaps in the knowledge required to conduct the testing. For example, a VSTL subcontracting with another laboratory to conduct temperature cycling tests should conduct the functional testing itself rather than allowing the subcontractor to do so. The VSTL is responsible for ensuring that the entire voting system is properly tested.
 - *“VSTL subcontracting with another laboratory to conduct temperature cycling tests should conduct the functional testing itself rather than allowing the subcontractor to do so.”*
 - If this is the case, then why subcontract to another lab or VSTL?

How the EAC decides to proceed given the current situation has a huge bearing on how the program is perceived and managed. Consideration of these decisions should be made on all affected parties and how it will impact the program currently and in the future.

Our preference would be that this current situation be played out under the assumed guidelines utilized for the execution of the prior program. We understand that the EAC needs to define the rules and guidelines of the program, since it is a new program being developed but it is impossible to change the rules in the middle of a Certification effort.

Rushing to any judgment given SysTest Lab's honest approach to and understanding of the current situation will be a potential negative for the Labs, the Manufacturers, and for the EAC.

Finally, we would like to express some concerns and raise other questions regarding the recently issued *NOC 07-005*.

Written as it is, does this then remove the ability of the Manufacturers to select the Hardware Testing Labs that it may utilize for non-core testing under the program? Is this now completely at the discretion of the Lead VSTL?



This could become a major point of contention for the Manufacturers when it comes to the use of third party labs for these non-core hardware environmental tests. Specifically we have situations where the Manufacturer has utilized a laboratory in close proximity to their main headquarters and is able to get good rates from that laboratory.

Will the Lead VSTL now be responsible for assuring that good rates are provided by any laboratory that we select if the Manufacturers are now not allowed to make these decisions themselves? What parameters shall guide the selection of third party labs for and Manufacturers that we are working with?

Could this potentially negate any existing testing that has occurred as it was not the Lead VSTL's decision, in this case ours, which laboratory to use? Due to this impact to prior test engagements, when are the guidelines implemented for the NOC to take affect?

We look forward to discussing these issues with you on Friday, September 7, 2007.

Sincerely,

A handwritten signature in blue ink that reads "James M Nilius".

James M Nilius
Vice President of Compliance Services
SysTest Labs Incorporated