



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

2/10/09

Gail Audette, Quality Manager
iBeta Quality Assurance
3131 S Vaughn Way, Suite 650
Aurora, CO 80014

Re: Reuse of prior testing conducted by SysTest Laboratories

Dear Ms. Audette,

This letter is in response to iBeta Quality Assurance's recommendations (attached) to the Election Assistance Commission (EAC) regarding the reuse of the data accuracy test results conducted by SysTest Laboratories as part of the testing campaign for the Premier Assure 1.2 voting system. EAC instructed (attached) iBeta, to audit and review the test plans, test reports, and test cases for the data accuracy testing conducted on the Premier Assure 1.2 voting system in order to make a recommendation regarding the possible reuse of testing conducted by SysTest prior to SysTest's suspension. This review was conducted in an effort to preserve any prior testing that could be relied upon as meeting the EAC's rigorous program requirements.

Based on iBeta's recommendations the EAC approves the following reuse of data accuracy testing:

Data Accuracy Testing

On February 5, 2009 iBeta submitted a letter to the EAC recommending the following:

1. The data accuracy test results for all **BUT** the TSX unit are adequate for reuse in the Premier Assure 1.2 certification test effort (emphasis added).
2. The TSX data accuracy test method should be updated; a test case for the TSX data accuracy test should be created and executed during functional configuration audit.

After a careful technical review of iBeta's review and audit the EAC approves the above recommendations made by iBeta. Therefore, the data accuracy test results for all **BUT** the TSX units may be reused. A test method and test cases shall be developed for a data accuracy test to be run on the TSX unit during the functional configuration audit. In addition to this accuracy testing the Premier Assure 1.2 system will undergo volume,

stress, and error recovery testing that will further stress the system and further test the accuracy of the system.

If you should have any questions regarding this approval of the reuse of testing or the impact it has on the Premier Assure 1.2 testing campaign please feel free to contact me at anytime. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian Hancock". The signature is fluid and cursive, with the first name "Brian" and last name "Hancock" clearly distinguishable.

Brian Hancock
Director, Testing and Certification
US Election Assistance Commission

cc: Premier Election Solutions

attachments: iBeta letter to EAC, February 5, 2009
EAC letter to Premier, November 11, 2008



February 5, 2009

Mr. Brian Hancock
U.S. Election Assistance Commission
Voting System Testing and Certification Program
1225 New York Avenue, NW, Suite 110
Washington, DC 20005

Sent via E-mail

Mr. Hancock,

The purpose of this letter is to document the review of the Data Accuracy Test results in accordance with your 20 November 2008 letter providing instruction on the reuse of testing for the Premier certification effort. iBeta has completed the instructed review of the Data Accuracy Testing conducted by SysTest based on the SysTest submitted documentation of the as-run test cases, data sheets, and Premier Assure 1.2 Draft Test Reports (Rev. 01 2/22/08 as posted on the EAC website and Rev. 02 5/5/08 as delivered by SysTest). This letter also provides the iBeta recommendation to the EAC regarding the reuse of the those test results.

Documentation of the Data Accuracy Testing Review

The first task of this review was to gain an understanding of the test methods, test cases, and results as documented in the Test Plan and the Premier ASSURE 1.2 Draft Test Report 2.0. The Test Report lists the following components as being subjected to the Data Accuracy requirements:

- AccuVote-OS Central Count
- AccuVote-OS Precinct Count
- AccuVote-OSX
- AccuVote-TSX
- AccuVote-TS R6
- PhotoScribe PS960 (Note: Identical scanning capabilities as the PS900 iM2)
- OSAA
- VAT A100
- VAT A200
- VAT A300

iBeta concurs in the component list but disagrees in the execution of the testing using different peripherals. The iBeta analysis of each component for test adequacy and those documents reviewed are provided as an Attachment to this letter.

Summary of Review Results

- AccuVote-OS Central Count: The final report indicates that the test was executed and review of the associated hard-copies of data sheets and the as-run test cases, these test results are acceptable.
- AccuVote-OS Precinct Count: The final report indicates that the test was executed and based on the documentation received and reviewed, these test results are acceptable.
- AccuVote-OSX: The final report indicates that the test was executed and based on the documentation received and reviewed, these test results were acceptable; however, the Revision 11 of the Test Plan indicated that the test was to be re-run due to a hardware change. iBeta has assessed the hardware change as well as the requirements of the data accuracy within the VSS and is not recommending to re-run this test due to these hardware changes. Our recommendation is also based on the execution of the Volume, Stress, and Recovery Test Method and corresponding test case.
- AccuVote-TSX: The final report and the as-run test case indicate that only 2 of the 5 machines used to execute the Data Accuracy testing were configured with the Verified Voter Paper Audit Trail (VVPAT) such that the requirement was not validated on that device. There is also no indication as to whether or not the bar code printout was executed or deemed to be a functionally equivalent data path not subjected to this testing.
- AccuVote-TS R6: The final report indicates that the test was executed and based on the documentation received and reviewed, these test results are acceptable.
- PhotoScribe PS960: The test case matches the test results so these test results are acceptable.
- OSAA: The as-run test case matches the test results but not the Test Report so based on the documented evidence and not the reported results in the Test Report, these test results are acceptable.
- VAT A100/A200: The Data Accuracy Test for these units were combined such that 3 A100s and 3 A200s were used. iBeta conducted the analysis of the differences of the hardware versions to verify that this combined use was technically valid. Based on that analysis, the review of the as-run Test Case, and the documented results within the final report, these test results are acceptable.
- VAT A300: Based on the documentation received and reviewed, these test results are acceptable.

Recommendation regarding the need to conduct a Data Accuracy Testing

The iBeta recommendation based on the audit and review as documented herein is that the Data Accuracy test results for all but the TSX are adequate for reuse in the Premier Assure 1.2 certification test effort. iBeta recommends an update of the TSX Data Accuracy Test Method

and creation of a TSX Data Accuracy Test Case to be executed during the Functional Configuration Audit.

Sincerely,

A handwritten signature in blue ink that reads "Gail Audette". The signature is written in a cursive style and is placed on a light blue rectangular background.

Gail Audette
iBeta Quality Manager

CONFIDENTIAL - Attachment: Component Level Test Adequacy Review Details

cc: Tab Iredale, Premier Election Solutions
Kathy Rogers, Premier Election Solutions



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

November 20, 2008

Mr. Talbot Iredale
Premier Election Solutions
Premier Election Solutions, Inc.
1253 Allen Station Parkway, P.O. Box 1019
Allen, TX 75013

Sent via E-mail

Mr. Iredale:

This letter is being sent to address Premier's questions regarding the reuse of testing by iBeta Quality Assurance (iBeta) that was conducted by SysTest Laboratories (SysTest) on the Premier Assure System prior to the suspension of SysTest's accreditation as an EAC Voting System Test Laboratory (VSTL). As you are aware, and as indicated in our letter to all EAC registered manufacturers (attached), section 2.10.6. of the EAC's *Voting System Test Laboratory Program Manual* allows for the reuse of prior testing at the EAC's discretion.

The EAC recognizes the unique circumstances the SysTest suspension has created and the need for the EAC to be diligent in reviewing and deciding on the reuse of this testing. Given these circumstances the EAC met with both iBeta and Premier in Denver, CO on November 13, 2008 to discuss the testing that was conducted by SysTest and its possible reuse. As a result of this discussion and in consultation with both iBeta and the EAC's Technical Reviewers the EAC has reached the following decision regarding the reuse of prior testing by SysTest on the Premier Assure 1.2 voting system:

- All hardware testing conducted by SysTest sub-contractors APT Labs Inc., Compliance Integrity Services, and Percept Technology Labs is accepted and may be reused. This decision was reached after a careful review by the EAC of the audit conducted by SysTest of these laboratories and a review of the testing conducted.
- iBeta will conduct an audit of the Technical Data Package (TDP) submitted to and reviewed by SysTest and make a recommendation to the EAC regarding the need to conduct a full review of the TDP. The EAC will then make a determination on the reuse of the TDP review conducted by SysTest.
- iBeta will conduct a 3% review of the Premier Assure source code. This review will focus on important functional sections of the code in order to determine the depth and focus of source review conducted by SysTest. iBeta will then make a recommendation to

the EAC regarding the reuse of the source code review conducted by SysTest. The EAC will then issue a decision regarding the reuse of the source code review conducted by SysTest.

- All other testing conducted by SysTest will not be allowed to be reused by iBeta as it tests the Premier Assure 1.2 system with the exception of the Accuracy Test results after a review by iBeta. iBeta will then make a recommendation to the EAC regarding the reuse of those test results and the EAC will make a decision based on that recommendation.
- Premier Assure 1.2 Test Plan rev. 11 submitted by SysTest on October 20, 2008 will be reviewed and approved by the EAC. The test plan and corresponding test cases will be used by iBeta as it works to develop its own test cases for the testing of the Premier Assure 1.2 system. The EAC will provide direction on the Volume and Stress test discussions conducted with the manufacturers and SysTest for test case development.

If you should have any questions regarding these decisions or the testing to be conducted at iBeta please do not hesitate to contact me. Thank you for your time in resolving these issues.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian J. Hancock". The signature is fluid and cursive, with the first name "Brian" being the most prominent.

Brian J. Hancock
Director, Testing and Certification

Attachment: 10.29.08 EAC ltr. to all EAC registered manufactures

cc: iBeta Quality Assurance
Kathy Rogers, Premier Election Solutions



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

October 29, 2008

To: Registered Voting System Manufacturers

From: Brian Hancock, Director
United States Election Assistance Commission
Testing and Certification Program

RE: EAC Issuance of Notice of Intent to Suspend SysTest, Laboratories Inc.

The U.S. Election Assistance Commission today notified (attached) SysTest Laboratories Inc. of its intent to suspend the laboratory based upon the suspension of its accreditation by NIST/NVLAP.

As a result of the notice, SysTest has three days to respond to EAC's action. If SysTest cannot refute the fact that NVLAP has suspended the laboratory the EAC will suspend SysTest and all testing under the EAC's program must be halted immediately.

Those manufacturers currently using SysTest as their lead VSTL for testing under the EAC's program should be aware of their options as provided for in the EAC's *Voting System Testing and Certification Program Manual* and the *Voting System Test Laboratory Program Manual*. Per section 4.3.1.2. of the EAC's *Testing and Certification Program Manual*, the EAC Program Director may, at his discretion, allow a manufacturer to change VSTL's provided the manufacturer shows good cause for the change. A manufacturer may request to change its VSTL by providing in writing:

1. A statement indicating the current VSTL conducting testing of their voting system.
2. The reasoning for the request to change VSTL (good cause).
3. A statement indicating the new VSTL the manufacturer wishes to test the voting system.
4. A proposed amended Voting System Certification Application reflecting the proposed VSTL change.

Upon receipt of this information, the EAC Program Director will issue written notice to the manufacturer regarding the proposed change of VSTL. Upon receipt of expressed written permission from the Program Director to change VSTLs the manufacturer may

begin testing at the new VSTL in conformance with the EAC's program requirements. Manufacturers may also choose to halt testing until such time as SysTest Laboratories may become eligible to recommence testing of their voting system. Please be aware that SysTest MAY NOT recommence testing until such time as the EAC provides written notice to SysTest of their ability to begin testing again under the EAC's program.

Many of you may have questions regarding the testing already conducted by SysTest and its use by a new VSTL. Per section 2.10.6. of the EAC's *Voting System Test Laboratory Program Manual* a VSTL may accept prior testing conducted by another VSTL or third party laboratory provided certain conditions are met. These conditions are:

1. The discrete hardware or software component previously tested is demonstrably identical to that presently offered for testing.
2. The voting system standards and relevant EAC interpretations applicable to the prior and current testing are identical.
3. The test methods used are equivalent or identical to current test methods approved by the EAC.
4. The prior testing has been reviewed by the VSTL and no errors or omissions are apparent.
5. The adoption and use of prior testing is noted in the test plan and test report.

Please be aware that the lead VSTL is responsible for ensuring that the prior testing has met these requirements. Like all testing under the EAC's program, all prior testing remains subject to EAC technical review and approval.

If you have any questions regarding the possible suspension of SysTest Labs, the process for the changing of a lead VSTL, or the process for approval of prior testing please do not hesitate to contact myself or my staff.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian J. Hancock". The signature is fluid and cursive, with the first name "Brian" being the most prominent.

Brian J. Hancock
Director, Testing and Certification