U. S. ELECTION ASSISTANCE COMMISSION
Voting System Testing and Certification Program
1225 New York Avenue, NW, Suite 1100
Washington, DC. 20005

April 14, 2008

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

RE: Approval of Test Plan

Dear Mr. Iredale,

This letter is to inform you that version 8.0 of the test plan (cover page attached) submitted by SysTest Labs, for the testing of Premier Election Solutions, Inc. Assure 1.2 Voting System, EAC Application Number PRM0701 (Formerly DBD0701) has been reviewed and approved. Per section 4.4.4.3 of the EAC's Testing and Certification Program Manual ("Program Manual") a test plan is approved based on the information submitted. Any new or additional information must be reported to the EAC and may require a change in the testing requirements at any point in the certification process. Approval of a test plan simply signifies that the tests proposed, if performed properly, appear to be sufficient to fully test the system.

I also want to take this opportunity to remind you of the EAC's requirements following approval of a test plan. Section 4.5 of the Program Manual requires manufacturers to enable VSTLs to report any changes to a voting system or an approved test plan directly to the EAC. Under this section, Manufacturers are also required to enable VSTLs to report all test failures or anomalies directly to the EAC. In addition, please see Section 4.5.1. for information regarding the reporting requirements for changes to a system or test plan during testing, and Section 4.5.2 for information regarding the reporting requirements for anomalies or failures found during testing.

Section 4.6 of the Program Manual lays out the various requirements for the submission and approval of a test report. Please be aware that all test reports will be posted on the EAC's website in accordance with Federal law. Chapter 10 of the Program Manual outlines the responsibilities of the EAC, the VSTL, and the Manufacturer regarding the dissemination of this information.

Finally, after final approval of the test report and the issuance of an Initial Decision of Certification by the Decision Authority (the EAC Executive Director) consistent with

Section 4.6 of the Program Manual there are additional steps that must be taken before final certification will be granted. These steps are outlined in Chapters 5 & 6 of the Program Manual and include items such as the execution of a trusted build, providing the EAC with specific system identification tools, and documentation that all other pre-certification requirements have been met. I strongly encourage you and the VSTL to re-read these chapters in order to make the final steps of the process as efficient as possible.

Finally, I have attached a preliminary list of concerns noted by our Technical Reviewers which must be addressed in the Test Report for this product. An addendum to the Test Report may be used to meet these requirements.

If you should have any questions regarding the approval of the test plan referenced above, or the rest of the EAC's certification process please contact me.

Sincerely,

Brian Hancock
Director, EAC Testing and Certification Program

 cc: SysTest Laboratories Inc.

Attachments: Approved Test Plan Cover
              Preliminary notification of issues to be addressed in product Test Report

Election Assistance Commission
Voting System Certification Testing

Certification Test Plan

Document Number 06-V-DB-058-CTP-01, Rev 08
April 1, 2008

Prepared for:

Vendor Name	Premier Election Solutions, Inc.
Vendor System	Premier Election Solutions, Inc. Assure® 1.2 Voting System
EAC Application No.	DBD0701
Vendor Address	1253 Allen Station Parkway P.O. Box 1019 Allen, TX 75013

Prepared by:

$SysTest$
$labs^®$

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NVLAP®

NVLAP LAB CODE 200733-0

Accredited by the Election Assistance Commission (EAC) for Selected Voting System Test Methods or Services
EAC Lab Code 0701

EAC Remaining Hardware Testing Concerns Related to Premier Assure 1.2 Rev. 08 Test Plan

After review of the documentation presented to address the concerns raised by the EAC and noted as the conditional item related to Test Plan approval, the following issues remain unresolved:

- It is not clear that this test plan is in compliance with NOC 08-001. In particular no statement could be found regarding the requirement to repeat ESD testing in order to check for potential problems with the use of prior testing.
- An alternate method of qualifying the safety and environmental labs is used but not described. Further, it is not clear that the alternate method has been authorized by the EAC.

A satisfactory remedy for these points would be separate communication, perhaps to become an addendum to the test report that would explicitly state that the requirements of NOC 08-001 have been met and provides details, satisfactory to the EAC, of the method being used to qualify the safety and environmental test laboratories used.

The initial focus of the review was to compliance with Notice of Clarification NOC 08-001, "*Validity of Prior Non-Core Hardware Environmental and EMC Testing*", Issued by the Program Director, March 26, 2008. That NOC requires, in part:
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 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.
The Test Plan, "*Certification Test Plan Premier 1.2 Rev 08*", Section 2.1.3 addresses the use of prior testing:

2.1.3 Hardware Environmental Testing Assessment
The acceptance and use of previous hardware environmental testing and certification performed by accredited NVLAP or A2LA facilities is based on the following criteria:
• Testing was performed no earlier than January 1, 2005
• The configuration of the equipment being presented for testing is substantially identical to the equipment that was previously tested and certified and that all changes made to the

hardware configuration of the equipment being presented for testing, from the hardware that was previously tested and certified were confirmed to be de minimis changes.
• The standards and associated requirements under which the previous testing and certification was performed are equal to or more demanding than the current requirements.
• There have been no significant changes to the test methods.
• The lab that completed the hardware environmental testing and certification meets the EAC's requirements for accreditation as defined in NIST HANDBOOK 150-22: 2005 and NIST HANDBOOK 150-22: 2007.

2.2.3 Hardware Environmental Testing Assessment
Test reports from previous hardware testing performed by accredited NVLAP or A2LA laboratories were analyzed to determine if the results could be accepted for certification (see Attachment G). If the testing met the criteria as defined in 2.1.3 above, it was considered to satisfy the requirements and is then exempted from specific tests. The testing matrix in Attachment B indicates which tests were previously performed, and it includes the name of the hardware test report from the previous accredited laboratory. Additionally, the testing matrix in Attachment B shows which accredited laboratories will be conducting the hardware tests which are now required.
Test Plans for required hardware tests are included in Attachment F to this document.
Significantly the Test Plan makes no mention of the requirement to repeat the ESD testing.

It is also worthy of note that final point should be amended to:
• *The lab that completed the hardware environmental testing and certification meets the EAC's requirements for accreditation as defined in NIST HANDBOOK 150-22: 2005, NIST HANDBOOK 150-22: 2007 and other documents appropriate to the scope of testing performed.*
NIST HANDBOOK 150-11 contains the requirements for EMC test laboratories. The purpose of this note is to assure that it is explicitly stated that laboratories are compliant with the requirements for accreditation appropriate for the testing they perform.
Test Plan Attachment B, "*Premier Hardware Test Matrix and Notations*" states the testing performed with dates for many of the tests. It notes at the top of the matrix:
VSS 2002 Hardware Tests Performed at:
 - Nemko and Wyle - Verified by Wyle and updated June 2007
 - Percept, CIS, APT and SysTest - Verified by SysTest February to April 2008
Further information on what was found or how the verification was performed could not be found.

Another concern arises concerning the qualification of the third party test laboratories. In Test Plan Section 4.3.1, "*Hardware Qualitative Examination Design*" it states:
Regarding the SysTest's hardware testing will be performed at four subcontract laboratories:

• Environmental Testing will be done at Advanced Product Testing (APT) Laboratories in Longmont, Colorado (In lieu of accreditation, APT has been audited for compliance with the appropriate sections of NIST Handbook 150-22.)

• Safety Testing will be performed at Compliance Integrity Services (CIS) Laboratories in Longmont, Colorado (In lieu of accreditation, CIS has been audited for compliance with the appropriate sections of NIST Handbook 150-22.)

There are several concerns with these statements. First, it is not stated what was done in lieu of accreditation. Second, it was not clear who audited the labs. Third, it is not clear that the EAC or NVLAP approved the lab reviewer or the review process. Forth, NIST Handbook 150-22 sets forth requirements for Voting System Test Laboratories. Different requirements would apply to safety and environmental testing laboratories. These labs should be reviewed to NIST Handbook 150 and appropriate specific requirements for their scope of testing.