Testimony of Brian J. Hancock

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Pilot Program Testing and Certification Manual Overview

Introduction

The primary purpose of the EAC Pilot Program Certification Manual is to provide clear procedures to Manufacturers for the testing and certification of voting systems to be used in pilot election projects. The program also recognizes that the Federal certification framework should encourage the voting systems industry to pursue technological innovation and experimentation in relation to the design of voting systems and the methods of providing a better and more secure voting experience for United States citizens. The general concept is to provide a quick and cost effective method to certify pilot program voting systems for use by States that require EAC certification. This Manual provides a clear and transparent process for the testing, certification, and evaluation of voting systems used for these pilot programs.

As you know, the EAC has submitted this manual to the Federal Register and posted the document on the EAC web site for public comment. The Public comment period is scheduled to run until 5:00pm eastern time on Monday, April 26th. Information on how and where to submit comments can be found on our web sit at www.eac.gov.

Pilot Certification Manual Overview

The Pilot Program Certification Manual follows the same general outline and format as the Testing and Certification Program Manual. The document contains 8 sections, including the introductory section. The sections containing information and requirements pertaining to Manufacturer Registration, Requests for Interpretation and Release of Certification are virtually identical to those same sections of the Testing and Certification Program Manual adopted by the Commission in December of 2006.

Certification Testing, Technical Review and Grant of Certification

Generally, to receive a determination on an EAC certification for a pilot voting system, a registered Manufacturer must have (1) submitted an EAC-approved application for certification, (2) had a VSTL submit an EAC-approved test plan, (3) had a VSTL test a voting system to applicable voting system standards, (4) had a VSTL submit a test report to the EAC for technical review and approval, and (5) received EAC approval of the report in a Decision on Certification. These elements are again very similar to our current Testing and Certification Manual. Like our full program, manufacturers must submit and application package containing very specific information about the system prior to testing. Unlike our full program, manufacturers will also be required o submit as part of the application package a Declaration of Conformity Document. For the purposes of EAC Pilot Certification Programs, a Declaration of Conformity is the procedure by which a pilot voting system manufacturer notifies and affirms to the EAC that the manufacturer has taken the necessary steps to ensure that the system conforms to the applicable technical standards and requirements promulgated by the EAC for a particular pilot program. All testing done by the manufacturer pursuant to the Declaration of Conformity must either be conducted by the manufacturer themselves under a quality process substantially similar to those noted in ISO/IEC 17025 or by a test laboratory accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) or by the American Association of Laboratory Accreditation (A2LA).

The Declaration of Conformity is a procedure by which the manufacturer of a pilot voting system gives written assurance that their product, process and service conforms to specified requirements. This declaration places the legal onus on the manufacturer for conducting testing of their product to the standards or requirements listed on the document. This process is used in many other industries and provides benefits to the manufacturers by limiting both the time and cost of traditional VSTL testing. Our hope is that reducing the time and cost of testing in this manner will benefit election jurisdictions by encouraging manufacturers to attempt innovative solutions while keeping the cost reasonable to both the manufacturers and to jurisdictions wishing to attempt limited time pilots.

Other changes to our process necessitated by truncated pilot program timeframes include an accelerated EAC Review process for both Test Plans and Test Reports (5 business days to review Test Plans, 10 business days to review test Reports), and the limited nature of the pilot certification and certification number. Each certification document awarded to a manufacturer will contain the specific expiration date which will generally coincide with the timeframe for the conclusion of the jurisdictions pilot program election work.

Denial of Certification

Because of the limited timeframe of a pilot certification effort our Pilot Program Manual will not include provisions for the decertification of a pilot system. This Manual does, however,

provide for the denial of certification for a pilot voting system with an expedited appeal capability by a manufacturer if a denial of pilot certification is issued.

A denial of certification would, of course be recommended by staff if the pilot system failed to show conformance to the applicable standards or requirements during the VSTL portion of the testing campaign, or if the EAC's Declaration of Conformity Audit, which I will discuss momentarily, finds that the manufacturer's testing documentation was missing or incomplete, or if the testing itself was inadequate to measure conformity to the applicable standards or requirements.

Pilot Program Monitoring and Reporting

Under our Pilot Program Certification Manual, the EAC has two primary tools and one secondary tool for assessing the level of effectiveness of the pilot certification process. The two primary tools are:

- manufacturer declaration of conformity audits
- mandatory post election reporting by manufacturers.

Our one secondary tool is:

- voluntary pilot program monitoring and reporting by State and local election jurisdiction participating in pilot programs.

The Manufacturer Declaration of Conformity Audits will be conducted to:

- Gather information and documentation to insure that the attestation in the declaration of conformance agrees with the actual documented testing done on the pilot voting system by the manufacturer.
- Review documentation (including but not limited to: test plans; test cases, test methods, test suites, test procedures; test data recorded, and test reports) to determine the adequacy of manufacturer conformance testing.
- Gather information and documentation to insure that the manufacturer adheres to their stated quality management system and configuration management system.

Each manufacturer shall be subject to a mandatory declaration of conformity audit during every pilot certification test engagement. Declaration of conformity audits shall be conducted for a period not to exceed 5 business days.

A written audit report will be drafted by the EAC and provided to the Manufacturer within 10 business days of completion of the audit. Manufacturers that pass these audits may continue in the pilot certification program. If the audit report finds the manufacturers quality program, and/or product testing was deficient, or if the audit finds that required records were missing, inadequate or otherwise falsified or fabricated in order to circumvent the EAC process, the auditors will recommend that the pilot voting system be dismissed from the pilot program pending adequate resolution of the nonconformities found during the audit.

The EAC will also require registered manufacturers of voting systems used in pilot programs to collect and submit information related to the performance of the system in any election in which it is used. Information on actual pilot system performance in the field is a basic means for assessing the effectiveness of the pilot product as well as manufacturing quality control. The EAC will provide a mechanism for election officials to provide real-world input on pilot voting system anomalies.

Manufacturers must record each anomaly that affects the pilot voting system during an election. In addition, the manufacturer shall identify all root causes for each anomaly, and report to the EAC all corrective actions identified and taken for each anomaly. Reporting of these anomalies will allow the EAC to better evaluate the performance of pilot systems under real election conditions in order to make recommendations for future use of the system. The Report may be filed with the EAC by electronic mail, by regular mail or by facsimile.

As another means of gathering field data, the EAC will collect information from election officials who field EAC-certified pilot voting systems. Information on actual voting system field performance of pilot systems is a basic means for assessing the effectiveness of the manufacturer's product and their quality control. The EAC will provide a mechanism for State election officials to provide input on their field experiences with the pilot voting system in real-world elections.

Conclusion

The Certification Division feels that this new Manual will provide valuable services to both the election community and the voting system manufacturing community by providing a process through which new and innovative systems may be piloted in jurisdictions in order to gain first hand experience with the new technology as implemented in a real election and to evaluate the system and its benefits to domestic or overseas voters. We look forward to the public comments on this document as we move forward towards final adoption of this document.