

Testimony of Brian J. Hancock

EAC Public Meeting September 21, 2010

EAC Quality Monitoring Program - Working with State and Local Election Jurisdictions

Madam Chair, Commissioners, and Executive Director Wilkey: Thank you once again for allowing me to testify this morning. My previous testimony to the Commission regarding our Testing and Certification Program have focused almost exclusively on the process behind getting a voting system tested by a Voting System Test Laboratory and eventually certified as having met the requirements contained in a specific set of Federal Standards or Guidelines.

While this process is unquestionably a critical component of the EAC mandate under the Help America Vote Act, my ultimate goal is for the technical certification related activities to some day become the most routine and yes, easy part of our process. I feel that the real value added in our certification program and where we should focus resources in the future, is working with State and local election jurisdictions to investigate and hopefully correct problems and anomalies found with fielded EAC certified voting systems through our Quality Monitoring Program.

As outlined in the EAC *Testing and Certification Program Manual*, EAC has three primary tools for assessing the level of effectiveness of the certification process and the compliance of fielded voting systems. These tools include (1) manufacturing site reviews, (2) fielded system reviews, and (3) a means for receiving anomaly reports from the field. My testimony today will focus on the second of these tools: fielded system review.

Fielded System Review and Testing.

Upon invitation or with the permission of a State or local election authority, the EAC may, at its discretion, conduct a review of fielded voting systems. Such reviews will

be done to ensure that a fielded system is in the same configuration as that certified by the EAC and that it has the proper mark of certification. This review may include the testing of a fielded system, if deemed necessary. Any anomalies found during this review and testing will be provided to the election jurisdiction, the Manufacturer and any other jurisdiction using the affected system.

How we use the Information

Ultimately, the information the EAC gathers from manufacturing site reviews, fielded system reviews, and field anomaly reports will be used to improve the program and ensure the quality of voting systems. The Quality Monitoring Program is not designed to be punitive but to be focused on improving the process. Information gathered will be used to:

- Identify areas for improvement in the EAC Testing and Certification Program.
- Improve manufacturing quality and change control processes.
- Increase voter confidence in voting technology.
- Inform Manufacturers, election officials, and the EAC of issues associated with voting systems in a real-world environment.
- Share information among jurisdictions that use similar voting systems.
- Resolve problems associated with voting technology or manufacturing in a timely manner by involving Manufacturers, election officials, and the EAC.
- Provide feedback to the EAC and the Technical Guidelines Development Committee (TGDC) regarding issues that may need to be addressed through a revision to the Voluntary Voting System Guidelines.
- Initiate an investigation when information suggests that Decertification is warranted

Informal Inquiry

An Informal Inquiry is the first step taken when information is presented to the EAC that suggests a voting system may not be in compliance with the applicable voting system standard or the procedural requirements of this Manual. The sole purpose of the Informal Inquiry is to determine whether a Formal Investigation is warranted. The outcome of an Informal Inquiry is limited to a decision on referral for investigation.

Informal Inquiries are initiated at the discretion of the Program Director. They may be initiated any time the Program Director receives attributable, relevant information that suggests a certified voting system may have issues that could lead to decertification.

This information may come from State and local election officials, voters, or others who have used or tested a given voting system. The Program Director may notify a Manufacturer that an Informal Inquiry has been initiated, but such notification is not required. The Informal Inquiry process is limited to that inquiry necessary to determine whether a Formal Investigation is required. In other words, the Program Director will conduct an inquiry sufficient to determine that the information obtained is credible and that the information, if true, could serve as a basis for decertification. The nature and extent of the inquiry process will vary depending on the source of the information. Information provided by election officials or by voters who have used a voting system may require EAC staff and technical experts to perform an inperson inspection or make inquiries of the Manufacturer. An Informal Inquiry will conclude after the Program Director is in a position to determine the credibility of the information that initiated the inquiry. The Program Director may make two conclusions from information gathered as a result of the Informal Inquiry: (1) refer the matter for a Formal Investigation or (2) close the matter without additional action or referral.

Working with Cuyahoga County

The DS200 precinct count optical scan voting device fielded in Cuyahoga County, Ohio is part of the EAC Certified Unity 3.2.0.0 voting system. During pre-election logic and accuracy (L&A) testing prior to the May 4, 2010 Primary Election the DS200 demonstrated intermittent screen freezes, system lockups and shutdowns. These issues were conveyed to the voting system manufacturer, Election Systems & Software (ES&S). ES&S provided the county with initial information on what they believe had occurred during L&A testing and during the subsequent election.

Cuyahoga County enhanced and expanded the Logic & Accuracy (L&A) tests that were initially provided for the DS200 by ES&S. Cuyahoga County has 1068 precincts with \approx 1200 machines to fulfill training and election needs. During the course of L&A testing a "power down" and "freezing" anomaly occurred on some DS200 machines. This anomaly appeared a total of 89 times during L&A testing without a distinguishable pattern in the timing or actions taken to cause the freeze/shutdown issue. During the May 4th Election, poll workers reported four DS200 shutdowns to the County. Although the machine failures were encountered less frequently on Election Day than during L&A testing, the anomaly still presented itself in a number of machines.

EAC was notified of the anomaly before the Primary election and contacted Cuyahoga County and other jurisdictions that use the same system, as well as ES&S to gather information. After determining that the information related to the freeze/shutdown issue was valid, I opened an Informal Inquiry into the issue.

Since the initiation of the Informal Inquiry, EAC staff has had numerous discussions with Cuyahoga County, ES&S, and iBeta Quality Assurance, the VSTL for the Unity 3.2.0.0 system. In addition, in order to determine the potential extent of the problem, EAC staff has also contacted other election jurisdictions using the DS200 including, Orange, Miami-Dade, Escambia, Clay, Collier and Pasco Counties in Florida, the Wisconsin Government Accountability Board and the New York State

Board of Elections. ES&S to their credit, has been forthcoming with information requested by the EAC and has submitted all relevant information in a timely manner. ES&S has also conducted an internal investigation into the root cause of the DS200 freeze/shutdown anomaly. EAC staff is currently reviewing the root cause analysis done by ES&S in order to close the informal inquiry and make a determination on whether the root cause analysis is valid and the matter should be closed, or whether questions exist sufficient to recommend to the Executive Director that we open a Formal Investigation.

In conclusion, I must say what a pleasure it has been to work with all of the jurisdictions during this inquiry process, particularly with Ms. Platten and her staff in Cuyahoga who have been welcoming, open and cooperative with us during the entire process. Our hope is that the working relationship we are building with Cuyahoga and other DS200 jurisdictions will set an example for future cooperation between the EAC and State and local jurisdictions. In my opinion, such cooperation is the key element in quickly and satisfactorily resolving problems with fielded voting systems, and to improve both the EAC testing process and the quality of manufactured voting systems for the benefit of all jurisdictions