

**Testimony of J. Bradley King, Co-Director, Indiana Election Division before the
United States Election Assistance Commission
February 2, 2006**

Chairman DeGregorio and members of the United States Election Assistance Commission, I would like to thank you for inviting me to testify regarding the implementation of the Commission's Voting System Certification Program and, in particular, the adoption of the 2005 Voting System Standards. I hope these comments provide helpful guidance to the Commission in briefly describing the lessons learned in Indiana in the transition from 1990 standards, 2002 standards and what we anticipate will be the challenges facing Indiana and other states in the transition to the newly adopted 2005 standards and further standards to be adopted by the Commission.

Certainly, the Help America Vote Act of 2002 (HAVA) has been a positive force in modernizing the administration of federal elections through the replacement of outdated voting systems with newer technology and in providing a mechanism, through this Commission to establish voluntary voting system guidelines to provide for the testing, certification, decertification, and recertification of voting system hardware and software and the ongoing maintenance and improvement of the standards. In Indiana in 2000, over 50% of our state's voters were casting ballots on punch card or lever voting equipment. In the 2004 elections, only 10% of registered voters would have voted on those same machines. Throughout 2004 and 2005, counties purchased new voting equipment to comply with federal and state laws and reimbursements were made to the counties for those purchases. In the spring of 2005, the last lever machine county replaced its system with a Direct Record Electronic (DRE) voting system. In October 2005, the last of the punch card county replaced its system. In addition, with the leadership of our Circuit Court Clerks and their dedicated election deputies, all counties completed contracts for accessible voting equipment in preparation for deployment in Indiana's 2006 May primary elections. In addition to compliance with the explicit requirements of HAVA, many Indiana counties took advantage of the opportunity offered by the federal reimbursement program to significantly upgrade the types of optical scan voting systems and DRE voting systems used in their county. For example, some counties replaced all of their DRE voting systems with new DRE voting systems containing accessibility features for disabled voters. To date, Indiana has spent at least 60 % of its federally allocated HAVA money for voting system replacements and upgrades.

As you consider the implementation of a national certification program for voting systems that will replace the voting system qualification process that has been conducted by the National Association of State Election Directors since 1994, I would like to share with you some issues our State has confronted.

Voting System Certification in Indiana

In Indiana voting systems are certified for marketing, sale and use by the Indiana Election Commission which is an administrative body that consists of four members, two

of each which are nominated by the major political parties in Indiana and appointed by the governor. As I'm sure it is in other states, our Commission members are not required to have expertise in voting systems and they have different levels of technical expertise. Many Commission members through the years have expressed their frustration with lacking the technical advice and support necessary for them to vote intelligently on a voting system application pending before the Commission. The Commission used to receive input from another administrative body in Indiana called the Voting System Advisory Committee. The members of this Committee consisted of no more than a half dozen state university faculty members who offered some technical expertise in its assistance to the Commission on a part time basis, however, the Committee lacked institutional continuity and support. This Committee was abolished in a move to streamline state government years ago.

To obtain certification in Indiana, a voting system vendor must submit an application with extensive technical information about the voting system and pay a fee. As part of the application process a vendor must demonstrate to the Commission that its system has been examined by an Independent Testing Authority ("ITA") (Indiana's definition of testing authority was recently amended to include an entity "accredited under Section 231 of HAVA") and that it meets the current 2002 Federal Election Commission Voting System Standards which were adopted as Indiana law effective July 1, 2003 (IC 3-11-15-13.1) as well as the applicable standards established under HAVA. According to survey responses provided by other NASED members several years ago, Indiana was one of the first states to adopt the 2002 FEC Voting System Standards as a specific requirement of certification under state law. In addition, to obtain certification a vendor must successfully demonstrate its system to the Commission and document the escrow of the voting system's software, firmware, source codes, and executable images with an escrow agent approved by the Election Division.

The Co-Directors of Election Division, the body which provides daily administrative support to the Commission, review materials submitted by voting system vendors and make a recommendation regarding certification to the Commission members. If there are any outstanding issues, the Co-Directors note these issues for the Commission. However, the individuals who currently serve, and that have previously serve, as Co-Directors would, I think, candidly admit that their training reflects a legal or other administrative background and not a extensive technological background required to properly review reports from an ITA.

Increasingly, the Co-Directors have been called upon to address technical issues. Some of these issues are routine. For example, sometimes the Co-Directors are asked to decipher cryptic cover letters from the ITAs indicating that some (but perhaps not all) testing of a voting system has been completed. However, despite helpful guidance by the EAC staff, the Co-Directors have had difficulty sorting through more challenging technical issues. For example, it is not uncommon for voting system vendors to use off-the-shelf (OTS) computer software together with their proprietary application software to build a voting system. For example, the issue of whether changes to off-the-shelf software incorporated into a certified voting system requires a vendor to request

recertification of its voting system when changes are made to the off the shelf software by the vendor of the off-the-shelf software. In addition, a new hybrid system (AutoMARK) that provides an electronic interface but marks an optical scan ballot has created several issues for Indiana, namely: 1) Is this new hybrid voting machine a “voting system” under Indiana statute which incorporated the federal definition of “voting system” beginning January 1, 2006?; 2) Did this new hybrid voting machine comply with the applicable accessibility standards set forth in HAVA?; and 3) Could this hybrid voting machine be used as a plug-and-play device with all other optical scan readers (including those of other non-consenting vendors) or did the hybrid voting machine have to be tested by an ITA with a specific optical scan reader to be certified as an overall voting system?

Recommendations

Evolving voting system standards can be useful if they address perceived gaps or ambiguity in current standards, address emerging technologies and improve the voting system certification process. Certainly one area that could be addressed is communication. Indiana has experienced difficulty due to the high turnover rate of the person responsible for voting system certification issues within the vendor’s organization. Often, this turnover is not due to the person leaving the employ of the vendor. More often, it seems to be that the person moves to a more lucrative position within the vendor’s organization or the vendor simply shifts people in and out of the position responsible for certification. When turnover occurs, the newest individual communicating with the state on behalf of the vendor is often unfamiliar with Indiana certification requirements and even federal voting systems standards. The turnover can lead to dire consequences for the vendor and the state. The vendor loses the opportunity to effectively complete the certification process and may lose sales. The state runs the risk that the vendor will actually sell and deliver uncertified voting equipment in Indiana. This has, in fact, occurred in Indiana.

Therefore, I would advocate that the standards address that the vendor be responsible for designating one individual within its organization to be the point of contact with the states on certification issues and to develop internal education programs within the vendor’s organization to ensure ongoing monitoring of the impact of new federal voting system standards on the products and marketing activities of the company. This would reduce the risks to both the vendor and the states in a proactive, rather than reactive, manner and, hopefully, lead the vendor to put greater value on this important function within its organization and encourage the vendor to promote stability and institutional memory at that position.

Of course, as you consider new voting system standards to address legitimate issues your deliberations should be balanced by change management difficulties that will be experienced by vendors, election administrators and voters whenever new standards are adopted. It is important to consider the continued use and support of systems that are currently certified under existing standards. Often, these systems are accurate, reliable and easy to use. Therefore we have to ask whether the new standards address some

deficiency perceived in existing systems. If not, then there would appear to be no harm in the continued use of systems certified under the current standards. If the new standards do address some deficiency in existing systems, we have to balance those concerns with the costs imposed by buying new systems or upgrading existing systems to meet new standards against the risks identified in the new standards. With respect to costs, I am speaking not only of the costs for the purchase or the upgrading of voting systems but also about the significant costs of training election officials, poll workers and voters that would be required to use new or upgraded voting systems that comply with the new standards.

Change management has been a major contributor in the success of our implementation of a statewide voter registration system. It is not enough that the system works. It must work for the election administrators who use it on a day to day basis and the transition from the old system to the new must be managed with detailed planning. In this respect, planning with respect to communication about the transition and training with regard to the new system was vital. I would urge you to consider the change management aspects of adopting new standards and adopting change management as part of the adoption and implementation of the new standards. For example, there must be a well developed plan for the communication the new standards to ITAs, state election officials and vendors. In addition, there must be a well developed plan to train ITAs, state election officials and vendors in the interpretation and use of the new standards.

The plan to implement new voting system standards must recognize the reality of the election cycle. Our deadlines to implement most provisions of HAVA were fixed by federal law. However, the adoption and implementation of voting systems standards must be timed to produce the least possible disruption to what has become a continuous election process. Indiana was lucky in that it had no elections of any significance during 2005 and, as a result, was able to focus more attention on the enforcement of the 2002 standards and otherwise. I recommend that implementation of future standards avoid as much as possible implementation during, or shortly before the start, of a general election year.

Turnover among state and local election administrators also requires ongoing training efforts. NASED and the Election Center should continue to play an important role in educating their own membership with regard to the adoption of new voting system standards as well as providing basic education for newcomers about the fundamental principles embodied in the recently adopted 2005 voting system standards.

Finally, change costs money. The adoption and implementation of voting system standards without adequate funding to accomplish significant changes to voting systems will ultimately be self defeating. Local election officials will continue to find more pressing priorities demanded by their voters than what voters perceive to be an incremental improvement to the voting system that they use. The implementation of HAVA voting system upgrade requirements in Indiana was met with widespread support and excitement. However, both voters and election administrators will need the education

provided by the training programs I described earlier to convince them of the importance of spending money to implement these types of changes.

The Voting System Technical Oversight Program

Recognizing that voting system standards will continue to evolve and that an institutionalized, but not bureaucratized, source of technical support is critically needed at the state level, Secretary of State Rokita proposed the enactment of legislation to establish “The Voting System Technical Oversight Program.” This legislation was enacted as P.L. 221-2005. I understand that, although many states have discussed creating a VSTOP modeled on Georgia’s relationship with Kennesaw University, Indiana may be the first state to have done so by statute.

Pursuant to this legislation, the Secretary of State is directed to contract with an entity to administer the program. The legislature directed that the contract require that entity to provide the following program services, namely: 1) Develop and propose voting system procedures and standards; 2) Compile an inventory of voting equipment in Indiana; 3) Review ITA reports; 4) Recommend to the Indiana Election Commission whether to approve a voting system application; 5) Perform random voting system audits; 5) Review contracts for the purchase of voting systems; and 6) Assist with the development of quantity purchase agreements for voting systems.

The legislature directed the Secretary to issue a request for proposals (“RFP”) to enter into a contract with an entity to run the program and established an expedited process for issuing the RFP. In addition, the legislature specifically directed the Secretary to send invitations to public and private colleges and universities located within Indiana to respond to the RFP.

With respect to how the program would effect the voting system certification process in Indiana, this legislation requires that ITA testing reports submitted by vendors in support of their certification applications be evaluated by the entity administering the program, at least with respect to an initial request for certification. The Indiana Election Commission may accept an evaluation from either the Election Division or the entity administering the program with respect to a request for the approval of an upgrade to a previously certified voting system.

A request for proposals was issued pursuant to this legislation in the summer of 2005. Several responses were submitted and an educational institution, Indiana University, was selected as the potential vendor. However, contract negotiations with the university did not produce a contract. The parties could not overcome difficult issues with respect to the activities to be conducted under the program. For example, the parties could not agree on the number and type of voting system audits to be performed under the contract. More specifically, the Secretary desired the type of audit that would confirm whether or not a voting system being utilized in a particular county was the exact voting system, including all hardware, firmware and software components of the system, that

was certified by the Indiana Election Commission for use in Indiana. The university proposal focused on auditing county voting system procedures with respect to security, use and training. There were other issues, as well as time pressures posed by a backlog of certification requests, that posed challenges that could not be overcome by the parties in contract negotiations. As far as lessons learned, more time would have been helpful. The additional time could have been used in vendor conferences prior to the issuance of the RFP to try to identify where clarification might have been needed in the RFP.

Indiana plans to issue a new RFP by the end of March 2006 and anticipates the successful establishment of a Voting System Technical Oversight Program that will both enable state certification authorities to perform their functions with more information and confidence and provide assistance in making the implementation of new federal voting system standards more successful in Indiana.

I appreciate your invitation to allow me here today to share Indiana's experiences and ideas with respect to voting systems standards. I look forward to continuing to work with you and with state and local election officials in my state and around the country to continue to improve the voting system certification process.

Thank you.