



*State of New Jersey*  
*Commission of Investigation*

# **ELECTRONIC VOTING**

**Protecting the Integrity  
of the Vote  
in New Jersey**

*December 2007*



**State of New Jersey**  
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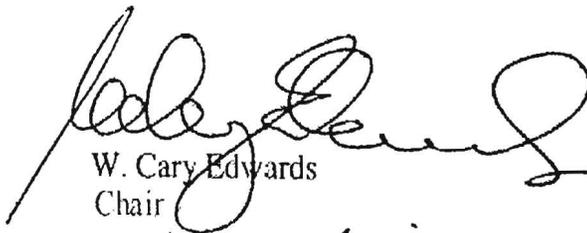
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December 2007

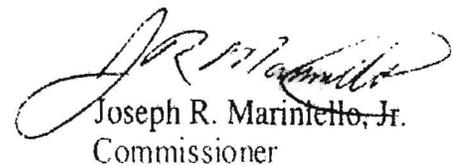
Governor Jon Corzine  
The President and Members of the Senate  
The Speaker and Members of the General Assembly

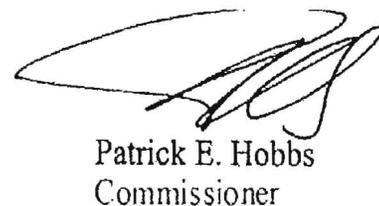
The State Commission of Investigation, pursuant to N.J.S.A. 52:9M, herewith formally submits a report and recommendations stemming from an investigation of matters involving the integrity of electronic voting machines in New Jersey.

Respectfully,

  
W. Cary Edwards  
Chair

  
Kathy Flicker  
Commissioner

  
Joseph R. Mariniello, Jr.  
Commissioner

  
Patrick E. Hobbs  
Commissioner

## ***Introduction***

The Commission undertook an investigation into the procurement of electronic voting machines in New Jersey based upon allegations suggesting manipulation and malfeasance in the vendor-selection process. During the course of the inquiry, additional questions arose with regard to whether there has been a sufficient level of uniformity and oversight in the actual purchases of the machines and whether they have been adequately certified to meet basic operational and performance standards.

Given the technological revolution that has occurred in recent years in the process by which citizens exercise one of their most fundamental rights and responsibilities, it is crucial that the integrity of the voting system be ensured and that any systemic flaws, abuses and/or weaknesses be rooted out and remedied. Indeed, the reliability of the entire nation's voting system came under scrutiny following the 2000 presidential election when nearly two million ballots were disqualified after it was discovered that manual, punch-card voting systems malfunctioned on a broad scale, primarily in the State of Florida. In the aftermath of that controversy, electronic voting machines became the norm, and new state and federal laws and regulations were adopted as part of a nationwide effort to bolster the integrity of the technology involved in the electoral process.

In New Jersey, paper ballots and manually-operated voting machines have been replaced entirely by electronic systems in each of the State's 21 counties. The transition to this new era of "high-tech" voting, however, has been neither smooth nor orderly. For example, apart from the lingering procurement and certification issues set forth and examined in this document, election officials and the courts are still wrestling with unresolved questions related to the adequacy of the actual hardware associated with electronic voting machines.<sup>1</sup>

While no specific improprieties were discovered during the course of this investigation, the Commission identified several critical areas in which the procurement and performance of voting machines are considerably vulnerable to abuse. Through this summary report, the Commission presents findings of fact, as well as a number of suggested recommendations for statutory and regulatory reforms relevant to the limited scope of the investigation.

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<sup>1</sup> A state court recently declined to enforce a January 1, 2008 deadline previously established under a state law requiring that all electronic voting machines be retro-fitted with printers to provide paper copies of completed ballots as a means of verifying electronically-recorded vote data. (*Assemblyman Reed Gusciora, et al. v. James E. McGreevey, Governor of the State of New Jersey et als.*, MER-L-2691-04.) Two bills pending in the Legislature, A-4585 and S-2949, would extend the retro-fitting deadline until June 3, 2008.

## ***Background***

Two separate sets of statutory guidelines govern elections in New Jersey. Title 19, a state law, sets forth rules and guidelines for the conduct of primary and general elections at the state, county and local levels of government.

The second set of statutory guidelines, meanwhile, establishes standards and legal requirements that must be met in order for the State to participate in primary and general elections involving federal offices. In the aftermath of the 2000 presidential election controversy, the federal Help America Vote Act of 2002 (HAVA) was enacted to establish minimum election administration standards for the states and to eliminate punch-card voting systems.<sup>2</sup> Among other things, HAVA required electronic voting machines to meet six basic performance standards, including a minimum error rate, allowing voters to review the accuracy of a vote before a ballot is cast, ensuring that disabled persons can vote independently, making multi-lingual voting ballots available and providing an audit function to facilitate a more efficient and reliable process in the event a recount is required.<sup>3</sup> Along with these voting-machine performance standards, HAVA also required states to address ancillary processes associated with the successful conduct of elections, including upgraded voter registration activities. States were required to adopt official plans to establish and maintain compliance with HAVA, which, in turn, provided for the distribution of federal funds to assist with that process.

New Jersey's share of federal HAVA funding included \$16.8 million to upgrade existing equipment and to purchase new electronic voting machines consistent with the HAVA guidelines.<sup>4</sup> Initially, the Office of the Attorney General of New Jersey, which oversees the State Division of Elections, undertook the process of selecting a vendor with which the State could contract for the purchase of HAVA-compliant voting machines. In July 2004, the State solicited vendor proposals via a "Request for Quotations" and subsequently evaluated the products of four voting-machine manufacturers. Early in 2005, however, the State abruptly abandoned this plan amid confusion surrounding a federal review involving the nature and future direction of various mechanical voting systems. According to a letter dated January 23, 2005 from the Attorney General's office to voting machine vendors:

*. . . The [Evaluation] Committee, on behalf of the Attorney General, has decided not to recommend the award of a state contract for a HAVA compliant voting system at this time. This decision was made in consideration of the ongoing national debate concerning electronic voting systems and in recognition that the Federal Election Assistance Commission is currently reviewing the matter. In light of the uncertainty surrounding the direction that voting systems will take and the requirements that such systems will have to meet, the State has*

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<sup>2</sup> HAVA, Pub. L. No. 107-252, 116 Stat. 1666 (2002), codified at 42 U.S.C. 15301 to 15545.

<sup>3</sup> Section 301 of Title III of HAVA requires that voting machines meet requirements by January 1, 2006.

<sup>4</sup> In total, New Jersey received \$84.9 million through HAVA in 2005. This included \$68 million for creating statewide computerized voter registration lists, addressing provisional voters and providing voter information.

*decided that rather than move forward with this procurement, additional study and consideration is advisable.*

The State’s withdrawal, however, did not halt the procurement process. Under Title 19, New Jersey’s 21 counties are authorized to purchase voting machine equipment unilaterally, and that is what occurred in this case. Utilizing the funds made available through HAVA, each county proceeded to enter into voting-machine purchase arrangements with vendors.<sup>5</sup>

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### ***Lack of Competitive Bidding***

Under New Jersey’s current procurement statutes, voting machines, unlike other goods and hardware regularly acquired by the State and its various governmental units – everything from paper clips to laptop computers – are exempt from competitive public bidding.<sup>6</sup> In effect, voting machines are treated for procurement purposes like professional services, and counties may purchase them at their sole discretion. Against this statutory back-drop, one manufacturer – Sequoia Voting Systems Inc. of Oakland, California – emerged as the market dominator in New Jersey, winning the exclusive rights to sell its electronic voting machines to 19 of 21 counties across the State. Eighteen counties opted to purchase the same Sequoia model, known as the “AVC Advantage.” Two other leading vendors won business in single counties. Warren County purchased machines from Avante Inc. of Princeton Junction, New Jersey, while Sussex County bought a model from Election Systems & Software of Omaha, Nebraska.

The machines produced by each of these three manufacturers were evaluated by the State and found to be quite similar in performance and reliability. In particular, Sequoia and its predecessor companies – Sequoia Pacific Systems Corp., Automatic Voting Machine Corp., and AVM Corp. – were found to have a demonstrated track record of use in New Jersey dating back to the mid-1990s. Further, a number of county officials told the Commission that they preferred the AVC Advantage machine on its merits because it is a “full-face” device that presents voters with a ballot image similar in appearance and configuration to the old manual, lever-activated machines.

While the Commission found no evidence that Sequoia received preferential treatment, that county governing bodies were urged to avoid doing business with other manufacturers or that price-gouging occurred, it is concerned that, going forward, the procurement process nonetheless is vulnerable to manipulation and abuse due to the lack of competitive bidding and the absence of any central controls or oversight. Competitive bidding is a formal process designed to provide public entities with the best possible product at the most reasonable price and to accomplish those goals with the utmost

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<sup>5</sup> N.J.S.A. 19:48-3

<sup>6</sup> N.J.S.A. 40A:11-5

transparency. Under the statutory and regulatory structure currently in place, none of those objectives can be guaranteed and enforced.

### ***Insufficient Certification Process***

All voting machines purchased for use in State-level elections in New Jersey must be certified, which means the equipment must be physically inspected and approved to meet statutory standards established through Title 19. The State conducts such inspections via its Voting Machine Examination Committee, a three-member advisory panel established by the Office of the Attorney General. Once the committee deems a particular machine/device as state-certified, information to that effect is published and made available for use by the counties in purchasing voting equipment.<sup>7</sup>

With regard to elections in which federal offices are at stake, all voting machines used in the State must additionally meet the separate set of six standards and requirements set forth in the HAVA statute with regard to accessibility, functionality and security. As to the actual process of certifying voting machines as HAVA-compliant – particularly with respect to vital matters such as whether the equipment meets the minimum error-rate standard – the federal government leaves that to the states.<sup>8</sup> Many, including New Jersey, rely upon the results of tests conducted by private laboratories but paid for by the very manufacturers who sell the machines. The U.S. Election Assistance Commission (EAC), created by HAVA as a clearinghouse on election issues, accredits such laboratories but does not do independent testing to verify results submitted by the laboratories.

Although the laboratories that conduct these tests are referred to in federal regulations as “Independent Testing Authorities,” the fact that the tests are carried out at the expense of manufacturers whose products could be made more marketable by the results makes them anything but independent. Aside from the obvious appearance, if not outright reality, of a conflict of interest, this arrangement raises questions about the extent to which the public can have confidence in the ultimate integrity of the core machinery used in the electoral process.

Taking note of these concerns, some states have undertaken efforts to oversee the process and ensure independent testing, a practice which is permitted under the terms of HAVA.<sup>9</sup> In 2006, for example, the State of New York entered into a direct contract with

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<sup>7</sup> List of state-certified voting machines is maintained by the New Jersey Division of Elections.

<sup>8</sup> With regard to error rates, HAVA Sect. 301(5) states, “The error rate of the voting system in counting ballots (determined by taking into account only those errors which are attributable to the voting system and not attributable to an act of the voter) shall comply with the error rate standards established under section 3.2.1 of the voting systems standards issued by the Federal Election Commission which are in effect on the date of the enactment of this Act.”

<sup>9</sup> HAVA Section 231 (a) (2) states: “At the option of a state, a state may provide for the testing, certification or recertification of its voting system hardware and software by the laboratories accredited by the [Election Assistance] Commission under this section.”

one leading testing lab, CIBER Inc. Such testing, however, is not cheap. CIBER estimates the cost of testing the typical electronic voting machine at more than \$540,000.

In another strategy designed to protect the integrity of voting systems, both New York and Pennsylvania have incorporated into their own state statutes governing voting equipment tougher federal standards that were established by the EAC in 2005 subsequent to HAVA. These standards, known as Voluntary Voting System Guidelines (VVSGs), were intended to ensure stronger levels of functionality, security and accessibility to voting systems, providing specifications and requirements against which voting equipment can be tested.

New Jersey has not adopted the stricter federal voting-machine standards into its own Title 19. Nor does the State pay laboratories to independently test the integrity and functionality of voting machines or provide any oversight of the testing process.

### ***Lack of Signed Contracts***

The Commission found that in the course of purchasing electronic voting machines, a number of counties did not enter into signed contracts with the vendor. Five counties – Mercer, Middlesex, Cumberland, Union and Salem – used simple purchase orders. In some instances, the only procurement information available for review by the Commission was a manufacturer’s proposal or a formal resolution from the Board of Chosen Freeholders to authorize the purchase. In Cumberland and Mercer counties, counsel for the county government told the Commission that county policies allow bid specifications or requests for proposals, bid responses and purchase orders to serve as the written contract.

As a mechanism for safeguarding the public trust in public procurements, however, there is no substitute for written contracts coupled with competitive bidding. Written contracts provide substantive legal protection for the buyer. In the context of voting machine purchases, counties that required contracts typically included provisions stating the manufacturer attested that the software, upgrades and hardware complied with laws applicable at that time of purchase. Counties lacking signed contracts received no documentation that the machine they were purchasing was in compliance with HAVA or other election laws.

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## ***Recommendations***

Voters should have complete confidence that the State's voting system is secure and reliable. To ensure its integrity, the Commission makes the following recommendations intended to fortify New Jersey's voting system:

### ***Procurement Process***

- Title 19 should be amended to require the State to establish and oversee a centralized system for the procurement of voting machines, thus providing a one-stop assurance that machines are compliant with both state and federal laws at the time of sale.
- The purchase of voting machines in New Jersey should be subject to competitive bidding requirements, a practice already required by neighboring New York and Pennsylvania. Besides ensuring the best product at the best price and safeguarding the integrity and transparency of the procurement, the State would be in a better position to gain the most favorable terms for equipment warranties, software renewals and service agreements.

### ***Performance Standards and Certification***

- Title 19 should be amended to incorporate all provisions of HAVA so that the conduct of both state and federal elections in New Jersey are on the same regulatory footing. As noted by the Attorney General in 2004, New Jersey's election statute is antiquated: “. . . [C]urrent law has been outpaced by the growing technological advances and must be revised.”<sup>10</sup> Three years later, the statute has still not been adequately updated.
- Any update of Title 19 should take into account all relevant regulations and guidelines adopted by the federal government since the enactment of HAVA to ensure that the State's electoral process meets the highest level of integrity. According to the EAC, more than 30 states have incorporated some measure of the federal guidelines and the standards for certification into their own state-level statutes.
- New Jersey should move away from the practice of allowing vendors to pay for tests to certify machines as HAVA compliant. If it is determined to be economically unfeasible to arrange independent testing of voting machines via commercial laboratories under contract with the State, New

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<sup>10</sup> HAVA NJ, The New Jersey State Plan approved and published by the Election Assistance Commission in the Federal Register of March 24, 2004 Sect. 4, pg. 25.

Jersey should explore alternate remedies, such as utilizing the expertise of its own public research universities.

*Official Contracts*

- Any purchase of a voting machine should be executed through a signed contract. This official documentation is necessary to provide legal protections to the buyer and to provide a written certification of the transaction – both of which are objectives in the best interest of the tax-paying and voting public.