

California's secretary of state puts brakes on electronic voting

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On August 3rd, a few minutes before a six-month election deadline was due to elapse, Secretary of State Debra Bowen decertified three brands of electronic voting machinery in California, citing research her office commissioned which showed the equipment's vulnerability to hackers. The decertified equipment is manufactured by Diebold Election Systems and Sequoia Voting Systems.

According to the *Los Angeles Times*, Diebold touch-screen voting terminals malfunctioned in the March 2004 state primary. The machines also contained uncertified software. The state barred 4 counties from using Diebold but later approved their use when local registrars agreed to implement new security requirements.

The UC Berkeley computer scientist who led Bowen's study said the verdict on the machines was in. "We found flaws that could allow an attacker to defeat all the technological countermeasures in the software," said David Wagner in a statement. "Unfortunately, these vulnerabilities are not trivial implementation bugs that can be patched up. The software just wasn't designed with fundamental safeguards in place to make them resilient to intrusion."

At a public hearing in Sacramento on July 30th, Wagner and



Secretary of State Debra Bowen made a campaign promise to insure California's vote-counting stays on the up and up.

Other experts described how they tampered with the software of all three electronic voting machines and altered votes via a laptop computer, or physically broke into an electronic ballot box with small, concealable tools.

Bowen also decertified the InkaVote Plus machine because the manufacturer, Election Systems and Software, failed to submit its equipment for analysis. Only one electronic voting machine from by Diebold or Sequoia can be used in a polling place for the convenience of disabled voters.

The decision doesn't affect San Francisco, Solano or Contra Costa counties, which don't use the electronic machines. San Mateo County uses electronic equipment manufactured by Hart InterCivic, whose machines Bowen approved as long as additional security and post-election auditing measures are implemented.

Many local registrars reacted to the decertification angrily, accusing Bowen of acting irresponsibly and claiming the research study did not accurately reflect a real-life situation.

"This is the most frustrating thing," Assemblyman Anthony Adams (R-Hesperia) told the *San Jose Mercury*. "Why would she do something like this, make people wait this long for something that

should have been taken care of ages ago?"

The study "has no relevance to the real-world conduct of elections," Napa County Registrar John Tuteur said at the July 30th hearing, according to the *San Francisco Chronicle*. "Secretary Bowen, you should know better than to erode the public's confidence in fair and accurate elections for crass political purposes."

Bowen's detractors said the hacking investigation she ordered was tantamount to letting someone into a bank and giving them the combination to the vault, then concluding that the bank's not secure. In the study, the scientists had possession of the machines and plenty of time to examine them, something not likely to happen in a real-life scenario.

UC Berkeley's Wagner disagreed. "Getting a machine may be difficult, but it is not impossible," he said at the hearing, "especially considering that tens of thousands of the voting machines are used around the country."

Voting rights activists contend that the manufacturers of most electronic voting equipment have connections to Republican Party fundraising and that their employees are the most likely source for hacking problems. Most machines are also still incapable of producing printed receipts, which precludes the ability to audit their results.

"When NASA discovers a flaw or a potential safety concern in the space shuttle, it doesn't continue launching the missions," Bowen said during a press conference to announce her decision. "It scrubs the missions until the problem is fixed."

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