



**Jon Husted**  
Ohio Secretary of State

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**DIRECTIVE 2011-48**  
December 30, 2011

12-004

To: ALL COUNTY BOARDS OF ELECTIONS

Re: Voting System Battery Maintenance

**Summary**

All county boards of elections must properly maintain their voting equipment, including the regular inspection and replacement of batteries to ensure a fully functioning inventory of machines for use on Election Day.

**Background**

During the November 2011 General Election, the Secretary of State's office received a growing number of reports from M-100 county boards of elections of PCMCIA card failures. These problems were caused by the failure of the internal battery contained in the card. This battery failure did not jeopardize any votes that were cast and counted on the voting systems but prevented the machines from being used until a new card could be inserted and the machine rebooted.

While many counties have updated the replaceable battery, this internal battery cannot be replaced; therefore, its failure requires the purchase of new PCMCIA cards. Additionally, as voting systems age batteries located in the voting systems will deplete and eventually fail.

My staff and I are fully aware that this Directive comes late in the year, well after most county boards of elections have submitted their budget requests for the next county fiscal year. However, as we evaluated the data of machine problems due to battery failures from counties this year, and knowing that we only receive reports on a fraction of the actual number of such problems, we determined that it would be irresponsible in light of preparations for 2012 for this office to not issue this Directive.

**Instruction**

All counties are directed to do the following:

- Inspect and replace if necessary all batteries contained within the voting systems. This includes, but is not limited to, internal batteries (backup power source), UPS battery (external backup power source), PEB batteries, and internal motherboard batteries.

- Fully charge all systems prior to the each election. Follow the manufacturer's instructions for this process.
- Test the backup battery life of the system. This can be done by fully charging the system, unplugging the system, and determining if it remains powered on for 2 or more hours. Most systems should run for greater than the 2 hour requirement because they will not be in use during this time period. If a system shuts down prior to the 2 hour timeframe you should work with your maintenance provider to replace your backup power source.
- Change all replaceable memory card batteries (e.g., PCMCIA batteries, AccuVote Memory Card). This should be a routine practice each year before an election in order to ensure cards do not fail during the election.
- Replace all M100 PCMCIA cards not purchased within two calendar years of this directive. The replacement cards **MUST** meet manufacturer specifications. Contact your maintenance provider for additional information.

If you should have any questions regarding this directive please contact my Deputy Elections Administrator, Matt Masterson, at 614-466-2585 or [MMasterson@sos.state.oh.us](mailto:MMasterson@sos.state.oh.us).

Sincerely,

  
Jon Husted