

1 SENATE BILL NO. 482  
 2 INTRODUCED BY C. GLIMM  
 3 BY REQUEST OF THE (S) JOINT SELECT COMMITTEE ON ELECTION SECURITY  
 4

5 A BILL FOR AN ACT ENTITLED: "AN ACT REVISING LAWS RELATED TO VOTING SYSTEM TESTING AND  
 6 CERTIFICATION; REQUIRING HASH VALIDATION TESTS; PROVIDING DEFINITIONS; PROVIDING  
 7 RULEMAKING AUTHORITY; AMENDING SECTIONS 13-17-103, 13-17-212, AND 13-17-503, MCA; AND  
 8 PROVIDING AN EFFECTIVE DATE."

9  
 10 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MONTANA:  
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12 NEW SECTION. **Section 1. Hash validation test required -- exemption-- definitions.** (1) (a) A  
 13 hash validation test is required for all voting systems used in the state in accordance with 13-17-103, 13-17-  
 14 212, and 13-17-503.

15 (b) If a voting system has been certified by the secretary of state to not have the ability to run a  
 16 hash validation test, it is exempt from the requirement in subsection (1)(a).

17 (2) As used in this chapter, the following definitions apply:

18 (a) "Hash" means a mathematical function that creates a unique string of letters and numbers that  
 19 identifies a voting system and its programming. A specific hashing algorithm will always create the same string,  
 20 allowing election officials to compare hash values and confirm that the voting system and its source code has  
 21 not been altered.

22 (b) "Hash validation test" means the process of verifying the integrity of the files and the source  
 23 code of a specific voting system. During a hash validation test, a hash will be generated from the voting system  
 24 and compared to the trusted hash for the voting system. The two hash values are compared to verify that the  
 25 firmware and software used on the voting system is the same as the firmware and software that was initially  
 26 tested and certified by the federal election assistance commission and the secretary of state.

27 (c) "Trusted hash" means the hash that was generated by the federal election assistance  
 28 commission when the system was initially certified and tested at the federal level.

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2           **Section 2.** Section 13-17-103, MCA, is amended to read:3           **"13-17-103. Required specifications for voting systems.** (1) A voting system may not be approved  
4 under 13-17-101 unless the voting system:

5           (a) allows an elector to vote in secrecy;

6           (b) prevents an elector from voting for any candidate or on any ballot issue more than once;

7           (c) prevents an elector from voting on any office or ballot issue for which the elector is not entitled  
8 to vote;9           (d) allows an elector to vote only for the candidates of the party selected by the elector in the  
10 primary election;

11           (e) allows an elector to vote a split ticket in a general election if the elector desires;

12           (f) allows each valid vote cast to be registered and recorded within the performance standards  
13 adopted pursuant to subsection (3);

14           (g) is protected from tampering for a fraudulent purpose;

15           (h) prevents an individual from seeing or knowing the number of votes registered for any candidate  
16 or on any ballot issue during the progress of voting;

17           (i) allows write-in voting;

18           (j) will, if purchased by a jurisdiction within the state, be provided with a guarantee that the training  
19 and technical assistance will be provided to election officials under the contract for purchase of the voting  
20 system;21           (k) uses a paper ballot that allows votes to be manually counted; ~~and~~22           (l) allows auditors to access and monitor any software program while it is running on the system to  
23 determine whether the software is running properly; and24           (m) has a trusted hash or is exempt from the requirement under [section 1].

25           (2) A voter interface device may not be approved for use in this state unless:

26           (a) the device meets the electronic security standards adopted by the secretary of state;

27           (b) the device provides accessible voting technology for electors with hearing, vision, speech, or  
28 ambulatory impairments;

1 (c) the device meets all requirements specified in subsection (1);

2 (d) the device has been made available for demonstration and use by electors with disabilities in at  
3 least one public event held by the secretary of state; and

4 (e) disabled electors have been able to participate in the process of determining whether the  
5 system meets accessibility standards.

6 (3) To implement the provisions of subsection (1)(f), the secretary of state shall adopt rules setting  
7 a benchmark performance standard that must be met in tests by each voting system prior to approval under 13-  
8 17-101. The standard must be based on commonly accepted industry standards for readily available  
9 technologies.

10 (4) The trusted hash described in subsection (1)(m) must be filed with the secretary of state when  
11 the voting system is approved and must be retained for as long as the voting system is owned and used in the  
12 state. If the secretary of state certifies that the voting machine does not have the ability to run a hash validation  
13 test, the certification must be stored in the same manner as the trusted hash."

14

15 **Section 3.** Section 13-17-212, MCA, is amended to read:

16 **"13-17-212. Performance testing and certification of voting systems prior to election.** (1) (a) No  
17 more than 30 days prior to an election in which a voting system is used, the election administrator shall publicly  
18 test and certify that the system is performing properly in accordance with subsection (1)(b). An election  
19 administrator shall test all central count vote tabulation machines to be used if automatic tabulation begins  
20 pursuant to 13-13-241(7)(a) the day before the election. In accordance with subsection (3), the secretary of  
21 state shall adopt rules to meet the requirements of ~~this~~ subsection (1).

22 (b) Except for a voting system that is exempt under [section 1], the testing and certification process  
23 in subsection (1)(a) must include a hash validation test that compares the results with the results of the trusted  
24 hash. If the test results do not match, the voting system may not be certified for use in the upcoming election.  
25 The results of the hash validation test must be filed with the secretary of state and must be kept with the other  
26 hash test results for the voting system.

27 (2) The secretary of state shall ensure that at least 10% of each type of voting system in the state  
28 has been randomly tested and certified at least once every calendar year.

1 (3) The provisions of this section must be implemented according to rules adopted by the secretary  
2 of state pursuant to 13-17-211."

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4 **Section 4.** Section 13-17-503, MCA, is amended to read:

5 **"13-17-503. Random-sample audit of vote-counting machines required -- rulemaking authority.**

6 (1) After unofficial results are available to the public in a federal election, but before the official canvass by the  
7 county board of canvassers, the county audit committee shall conduct a random-sample audit of vote-counting  
8 machines.

9 (2) The random-sample audit may not include a ballot that a vote-counting machine was unable to  
10 process and that was not resolved pursuant to 13-15-206 because the ballot:

11 (a) appeared to have at least one overvote;

12 (b) appeared to be blank;

13 (c) was in a condition that prevented its processing by a vote-counting machine; or

14 (d) contained a mark, error, or omission that prevented its processing by a vote-counting machine.

15 (3) Except as provided in subsections ~~(4) and (5)~~ (5) and (6), the random-sample audit must  
16 include:

17 (a) at least 5% of the precincts in each county or a minimum of one precinct in each county,  
18 whichever is greater; and

19 (b) an election for:

20 (i) one statewide office race, if any;

21 (ii) one federal office race;

22 (iii) one legislative office race; and

23 (iv) one statewide ballot issue if a statewide ballot issue was on the ballot.

24 (4) (a) The random-sample audit must also include a hash validation test for every voting system  
25 from each county, except for voting systems exempted under [section 1]. The results of the hash validation test  
26 must be compared with the results of the trusted hash.

27 (b) If there is any deviation in the results, all ballots processed through the voting system must be  
28 recounted by hand or through a different voting system that has passed the hash verification test.

