

CHAPTER 8220

SECRETARY OF STATE

VOTING SYSTEM TESTING

8220 0050	CONDUCT OF ELECTIONS	8220 0800	PROGRAM PREPARATION BONDS
8220 0150	MINIMUM STANDARDS	8220 1050	PREPARATION OF TEST DECK
8220 0250	DEFINITIONS	8220 1350	PRELIMINARY TESTING OF COMPUTER
8220 0350	APPLICATION	8220 1450	PROGRAMS
8220 0450	ACCEPTANCE DEMONSTRATION	8220 1550	DUTIES UPON COMPLETION
8220 0650	APPROVAL OF SYSTEMS	8220 2050	PUBLIC ACCURACY TEST
8220 0700	PERIODIC REEXAMINATION OF SOFTWARE		ISOLATION OF CENTRAL COUNT VOTING SYSTEM AND PRECINCT COUNT VOTING SYSTEM
8220 0750	PREPARATION OF COMPUTER PROGRAMS		

8220.0050 CONDUCT OF ELECTIONS.

Except as provided in chapters 8220 and 8230 or in Minnesota Statutes, elections shall be conducted in the manner prescribed for precincts using paper ballots in the Minnesota election law.

Statutory Authority: *MS s 204D 11, 206 57, 206 81*

History: 25 SR 616

8220.0150 MINIMUM STANDARDS.

Chapters 8220 and 8230 set minimum standards for procedures in the use of electronic voting systems. An election jurisdiction may by resolution require additional procedures.

Statutory Authority: *MS s 206 57, 206 81, 206 82*

History: 25 SR 616

8220.0250 DEFINITIONS.

Subpart 1 Scope. As used in chapters 8220 and 8230, terms defined in Minnesota Statutes, section 206.56, have the meanings given them in that section, and the following terms defined in this part have the meanings given them

[For text of subp 1a, see MR]

Subp. 2 [Repealed, 25 SR 616]

Subp. 2a [Repealed, 25 SR 616]

[For text of subp 3a, see MR]

Subp. 3b. **Ballot secrecy cover.** "Ballot secrecy cover" means a cover to be used by the voter to conceal the votes marked on the ballot.

[For text of subp 4a, see MR]

Subp. 5a. **Central count voting system.** "Central count voting system" means an electronic voting system designed for and certified by the secretary of state for use in a central counting center

Subp. 5b. **Central counting center.** "Central counting center" means a place selected by the governing body of an election jurisdiction where an electronic voting system is used to count ballots from more than one precinct after voting hours have ended

Subp. 7 [Repealed, 25 SR 616]

Subp. 10. [Repealed, 25 SR 616]

[For text of subps 11 to 15, see MR]

Subp. 16. **Election jurisdiction.** "Election jurisdiction" means any municipality, school district, county, or special election district having responsibility for operating electronic voting systems to be used at an election.

Subp. 17 [Repealed, 25 SR 616]

MINNESOTA RULES 2000

23

VOTING SYSTEM TESTING 8220.0350

[For text of subps 18 and 18a, see MR]

Subp 20 [Repealed, 25 SR 616]

[For text of subp 21, see MR]

Subp 22a. **Precinct counting center.** "Precinct counting center" means a precinct where a precinct count voting system is used to count votes on ballots at the precinct polling place as voters deposit the ballots into the ballot box

[For text of subp 22b, see MR]

Subp 23. [Repealed, 25 SR 616]

[For text of subp 24, see MR]

Subp 25a. [Repealed, 25 SR 616]

[For text of subp 26, see MR]

Subp 27 [Repealed, 25 SR 616]

[For text of subps 28a and 30, see MR]

Subp 31 [Repealed, 25 SR 616]

Subp 32 [Repealed, 25 SR 616]

[For text of subp 33, see MR]

Subp 34 [Repealed, 25 SR 616]

Subp 35 **Vendor.** "Vendor" means an individual or organization other than an election jurisdiction supplying any element of an electronic voting system, including but not limited to hardware, software, and programming services.

Subp 36 [Repealed, 25 SR 616]

Subp 38 [Repealed, 25 SR 616]

Statutory Authority: MS s 206.57, 206.81, 206.82

History: 25 SR 616

8220.0350 APPLICATION.

An application by a vendor pursuant to Minnesota Statutes, section 206.57, for examination of an electronic voting system must be accompanied by the following

A a signed agreement that the vendor will pay all costs incurred by the secretary of state, the vendor, and any designees of the secretary of state in accomplishing the examination,

B. complete specifications of all hardware, firmware, and software,

C. all technical manuals and documentation related to the system,

D complete instructional materials necessary for the operation of the equipment by election jurisdictions and a description of any training available to users and purchasers,

E a list of all state election authorities that have tested and approved the system for use,

F a list of all election jurisdictions where the system has been used for elections,

G a description of any support services offered by the vendor and of all peripheral equipment that can be used in conjunction with the system,

H recommended procedures for use of the system at Minnesota elections including procedures necessary to protect the integrity of the election,

I specifications for materials and supplies required to be used with the system,

J. specifications for stickers for write-in votes that can be used with the system,

K explanation of the level of technical expertise required to program or prepare the system for use at an election, and

L. certification by an independent testing authority approved by the secretary of state of conformance to standards for voting equipment issued by the Federal Election Commission.

The vendor may submit additional material including test reports and evaluations by other states, election jurisdictions, and independent testing agencies. The secretary of state shall make a preliminary review of the application. If the secretary of state determines from the preliminary review that the system obviously does not meet provisions of Minnesota election laws, the vendor may withdraw the application.

Statutory Authority: *MS s 206.57; 206.81; 206.82*

History: *25 SR 616*

8220.0450 ACCEPTANCE DEMONSTRATION.

The vendor shall train a designee of the secretary of state in the preparation and operation of the system. The training must be at least as extensive as the training required for an election jurisdiction to be able to prepare and use the system at Minnesota elections.

The acceptance demonstration must be provided by the vendor and attended by designees of the secretary of state. The vendor is responsible for demonstrating that the system can meet all requirements of chapters 8220 and 8230 and Minnesota election law. In the acceptance demonstration, the vendor of the system must demonstrate the following concerning the system:

A its storage requirements,

B its speed of operation under conditions that simulate the scope and length of actual election ballots,

C full audit capability, with an audit trail, which includes a printout of overvotes and undervotes for each office and issue, and with the undervotes recorded directly from the ballots and not determined by subtraction of totals from ballots that were not overvoted,

D all features that can be programmed,

E all design specifications,

F maximum numbers of precincts, offices and issues, and candidates per office which can be handled,

G the production of reports which include vote totals and all statistics and other information required by the secretary of state;

H. simulation of vote counting involving a configuration of the largest number of voters, precincts, offices, and candidates with which the system is expected to be used, which vote counting includes ballots showing overvotes, undervotes, and invalid votes as well as those with no overvotes or stray marks, in many different combinations, and demonstrates rotation sequences and the ability to count votes cast on the partisan, nonpartisan, and proposal sections of the ballot independently;

I accuracy of vote counting and procedures or process for testing accuracy;

J. provisions for maintaining the security and integrity of elections, and

K provisions for write-in votes.

The vendor shall identify all hardware configurations with which software is intended to operate and shall provide an acceptance demonstration for every hardware and software configuration for which certification for use in Minnesota is requested. The secretary of state may provide additional ballots or test decks for the acceptance demonstration.

The acceptance demonstration and training of the secretary of state's designee may be accomplished either at the vendor's site or at the office of the secretary of state.

Statutory Authority: *MS s 206.57, 206.81, 206.82*

History: *25 SR 616*

8220.0650 APPROVAL OF SYSTEMS.

Subpart 1 Certification. If, from the reports of the demonstration and testing, the secretary of state determines that the system complies with chapters 8220 and 8230 and Minnesota Statutes and can be used safely at elections, the secretary of state shall issue to the vendor a certification of the system for use in Minnesota. The certification must be limited to specific hardware and software configurations and may not extend to models or configurations not examined. The certification may include stipulations or special procedures for use of the system. No certification may be issued until the vendor has:

A paid all costs of the examination required under the agreement submitted with the application,

B certified that the vendor and any agent acting on behalf of the vendor will offer the system for use or sale only according to chapters 8220 and 8230 and Minnesota Statutes and any stipulations of the certification,

C certified that the vendor will immediately notify the secretary of state of any modifications to the system and will not offer for sale or provide for use in Minnesota any modified system if the secretary of state advises the vendor that, in the opinion of the secretary, the modifications constitute a significant change requiring that the system be reexamined,

D deposited with an escrow agent a copy of all programs, documentation, and source codes, and

E. deposited with the secretary of state a bond in the amount specified in Minnesota Statutes, section 206.57, subdivision 4, conditioned on the vendor offering the system for sale in the manner required by chapters 8220 and 8230 and any conditions under which the system is certified for use in Minnesota. The form and execution of the bond must be acceptable to the secretary of state. Bonds must be issued by corporations authorized to contract as a surety in Minnesota. This bond is not in lieu of any right of action by the purchaser or the state of Minnesota against the vendor or the surety. The bond is required until the adoption, use, or purchase of the system or program is discontinued in Minnesota.

Subp. 2 Decertification. If a voting system no longer meets the standards of chapters 8220 and 8230 or Minnesota Statutes, the secretary of state may withdraw certification of the voting system. The vendor must be given written notification of intent to withdraw certification and may within ten days of receipt of the notification submit a written request to the secretary of state for a contested case hearing under Minnesota Statutes, sections 14.57 to 14.62.

Subp. 3 Forfeiture of bond. If the secretary of state determines that a vendor has offered for sale or use at an election a voting system in a manner other than that required by chapters 8220 and 8230 or any conditions under which the system was certified, the bond required by subpart 1, item E, must be forfeited. The secretary of state shall notify the vendor of the intent to forfeit the bond in writing and provide the vendor an opportunity to furnish a written explanation to the secretary of state prior to forfeiture. No system may be subsequently offered for sale or use at an election by the vendor who has received a notice of intent to forfeit the bond or whose bond has been forfeited, until the vendor has submitted an additional bond in the amount of \$50,000. The secretary of state shall notify each official on the user list of a receipt, forfeiture, or restoration of these bonds.

Statutory Authority: MS s 206.57, 206.81, 206.82

History: 25 SR 616

8220.0700 PERIODIC REEXAMINATION OF SOFTWARE.

After an electronic voting system has been certified by the secretary of state, the software necessary to operate the voting system, tabulate votes, and prepare ballot styles must be reexamined and recertified under part 8220.0650, subpart 1, by the secretary of state or an independent testing authority approved by the secretary of state

at least once every four years and at any time that, in the opinion of the secretary of state, the voting system no longer complies with Minnesota election law. The certification or approval of a significant change to a voting system's software satisfies the requirements of this part. The secretary of state may waive the reexamination and reapproval requirement in this part if no changes have been made to a voting system's software or if the software continues to operate in conformance with Minnesota election law.

Statutory Authority: *MS s 206.57; 206.81, 206.82*

History: *25 SR 616*

8220.0750 PREPARATION OF COMPUTER PROGRAMS.

Computer programs must be prepared so as to tabulate accurately each voter's choices for all candidates, offices, and measures for which the voter is lawfully entitled to vote in conformity with chapters 8220 and 8230 and the laws of Minnesota.

Computer programs must require an electronically readable precinct identifier or ballot style indicator on all ballots.

The vote tabulation portion of the computer program must be prepared as follows:

A. The computer program must reflect the rotation sequence of the candidates' names as they appear on the ballots in the various precincts.

B. The computer program must reflect the offices and questions to be voted on in the order that they appear on the ballots in the various precincts.

C. The computer program must count valid votes cast by a voter for candidates for an office.

D. The computer program must count valid votes cast by a voter for or against any question.

E. The computer program must not count the votes cast by a voter for an office or question if the number of votes cast exceeds the number which the voter is entitled to vote for on that office or question, but it must record that there is an overvote condition as referred to in part 8220.0450, item C.

F. The computer program must ignore stray marks on a ballot, these marks must have no effect on any portion of the ballot.

G. For the purpose of programming, the partisan, nonpartisan, and proposal sections of the ballot are independent ballots, no action of a voter on one section of the ballot may affect the voter's action on another section of the ballot.

H. In partisan primary elections, the computer program must count the votes recorded by a voter for candidates in one political party only and reject all of the partisan section of the ballot if votes are cast for candidates of more than one political party, but count valid votes in the nonpartisan section of the ballot.

I. In partisan primary elections the computer program must check for the situation of a voter casting votes for candidates of more than one political party prior to checking for overvote conditions.

J. If the counting equipment can examine and return a ballot to the voter before counting it, the computer program must check for and reject without counting any ballot with an overvote or, at a partisan primary, with votes cast for candidates of more than one party. When the ballot is returned to a voter, an error message must indicate the type of defect and may indicate the specific office or question where the defective condition was found. The error message must print on a paper tape or display electronically.

K. A mark indicating a write-in is a vote for the purpose of determining if an overvote condition exists. Except where an overvote condition for the office exists, the computer program must record that a write-in has been indicated. The program must count and record valid votes on the ballot for all other offices and questions before a

ballot with a write-in recorded is separated from ballots with no write-ins recorded. The program must report, by office, the total number of write-ins recorded

Statutory Authority: *MS s 206.57, 206.81, 206.82*

History: *25 SR 616*

8220.0800 PROGRAM PREPARATION BONDS.

[For text of subpart 1, see M.R.]

Subp. 2. Forfeiture of bonds. If the secretary of state determines that a program used with an electronic voting system was not prepared in the manner required by chapters 8220 and 8230, and the written instructions of the official responsible for preparation of the ballots, the bond must be forfeited to the extent necessary to cover actual expenses resulting from the failure of the program. The secretary of state shall determine within 45 days after receiving notification of the failure of a program and a request for reimbursement of expenses resulting from the failure of the program from the appropriate election officials, what actual costs were incurred as a result of the program failure. The secretary of state shall notify the vendor of the intent to forfeit the bond in writing and provide the vendor an opportunity to furnish a written explanation to the secretary of state prior to forfeiture. If required to meet actual expenses in excess of the amount of the bond posted under subpart 1, the secretary of state shall use, to the extent necessary, any bond posted by the vendor under part 8220.0650 as compensation to the election jurisdiction. The secretary of state shall notify each official on the user list of any receipt, forfeiture, or restoration of these bonds.

Statutory Authority: *MS s 206.57; 206.81; 206.82*

History: *25 SR 616*

8220.1050 PREPARATION OF TEST DECK.

The election jurisdiction requesting the computer program must prepare a test deck of ballots to be used to determine that the voting system and the computer program will correctly count the votes cast for all offices and all proposals in compliance with the Minnesota election law.

The test deck must conform to part 8220.1150. A test deck must be prepared specifically for each election.

The test deck prepared must consist of a preaudited configuration of ballots to record a predetermined number of valid votes for each candidate and issue.

Statutory Authority: *MS s 206.57, 206.81, 206.82*

History: *25 SR 616*

8220.1350 PRELIMINARY TESTING OF COMPUTER PROGRAMS.

Prior to the public accuracy test, the election jurisdiction providing the computer programs shall test the voting systems and programs to ascertain that they will correctly count the votes for all offices and measures. The computer programs must be tested on all precincts.

The election jurisdiction shall compare the zero tape with the ballots of all precincts to ascertain that the appropriate ballots are in each precinct and that the offices and questions to be voted on and the candidates' names are in the order that they appear on the ballots for each precinct. Each election jurisdiction shall make a certificate as to the above matters and file it with the county auditor.

The test must be conducted using the test deck prepared under the direction of the election jurisdiction, and the results must be compared against the predetermined results of the test deck.

Statutory Authority: *MS s 206.57; 206.81, 206.82*

History: *25 SR 616*

8220.1450 DUTIES UPON COMPLETION.

After an errorless count has been made on all precincts, the election jurisdiction providing the computer program must:

[For text of items A to D, see M.R.]

Statutory Authority: *MS s 206.57, 206.81, 206.82*

History: *25 SR 616*

8220.1550 PUBLIC ACCURACY TEST.

The election jurisdiction must hold a public accuracy test within 14 days prior to the election for the purpose of demonstrating the accuracy of the computer programs and voting systems to be used at the election. The public accuracy test must be conducted according to Minnesota Statutes, section 206.83.

The time and place of the public accuracy test must be designated by the election jurisdiction providing the computer program, which must give at least 48 hours' public notice of the time and place of the test by publication in official newspapers and by posting a notice in the office of the county auditor and each local election official conducting the test.

The test must be open to the public. At least two election judges of different political parties must witness the test. The chief election official of the election jurisdiction shall explain the methods and test procedures used to determine the accuracy of the computer programs. This will include submitting as public record the certificate prepared in accordance with part 8220.1450 that all precincts have been tested using the test deck prepared under the direction of the election jurisdiction.

The sealed container containing the computer programs, test deck, and predetermined results must be opened and the computer programs tested to determine their accuracy on the voting systems on which they are to be used on election day. The testing of the voting systems and programs must be with the test deck prepared under the direction of the election jurisdiction. In election jurisdictions with three or fewer precincts, all the precincts must be tested. In election jurisdictions with more than three precincts, a minimum of three precincts must be tested. One precinct from each congressional district, legislative district, county commissioner district, ward, and school district on the ballot must be tested. The official conducting the election shall select the precincts to be tested.

If an error is detected in any part of the testing, the cause must be ascertained, the error corrected, and an errorless count must be made on all precincts. At the discretion of the election jurisdiction, the meeting may be adjourned to a time and date certain.

Statutory Authority: *MS s 206.57, 206.81, 206.82*

History: *25 SR 616*

8220.2050 ISOLATION OF CENTRAL COUNT VOTING SYSTEM AND PRECINCT COUNT VOTING SYSTEM.

The central count voting system or precinct count voting system must be set up so that the vote-tallying procedures will function in isolation while being tested or operated on election day. No physical connection must exist between a central count voting system or precinct count voting system and any other computer during hours that voting is occurring in that precinct on election day or while the central count voting system or precinct count voting system is tabulating results for a precinct.

Statutory Authority: *MS s 206.57, 206.81, 206.82*

History: *25 SR 616*