Wisconsin Elections Commission

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DATE: For the February 3, 2021 Commission Meeting

TO: Members, Wisconsin Elections Commission

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SUBJECT: 2020 Post-Election Voting Equipment Audit Final Report

2020 Post-Election Voting Equipment Audit Results Summary

Over 6 days in November, county and municipal clerks directed the hand tally auditing of more than 145,000 ballots from the November 2020 General Election. The findings of the 2020 Post-Election Voting Equipment Audit showed that there was no evidence that any voting equipment subject to audit and used in the 2020 General Election in Wisconsin changed votes from one candidate to another, incorrectly tabulated votes, or altered vote totals in any way. The concerns identified in this report do not represent programming errors, unauthorized alterations or "hacking" of voting equipment software or malfunctions of voting equipment that altered the outcome of any races on the ballot. They do, however, highlight the limitations of electronic voting equipment and underscore the necessity of comprehensive administrative procedures required to ensure the effectiveness of voting equipment used in Wisconsin elections.

Post-Election Voting Equipment Audit Introduction

Wis. Stat. § 7.08(6) is the state embodiment of § 301(a)(5) of the Help America Vote Act of 2002 (HAVA) (52 USC §21081) and requires the Wisconsin Elections Commission ("WEC" or "Commission") to audit each voting system that is used in this state following each General Election:

> **Enforcement of federal voting system standards.** Following each general election audit the performance of each voting system used in this state to determine the error rate of the system in counting ballots that are validly cast by electors. If the error rate exceeds the rate permitted under standards of the federal election commission in effect on October 29, 2002, the commission shall take remedial action and order remedial action to be taken by affected counties and

> municipalities to ensure compliance with the standards. Each county and municipality shall comply with any order received under this subsection.

The WEC approves the sample size, procedures and timeline for conducting the audit. Each selected municipality is required to conduct the audit, and some local election officials receive assistance from their county clerk's office. Wisconsin has conducted a post-election voting equipment audit after each General Election since 2006. Audits are required to ensure that tabulation equipment is performing at the standards set forth in the certification for each piece of equipment. Equipment is audited to the testing standards set forth in the Help America Vote Act (HAVA), which requires all voting tabulation equipment accurately tabulate ballots and not exceed a pre-determined error rate. Sec. 301(a)(5) of HAVA states that the error rate is determined by the standards set forth under section 3.2.1 of the federal Election Assistance Commission ("EAC") voting system standards. The current federal standard maximum acceptable error rate for testing purposes is 1 in 500,000 ballot positions. Accordingly, auditing teams conducting the post-election voting equipment audit must reconcile the ballots and votes recorded by equipment and eliminate any potential non-tabulation related sources of error including printer malfunctions, voter generated ballot marking errors, poll worker errors, or chief inspector errors.

The audit process is designed to ensure that the equipment is performing up to certification standards and to identify any issues that impact vote tabulation. The acceptable error rate established in HAVA is intended for equipment certification testing scenarios which are conducted in lab settings under optimized conditions using test deck ballots that are marked in accordance with ballot instructions and do not include the same imperfections as an average absentee ballot that is required to be handled multiple times prior to processing. Auditing the machines to this certification standard as part of a performance audit can complicate the review of the results as it considers how the equipment performs during live elections where voter behavior and ballot marking is not scripted. When testing for certification purposes, the results set is pre-determined so that if there is an error in tabulation it will be noticed and investigated. In a performance audit, however, the teams of auditors are sometimes left to make their own determinations on how the equipment may have counted a ballot, especially if there are ambiguous marks. The benefit of using the certification standard for this audit is that it identifies performance areas where certification standards and required administrative procedures need adjusting or reconsideration. While the equipment met certification standards during the election, it is important to note that things like auditor error and election day ballot jams impact the data collected during a performance audit.

Reporting Unit Selection Process

Wisconsin Elections Commission staff randomly selected a pre-determined number of reporting units across Wisconsin for participation in the post-election voting equipment audit. The selection took place as part of a public meeting on November 4, 2020 in accordance with the guidelines approved at the September 16, 2020 meeting of the Wisconsin Elections Commission.

For the 2020 post-election audit, the Commission approved a continuation of the 5% sample size of all reporting units statewide that was used during the 2018 audit. The application of this sample size established a minimum standard of184 reporting units selected for the 2020 audit. The Commission also determined that at least one reporting unit from each county be included in the sample selected for audit. In summary, the Commission approved the following selection criteria for the 2020 audit:

1. Establish the audit sample as 5% of all reporting units statewide for a minimum of 184 total audits.
2. Ensure that at least one (1) piece of voting equipment is selected for audit in each of the 72 Wisconsin counties.
3. Ensure that a minimum of five (5) reporting units are selected for each piece of equipment certified for use in Wisconsin that records and tabulates votes.

Reporting Unit and Contest Selection Outcome and Clerk Notification

Staff randomly selected 190 total reporting units that were ultimately subject to audit, with 7 additional reporting units excused due to zero voters residing within those reporting units. With 3,698 total reporting units across the state, the final selection represented 5% of all statewide reporting units. Every county was represented by at least one reporting unit and 166 different municipalities participated in the audit including 18 municipalities required to conduct audits of more than one reporting unit. Staff developed a tiered selection algorithm that was intended to provide a more representative sample of ballots cast in the 2020 General Election by allowing larger municipalities to have more reporting units selected for audit. These criteria established a maximum of four reporting units to be selected from Wisconsin's two largest municipalities (Cities of Milwaukee and Madison), up to three reporting units from the top twenty other municipalities in terms of voter population, and one reporting unit maximum for the remainder of all reporting units across the state. A complete list of all selected reporting units is included with this memorandum as **Appendix A**.

The total ballots cast for the 2020 General Election in selected reporting units represents approximately 4.2% of all ballots cast statewide, with over 145,000 ballots hand-counted during the audit process. The random selection process also resulted in reporting units from 9 of the 10 most populous Wisconsin municipalities being audited.

In addition to the reporting units selected, staff also selected the contests for audit during the public meeting on November 4, 2020. All statewide contests were included as possible selections, including the office of State Senate. As this contest is not on all ballots statewide, it had never been included as part of the audit prior to 2018. Staff included this contest in the list of possible selections, with the caveat that if State Senate was selected an alternate contest would be selected for reporting units whose State Senator was not up for election this cycle. The result of the contest selection is as follows:

1. President/Vice President (required)
2. Representative to Congress
3. Representative to the Assembly

4. State Senate or County Clerk: Selected municipalities with a **State Senate** race on the ballot audited that contest. If that contest was not on the ballot in that reporting unit, the **County Clerk** contest was audited instead.

Staff reviewed the initial sample selected for audit to ensure that all voting equipment that records and tabulates votes were represented by at least 5 reporting units. The only exceptions to the 5-reporting unit rule were the ES&S DS850 and DS450, high-speed scanners and tabulators, which were used by only a small number of municipalities to tabulate absentee ballots at their central count facilities.

All selected municipalities were notified of their selection by email on November 4, 2020. Included in the email was a link to a page on the agency website where audit materials were posted, including a training webinar, instructions, tally sheets, reporting forms and municipal reimbursement information. Notification of selection for audit was sent to both municipal and county clerks for impacted jurisdictions.

Audit Completion Timeline

For the 2020 post-election voting equipment audit, the Commission determined that all post-election audits should be conducted prior to the state deadline to certify election results on December 1, 2020. The Commission specifically established November 27, 2020 as the deadline to complete and report the results to the WEC. Staff also recommended that any selected municipality may request an extension waiver if it shows cause that it will not be able to meet this deadline and the Commission set a submission deadline of November 10 for those requests, but no extensions were requested or granted by the deadline. As previously reported to the Commission, all audits were completed by December 1.

2020 Voting Equipment Summary

Audit results reported by local election officials, and reviewed by WEC staff, did not identify any issues with the tabulation functionality of the voting equipment in the majority of reporting units in which audits were conducted. The audit did, however, identify an issue with how one type of equipment, the ImageCast Evolution, identified write-in votes in one contest. The issue was identified in 2 of the 28 reporting units selected for audit using the equipment and had no material effect on the outcome of any contest. A detailed summary of this issue can be found in the Election Administration Errors section of this report.

Accessible Voting Equipment Summary

Accessible Voting Equipment that Records Tallies Votes	**Audits Conducted**
Sequoia Edge	60
Ballot Marking Devices that Assist Voters with Marking Ballots Processed by Optical Scan Equipment	**Audited as Part of Optical Scan Ballots**
ES&S AutoMark	31
ES&S ExpressVote	57
Clear Ballot Group ClearAccess	7
Dominion ImageCast Evolution (ICE)	28

There is now only one approved accessible voting system that records and tabulates votes in use in Wisconsin. This type of equipment is often referred to as Direct Recording Electronic machines, or DREs, and the one system still in use in Wisconsin is the Sequoia Edge. In addition to DREs, there are four different ballot marking devices approved for use in Wisconsin. Voters use a touchscreen interface or tactile keypad on these devices to make their ballot choices. When the voter is finished, the machine provides them with a paper ballot marked with their choices and those ballots are then inserted into and tabulated by the optical scan equipment or hand tallied.

All voting equipment audits of DREs were completed by municipal or county clerks. The audit reports indicate the machine tallying function on all audited devices tabulated correctly, with no identifiable bugs, errors, or failures occurring between the individual cast vote record and the total tabulated vote record. The only noted issue arose with auditors not being able to verify several ballots cast on the Sequoia Edge due to paper jams of the Voter Verified Paper Audit Trail (VVPAT) on Election Day. Until cleared, the paper jams may not allow for the recording of votes by the VVPAT.

Ballots marked by the four different ballot marking devices were audited along with the rest of the ballots processed by the optical scan tabulator. These ballots are not segregated from other optical scan ballots, so it is difficult to determine how many ballots marked by these devices were audited. Auditors did not report any discrepancies that could be attributed to ballot marking devices.

Tabulation Voting Equipment (Optical Scan) Summary

Optical Scan Equipment	Audits Conducted
Sequoia Insight	17
ES&S M100	7
ES&S DS200	72
ES&S DS450	5
ES&S DS850	4
Dominion ImageCast Evolution (ICE)	28
Clear Ballot Group ClearCast	7
Hand-Count Paper Ballots – DRE Equipment Only	43

Audit Results

In total, 145,100 ballots were counted by hand during this audit. Each municipality was required to provide a summary of each of the four audited contests showing the allocation of votes between candidates, write-in votes, undervotes, etc. The post-election voting equipment audit showed, with the limited exceptions listed below regarding the City of Oshkosh and Town of Lac du Flambeau, that the voting equipment utilized in the 2020 November General Election performed up to certification standards, tabulating and counting votes accurately.

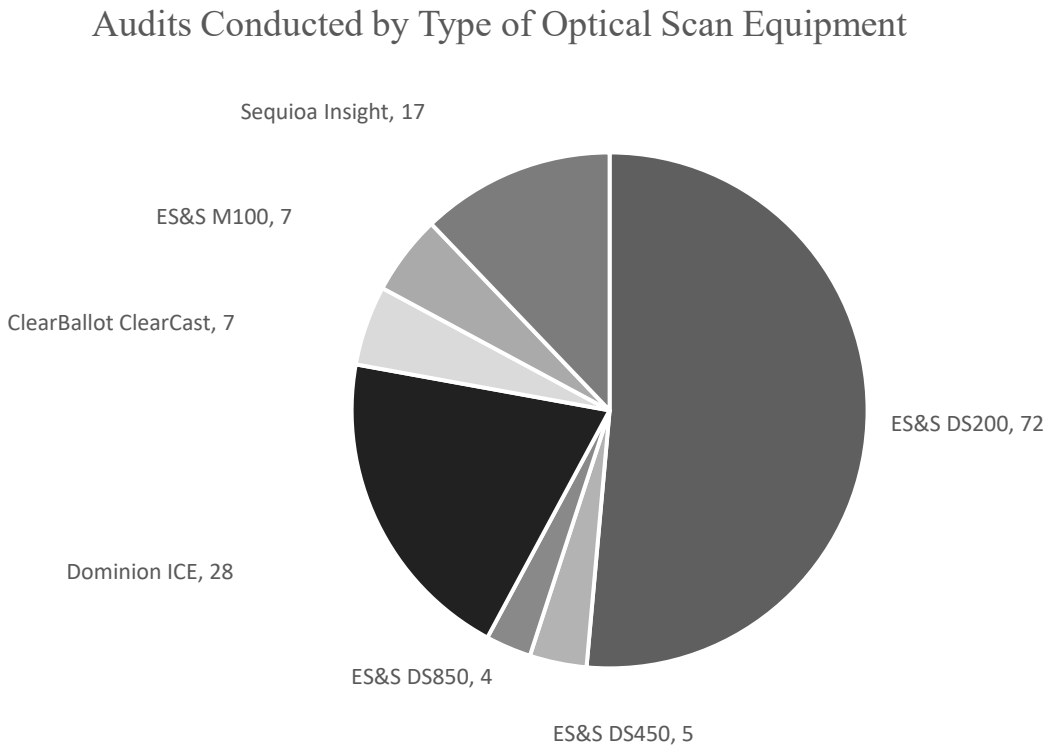
There were several instances of auditor and election administration error that led to discrepancies between equipment result tapes and the total number of ballots audited in specific contests. Issues experienced by staff can generally be divided into two classifications: auditor errors and election administration errors. A representative summary of those issues is itemized later in this report.
As was expected, the total number of votes cast on voting equipment and the total number of ballots audited do not perfectly match in all audits that were conducted. There were multiple occurrences in which auditors included the hand-count paper ballots that were cast in their reporting units in their final ballot totals when only the votes cast on the accessible voting equipment should have been tallied. In other cases, jams or misfeeds of the paper tape used to record ballots on the Sequoia Edge DRE led to discrepancies between the total votes as recorded by the voting equipment and the total number of ballots available to be audited. The ballot tape produced by the Edge serves as the VVPAT which shows the ballot choices for each voter using that machine. If there is a jam of the paper roll, or a misfeed when a new roll is inserted, the ballot choices for the impacted voters may not have a paper artifact. The votes are still accurately tabulated even if there is a jam. In addition to the votes being tabulated by the machine, there are cast vote records that can be accessed and analyzed if the paper artifact is irretrievable, but these records need to be recreated by the vendor who programs and services these machines.

Certain participating municipalities experienced issues unique to optical scanning equipment. For example, a number of auditors reported discrepancies arising from poorly marked ballots, refeeding of ballots that were already tabulated by the voting equipment after ballot jams were cleared, and the issue of voter intent. In all cases, the incidents that led to minor discrepancies of 1 or 2 votes between the final audit tallies and the equipment result tapes were documented, either by Election Inspectors on Election Day or by auditors throughout the course of conducting the audit.

Number of Ballots Audited by Equipment Type

DRE Equipment	Total Ballots Audited
Sequoia Edge	15,314

Optical Scan Equipment	Total Ballots Audited
Sequoia Insight	13,752
ES&S M100	6,394
ES&S DS200	69,458
Dominion ICE	24,226
ES&S DS450	3,465
ES&S DS850	1,851
Clear Ballot Group ClearCast	10,640



General Election Administration and Auditor Errors

All voting equipment audits of tabulation equipment were completed by municipal or county clerks. The individual audits indicate the tabulation voting equipment performed up to certification standards in all but two reporting units selected for audit. Minor discrepancies were reconciled between the audit hand count totals and the election results produced by the voting equipment from Election Day. Staff contacted municipalities for clarification if any discrepancies were reported to WEC.

- The vast majority of reconciliation issues identified were due to human error on election day or during the audit and only impacted one or two votes in a contest and were not indicative of equipment malfunction or failure.
- Several discrepancies were due to ballots in the machine count that were double counted when ballot jams were not cleared properly on election day and ballots were reinserted in the equipment and processed again. In most of these instances only one ballot is in question in these reporting units.
- Other discrepancies were identified due to auditors using a voter intent threshold when reviewing and counting ballots during the audit rather than counting those ballots the same as how the equipment would have treated those ballots. For example, if a voter circled a candidate name rather than filling in the oval next to that name no vote should have been counted during the audit as the equipment could not find an oval filled in to count. During the audit, votes are sometimes incorrectly attributed to candidates where voter intent can be identified even though

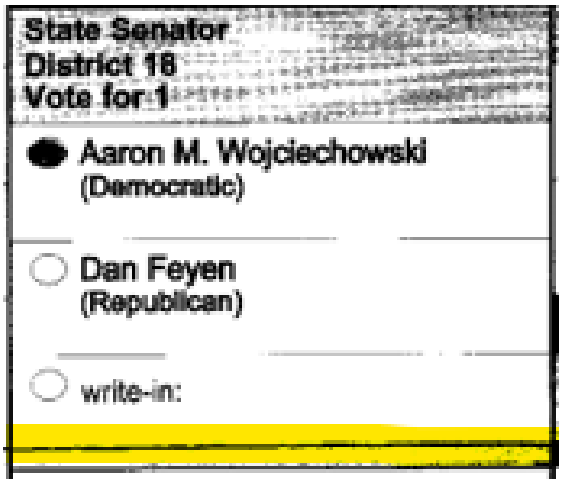
there is no expectation that the equipment can make that same determination due to the voter not following the proper instructions.

- Several reporting units subject to recount had ballots removed from the ballot pool during the recount in Dane and Milwaukee counties and lead to audits being off by the same number of ballots/votes that were removed from the pool.
- Other discrepancies have been identified where auditors are unsure of how the machine treated an ambiguous mark or an oval that was not completely filled in. It is sometimes difficult for an auditor to determine how the machine would have treated these marks and how much of an oval must be filled in for the machine to interpret it as a good mark.

Many of the initial reported discrepancies occurred because voter intent was considered when hand counting ballots. The instructions provided to local election officials clearly state that the purpose of this process is to verify the performance of the voting equipment, not to determine the voter's intent as to votes which the equipment cannot read.

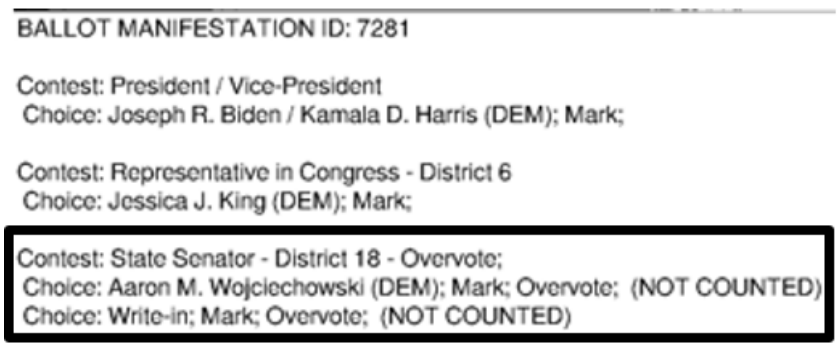
Specific Election Administration Errors

City of Oshkosh



The City of Oshkosh was selected to audit Ward 23A where the Dominion Voting Systems ImageCast Evolution (ICE) optical scan tabulator is used to record and tabulate votes. Their audit identified a discrepancy of 21 votes in the State Senate District 18 contest between the machine totals from election night and the audit totals. The hand tally during the audit indicated an increase of 12 votes for candidate Aaron Wojciechowski and an increase of 9 votes for candidate Dan Feyen. Those increases corresponded to the decrease in the overvote totals for that same contest in the machine totals. A review of the ballot images and associated ballot manifests, which list how votes were counted for each contest and each ballot, by the municipal clerk and WEC staff indicate that the voting equipment identified this contest as overvoted due to a crease in these ballots that was present in the target area for the write-in option (the crease appears as a black line in the example provided). The voting system in question was programmed to accommodate Wis. Stat. §7.50(2)(d) which states that "If an elector writes a person's name in the proper space for write-in candidates for an office, it is a vote for the person written in for the office indicated, regardless of whether the elector strikes the names appearing in the same column for the same office, or places a mark by the same or any other name for the same office, or omits placing a mark to the right of the name written in." In this case the equipment perceived the crease as handwriting and believe that a voter had written in a candidate name in addition to marking the oval for a ballot candidate.

The ballot manifest clearly indicates in each of these 21 instances that the machine considered the presence of this crease as a vote for a write-in candidate in addition to a vote for a ballot candidate (example provided). These 21 ballots were all absentee ballots where the fold was not made on the scored or perforated line present to encourage uniform folding of absentee ballots. A visual inspection of these ballots would have revealed that the contest in question was not overvoted.


BALLOT MANIFESTATION ID: 7281

Contest: President / Vice-President
Choice: Joseph R. Biden / Kamala D. Harris (DEM); Mark;

Contest: Representative in Congress - District 6
Choice: Jessica J. King (DEM); Mark;

Contest: State Senator - District 18 - Overvote;
Choice: Aaron M. Wojciechowski (DEM); Mark; Overvote; (NOT COUNTED)
Choice: Write-in; Mark; Overvote; (NOT COUNTED)

All voting equipment used in Wisconsin elections must be programmed to reject all votes in excess of the number which a voter is allowed to cast for a particular contest. When a contest has been overvoted, the voting equipment is required to display a notification to the voter or election inspector that an overvote is present on the ballot and identify which contest was overvoted. In these instances when the voter is not present and the election inspector is processing absentee ballots, the Commission-approved administrative procedures require that the ballot be returned to the inspector so that the contest, or contests, in question can be reviewed to determine possible voter intent. Those procedures also state that if voter intent can be determined, the ballot should be remade to correct the error (Election Day Manual, p. 106-107). If the ballot is not returned for review and is, instead, processed on the equipment using the override function, no votes in contests it perceives as overvoted will be counted.

The City of Oshkosh indicated they received a call from the polling place where residents of Ward 23A were voting a little before 10:00 a.m. on election day reporting that overvote warnings were appearing when absentee ballots were being processed on the optical scan tabulator. The clerk stated she affirmed that the inspectors should have those ballots returned to them so the visual review could be completed and ballots without overvotes should be remade. The clerk was unsure of when the override function was used at this location without the required review of the ballot being done, but it is clear from the ballot manifests that 21 of these ballots were not processed properly. The voting equipment should not have identified these creases as good marks, but the administrative procedures established to account for such anomalies should have caught the error if they were followed uniformly throughout the day at this location.

WEC staff conclude this is an issue that can be partially addressed with additional training of election inspectors and a more comprehensive understanding of how this voting equipment treats marks it believes are handwriting in the write-in target area. Election inspectors are instructed to have the equipment return the ballot to them before examining the ballot for voter intent and remaking any ballots determined to be overvoted. If the step of returning the ballot is not taken, the risk is that contests with valid votes will be perceived as overvoted by the equipment and no votes for those contests will be counted. WEC staff find that continuing to emphasize this in training is essential with the increased of popularity of absentee ballots that are processed without the voter present to correct any mistakes

identified by the voting equipment. Additional steps have been recommended to municipalities for their pre-election voting equipment tests to account for folded ballots and the treatment of overvotes. Staff have also outlined potential changes to the certification of this system later in this report that would also alleviate this problem.

Town of Lac du Flambeau

An issue similar to that which occurred in the City of Oshkosh was identified during the audit in the Town of Lac du Flambeau and was not reconciled during subsequent attempts. The audit identified 5 ballots in the Representative to the Assembly contest that could not be reconciled. The three other contests audited in this municipality reconciled during the initial attempt to complete the audit. Staff requested that the town send their audit materials to WEC so that a review of votes cast in the Representative to Assembly contest could be completed to determine the source of the discrepancy. This review was completed as part of a public meeting in the WEC offices on November 30, 2020. After a review of the ballots staff determined the source of the discrepancy was overvotes perceived by the equipment due to creases in the write in target area for that contest on 5 ballots.

Error Rate Calculation

The issue discovered related to the Dominion ImageCast Evolution, further detailed previously in this report, saw heavy creases created by folds on absentee ballots that ran through the write-in field for specific contests read by the tabulator as overvotes in those contests. In the two cases detailed elsewhere in the report, the City of Oshkosh and the Town of Lac du Flambeau, this issue was present on 21 out of 2,173 ballots audited in the City of Oshkosh and 5 out of 1,630 ballots audited in Town of Lac du Flambeau. In total, 24,226 ImageCast Evolution ballots were audited throughout Wisconsin. Additionally, staff identified a separate contest, which was not subject to audit, in the Town of Lac du Flambeau where a crease in the write-in field likely contributed to overvotes being recorded erroneously.

There was a single ballot in both the Town of Salem and Town of Dekorra where auditors determined that a ballot crease had likely triggered an overvote and noted this in their audit documentation. The Towns of Salem and Dekorra utilize the ES&S DS200 and audited 276 and 1,698 ballots respectively. In total, 69,458 DS200 ballots were audited. Instead of the crease running through the write-in field triggering an overvote, as with the ImageCast Evolution, auditors stated that the crease ran through the oval that would be marked by voters. The possibility of a crease that runs through an oval creating a false positive overvote is an item addressed in state certification testing and noted in subsequent certification reports presented to the Commission.

Administrative procedures are in place to prevent ballots with false overvotes from being overridden and processed without those ballots being remade. Had these procedures been followed, these overridden ballots would have been correctly remade preventing any anomalies from materializing and ensuring all votes in the contests on the affected ballots would have been counted appropriately.

Post-Audit Municipal Reimbursement

At its September 1, 2020 meeting, the Wisconsin Elections Commission approved an updated procedure by which municipalities would be reimbursed for the costs incurred for conducting the voting equipment audit in their selected reporting units. In contrast to the reimbursement process used in past audits, which was structured to reimburse municipalities for actual costs incurred with an upper limit of $300 per each reporting unit selected, the process for the 2020 audit instituted a flat selection fee of $50 for each reporting unit and additional reimbursement at a rate of $0.35 per ballot audited.

In addition to this per-ballot formula, the $300 upper limit for each reporting unit was also removed from consideration. Overall, the new reimbursement process was more intuitive for clerks and reduced the paperwork burden. WEC staff were able to process the requests quickly and efficiently.

Currently, staff have received 170 reporting unit reimbursement requests from 152 municipalities, totaling $55,359.10. There are a further 14 reporting units in 9 municipalities from which no reimbursement request has been received. The total allowable reimbursement amount for these 14 reporting units is an additional $4,574.85. Based on the formula approved by the Commission for municipal reimbursement, the maximum cost of the audit will be $60,185. This figure reflects total reimbursements if received from all municipalities selected for audit. By comparison, the reimbursement requests for the 2018 voting equipment audit totaled $40,914.02. Reimbursement information for each reporting unit selected for the 2020 voting equipment audit is further detailed in Appendix A.

Proposed Amendment to Dominion Voting Systems Certification

Due to the issue identified in the City of Oshkosh and the Town of Lac du Flambeau staff recommends revisiting the original certification for the voting system in question. Amending the certification will address the problem and ensure that creases in the write in area on absentee ballots will not be read as votes by the ImageCast Evolution tabulator. Dominion Voting Systems Democracy Suit 4.14 was certified by the former Government Accountability Board in June 2014. As part of that certification, the target area on the ballot, the area in which the tabulator checks for marks, was approved to include both the oval and the write-in field. A standardized ambiguous mark threshold was instituted for both the oval and the write-in field so that any municipality in the state using the ImageCast Evolution would be processing ballots with ambiguous marks in a uniform manner. The ambiguous mark threshold for the oval was set at 15%-35% and 12%-35% for the write-in field. This means that a mark must occupy at least that amount of the oval or write-in field to be read by the tabulator. While this standard was set as part of the Democracy Suite certification, the Board, and likewise the Commission, retained the option of altering these ranges. As part of the voting equipment audit, pursuant to state law, the Commission is also allowed to take remedial action regarding the certification of voting equipment in the event that an issue is discovered. A full copy of the certification letter for Democracy Suite 4.14 can be found in **Appendix B** and at the link below: Democracy Suite 4.14 Wisconsin Certification Approval Letter

As mentioned previously in this report, as part of the voting equipment audit, it was discovered that several ballots in the City of Oshkosh and the Town of Lac du Flambeau had heavy creases in the write-in field which caused the ICE optical scan tabulator to identify these as false-positive overvotes. While an increase in training on administrative procedures will help to mitigate this situation in the future, further measures taken in the programming of the tabulator can help to resolve the issue much more effectively. To remedy the issue identified related to the ImageCast Evolution in the voting equipment audit, staff is recommending amending the certification of Democracy Suite 4.14 and eliminating the ability for the equipment to look for good marks in the write-in target area. The ImageCast Evolution has the flexibility to be programmed in such a way that the only target area on the ballot which is checked for marks is the oval filled in by the voter. Staff believe that the best solution would be to implement a requirement that the only allowable target area on the ballot be the oval that is filled in by voters. Removing the write-in field as a part of the ImageCast Evolution target area that is scanned when checking for marks would eliminate the specific problem identified during the audit. This approach, along with increased training on administrative procedures related to overvotes and the override function, is an easily implementable fix to the issue which allows for the continued use of the ImageCast Evolution in municipalities which rely on this tabulator to conduct elections. By taking prompt action, this change can be implemented in time for the April 2021 Spring Election.

Conclusion

The 2020 post-election voting equipment audit was the largest audit of its kind undertaken in the State of Wisconsin. During the course of this audit, more than 145,000 ballots were hand counted by local election officials. Staff would be remiss in not commending the efforts of all those who were instrumental in ensuring the audit was conducted properly, safely, and securely. Certain constraints imposed on those conducting the audit were significant. Despite the truncated timeline to complete the process, a recount taking place in several selected municipalities, and the omnipresent issue of an ongoing pandemic, auditors at the municipal and county levels were able to successfully conduct audits and report their findings to WEC. While there were several instances of auditor error that needed to be investigated, identifying and reporting problems in the audit process is a means by which to ensure the procedures are being followed and that the equipment is performing as certified and is in no way an attempt to minimize the efforts of the individuals who accomplished this task.

With very limited exceptions, tabulation and accessible voting equipment used in the 2020 General Election recorded and tabulated votes in a manner that satisfied certification standards and Wis. Stat. § 7.08(6). The audit results indicated that improvements can be made in both administrative procedures training and equipment programming requirements. The few discrepancies identified during the audit were primarily the result of human error that occurred as part of the process of conducting the audit. Additionally, the results of the audit did identify a single issue which impacted equipment in two selected reporting units. With prompt implementation of recommended programming changes to the ImageCast Evolution, this issue can be addressed and remedied prior to the time programming begins for the April 2020 Spring Election.

Recommended Motions

1. Staff recommends that the Commission accept this final report of the 2020 Post-Election Voting Equipment Audit.

2. Staff recommends that the Commission amend the certification of Democracy Suite 4.14 to establish the target area of the ballot as only the oval filled in by voters, thereby removing the write-in field as part of the area scanned for marks.

Appendix A
Municipalities with Approved Reimbursement Amounts and Total Number of Ballots Audited

County	Municipality	Equipment Type	Ballots Audited	Reimbursement
Adams	Town of Colburn	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	99	$ 84.65
Ashland	City of Ashland	ES&S M100 (central count muni)	909	$ 368.15
Barron	City of Rice Lake	Sequoia Voting - Optech Insight/ Sequoia Voting - AVC Edge with	4341	$ 1,569.35
Barron	Town of Lakeland	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	428	$ 199.80
Bayfield	Town of Russell	ES&S M100	701	$ 295.35
Bayfield	Town of Bayview	ES&S M100	371	$ 179.85
Brown	City of De Pere	ES&S DS200 (central count muni)	211	*
Brown	Village of Allouez	ES&S DS200 (central count muni)	478	$ 217.30
Brown	City of Green Bay	ES&S DS200 (central count muni)	255	$ 139.25
Brown	City of Green Bay	ES&S DS450 (central count muni)	1421	$ 547.35
Buffalo	Town of Lincoln	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	62	$ 71.70
Buffalo	Town of Alma	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	126	$ 94.10
Buffalo	Town of Dover	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	155	$ 104.25
Burnett	Town of Meenon	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	452	$ 208.20
Burnett	Town of Sand Lake	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	177	$ 111.95
Burnett	Town of Union	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	88	$ 80.80
Burnett	Town of Dewey	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	171	$ 109.85
Calumet	Village of Hilbert	ES&S DS200	*	

Calumet	Village of Potter	ES&S DS200	158	$ 105.30
Chippewa	City of Chippewa	ClearCast	938	$ 378.30
Chippewa	Town of Wheaton	ClearCast	1697	$ 643.95
Chippewa	Town of Anson	ClearCast	4	$ 51.40
Clark	Town of Hendren	ES&S DS200	214	$ 124.90
Clark	Town of Mayville	ES&S DS200	378	$ 182.30
Clark	Village of Withee	ES&S DS200	244	$ 135.40
Columbia	Town of Marcellon	ES&S DS200	599	$ 259.65
Columbia	Village of Pardeeville	ES&S DS200	1134	$ 446.90
Columbia	Village of Rio	ES&S DS200	627	$ 269.45
Columbia	City of Wisconsin	ES&S DS200	1247	$ 486.45
Columbia	Town of Dekorra	ES&S DS200	1698	$ 644.30
Crawford	Town of Wauzeka	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	159	$ 105.65
Dane	City of Middleton	ES&S DS200	3177	$ 1,161.95
Dane	City of Madison	ES&S DS200	2266	**
Dane	City of Madison	ES&S DS200	4	**
Dane	City of Madison	ES&S DS200	*	
Dane	City of Madison	ES&S DS200	1058	**
Dane	Village of Maple Bluff	ES&S DS200	1098	$ 434.30
Dane	Village of Mazomanie	ES&S DS200	1094	**

Dane	Village of Windsor	ES&S DS200	453	$ 208.55
Dane	City of Verona	ES&S DS200	2457	$ 909.95
Dodge	Town of Rubicon	ES&S DS200	1483	$ 569.05
Door	Town of Jacksonport	Dominion Voting - ImageCast Evolution (ICE)	624	$ 268.40
Douglas	Village of Superior	ES&S DS200	444	$ 205.40
Dunn	City of Menomonie	Sequoia Voting - Optech Insight/ Sequoia Voting - AVC Edge with	620	$ 267.00
Dunn	Town of Dunn	Sequoia Voting - Optech Insight/ Sequoia Voting - AVC Edge with	897	$ 363.95
Dunn	Town of Rock Creek	Sequoia Voting - Optech Insight/ Sequoia Voting - AVC Edge with	597	$ 258.95
Eau Claire	City of Eau Claire	ES&S DS200	560	$ 246.00
Eau Claire	City of Eau Claire	ES&S DS200	434	$ 201.90
Eau Claire	City of Eau Claire	ES&S DS200	439	$ 203.65
Florence	Town of Florence	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	458	$ 210.30
Fond Du Lac	City of Fond Du Lac	Dominion Voting - ImageCast Evolution (ICE)	*	
Fond Du Lac	City of Fond Du Lac	Dominion Voting - ImageCast Evolution (ICE)	801	$ 330.35
Fond Du Lac	City of Fond Du Lac	Dominion Voting - ImageCast Evolution (ICE)	765	$ 317.75
Fond Du Lac	Town of Marshfield	Dominion Voting - ImageCast Evolution (ICE)	728	$ 304.80
Fond Du Lac	Village of Fairwater	Dominion Voting - ImageCast Evolution (ICE)	184	$ 114.40
Forest	Town of Nashville	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	129	$ 95.15
Forest	Town of Wabeno	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	263	$ 142.05
Grant	Town of North	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	306	$ 157.10

Grant	Town of Clifton	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	95	$ 83.25
Grant	Town of Fennimore	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	146	$ 101.10
Grant	Village of Muscoda	Dominion Voting - ImageCast Evolution (ICE)	580	$ 253.00
Green	Village of Browntown	Dominion Voting - ImageCast Evolution (ICE)	130	$ 95.50
Green	Village of Monticello	Dominion Voting - ImageCast Evolution (ICE)	681	$ 288.35
Green	Village of New Glarus	Dominion Voting - ImageCast Evolution (ICE)	1394	$ 537.90
Green Lake	Town of Marquette	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	323	$ 163.05
Iowa	Town of Linden	ES&S DS200	437	$ 202.95
Iron	City of Hurley	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	70	$ 74.50
Jackson	Town of Brockway	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	466	$ 213.10
Jackson	Village of Alma Center	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	165	$ 107.75
Jefferson	City of Whitewater	Dominion Voting - ImageCast Evolution (ICE)	205	$ 121.75
Jefferson	Town of Milford	ES&S DS200	732	$ 306.20
Juneau	Town of Finley	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	57	$ 69.95
Juneau	Town of Lisbon	Dominion Voting - ImageCast Evolution (ICE)	515	$ 230.25
Kenosha	City of Kenosha	ES&S DS200	*	
Kenosha	Town of Paris	ES&S DS200	1035	$ 412.25
Kenosha	Town of Randall	ES&S DS200	2056	$ 769.60
Kenosha	City of Kenosha	ES&S DS200 / DS450 (central count muni)	491	$ 221.85
Kenosha	City of Kenosha	ES&S DS200 / DS450 (central count muni)	966	$ 388.10

Kewaunee	Town of Ahnapee	Sequoia Voting - Optech Insight/ Sequoia Voting - AVC Edge with	527	$ 234.45
Kewaunee	Town of Carlton	Sequoia Voting - Optech Insight/ Sequoia Voting - AVC Edge with	656	$ 279.60
Kewaunee	Town of Montpelier	Sequoia Voting - Optech Insight/ Sequoia Voting - AVC Edge with	907	$ 367.45
La Crosse	City of Onalaska	ES&S DS200	4009	$ 1,453.15
La Crosse	City of La Crosse	ES&S DS200	409	$ 193.15
La Crosse	City of La Crosse	ES&S DS200	2104	$ 786.40
Lafayette	Village of Belmont	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	310	$ 158.50
Langlade	City of Antigo	Sequoia Voting - Optech Insight/ Sequoia Voting - AVC Edge with	519	$ 231.65
Langlade	Town of Antigo	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	378	$ 182.30
Lincoln	Town of Harding	ES&S DS200	264	$ 142.40
Manitowoc	City of Two Rivers	ES&S M100	1258	$ 490.30
Manitowoc	Town of Cato	ES&S M100	1016	$ 405.60
Manitowoc	Town of Kossuth	ES&S M100	1271	$ 494.85
Manitowoc	Village of Cleveland	ES&S M100	868	$ 353.80
Marathon	Town of Rib Mountain	ES&S DS200	4763	$ 1,717.05
Marathon	City of Wausau	ES&S DS200 (central count muni)	712	$ 299.20
Marathon	City of Wausau	ES&S DS200 (central count muni)	987	$ 395.45
Marathon	City of Wausau	ES&S DS200 (central count muni)	663	$ 282.05
Marinette	Town of Niagara	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	327	$ 164.45
Marinette	Town of Pembine	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	357	$ 174.95

Marquette	Town of Westfield	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	343	$ 170.05
Menominee	Town of Menominee	ES&S DS200	229	$ 130.15
Milwaukee	City of Greenfield	ES&S DS200	975	$ 391.25
Milwaukee	City of Oak Creek	ES&S DS200 (central count muni)	1026	$ 409.10
Milwaukee	City of Wauwatosa	ES&S DS200 (central count muni)	1565	143.80 polls; 453.95 central;
Milwaukee	Village of Greendale	ES&S DS200 (central count muni)	1768	$ 668.80
Milwaukee	Village of Whitefish Bay	ES&S DS200	1678	$ 637.30
Milwaukee	City of Milwaukee	ES&S DS850 (central count muni)	991	$ 396.85
Milwaukee	City of Milwaukee	ES&S DS850 (central count muni)	304	$ 156.40
Milwaukee	City of Milwaukee	ES&S DS850 (central count muni)	265	$ 142.75
Milwaukee	City of Milwaukee	ES&S DS850 (central count muni)	291	$ 151.85
Monroe	City of Sparta	Sequoia Voting - Optech Insight/ Sequoia Voting - AVC Edge with	1161	$ 456.35
Monroe	Town of Little Falls	Sequoia Voting - Optech Insight/ Sequoia Voting - AVC Edge with	806	$ 332.10
Monroe	Town of Lafayette	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	159	**
Monroe	Town of Leon	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	454	$ 208.90
Oconto	Town of Morgan	Dominion Voting - ImageCast Evolution (ICE)	673	$ 285.55
Oneida	Town of Sugar Camp	Sequoia Voting - Optech Insight/ Sequoia Voting - AVC Edge with	1254	$ 488.90
Outagamie	City of Seymour	ES&S DS200	1937	$ 727.95
Outagamie	Town of Greenville	ES&S DS200	247	$ 136.45
Outagamie	City of Appleton	ES&S DS200	715	**

Outagamie	City of Appleton	ES&S DS200	346	**
Outagamie	City of Appleton	ES&S DS200	990	**
Outagamie	Village of Hortonville	ES&S DS200	1745	$ 660.75
Outagamie	Village of Wrightstown	ES&S DS200	202	$ 120.70
Ozaukee	City of Mequon	Dominion Voting - ImageCast Evolution (ICE)	1623	$ 618.05
Ozaukee	Town of Cedarburg	Dominion Voting - ImageCast Evolution (ICE)	1287	$ 500.45
Ozaukee	Village of Grafton	Dominion Voting - ImageCast Evolution (ICE)	1128	**
Pepin	Town of Stockholm	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	95	$ 83.25
Pierce	Town of Rock Elm	ES&S DS200	265	$ 142.75
Pierce	Town of Salem	ES&S DS200	276	$ 146.60
Pierce	Village of Ellsworth	ES&S DS200	1649	$ 627.15
Polk	City of Saint Croix Falls	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	533	$ 236.20
Polk	Town of Bone Lake	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	265	$ 142.75
Polk	Town of Farmington	Sequoia Voting - Optech Insight/ Sequoia Voting - AVC Edge with	1225	$ 478.75
Polk	Village of Luck	Sequoia Voting - Optech Insight/ Sequoia Voting - AVC Edge with	616	$ 265.60
Portage	City of Stevens Point	ES&S DS200	744	$ 310.40
Price	Town of Fifield	Dominion Voting - ImageCast Evolution (ICE)	398	$ 189.30
Racine	City of Racine	Dominion Voting - ImageCast Evolution (ICE)	868	$ 353.80
Racine	City of Racine	Dominion Voting - ImageCast Evolution (ICE)	914	$ 369.90
Racine	City of Racine	Dominion Voting - ImageCast Evolution (ICE)	1010	$ 403.50

Richland	Town of Marshall	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	109	$ 88.15
Rock	City of Beloit	ES&S DS200 (central count muni)	536	$ 237.60
Rock	Town of Center	ES&S DS200	704	$ 296.40
Rock	City of Janesville	ES&S DS200 (central count muni)	*	
Rock	City of Janesville	ES&S DS200 (central count muni)	*	
Rock	Town of Harmony	ES&S DS200	160	$ 106.00
Rock	Town of Janesville	ES&S DS200	56	$ 69.60
Rock	Town of Porter	ES&S DS200	670	$ 284.50
Rock	Town of Rock	ES&S DS200	*	
Rusk	Town of Big Bend	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	195	$ 117.90
Sauk	Town of Greenfield	ES&S DS200	667	$ 283.45
Sauk	Town of Merrimac	ES&S DS200	844	$ 345.40
Sawyer	Town of Bass Lake	Dominion Voting - ImageCast Evolution (ICE)	1485	$ 569.75
Sawyer	Town of Hayward	Sequoia Voting - Optech Insight/ Sequoia Voting - AVC Edge with	2094	$ 782.90
Shawano	Town of Almon	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	234	$ 131.90
Shawano	Town of Waukechon	Sequoia Voting - Optech Insight/ Sequoia Voting - AVC Edge with	592	$ 257.20
Sheboygan	City of Plymouth	ClearCast	5158	$ 1,855.30
Sheboygan	Town of Mitchell	ClearCast	843	$ 345.05
Sheboygan	City of Sheboygan	ClearCast	1048	$ 416.80
Sheboygan	City of Sheboygan	ClearCast	952	$ 383.20

St. Croix	Village of Roberts	ES&S DS200	1117	$ 440.95
Taylor	Town of Deer Creek	ES&S DS200	309	$ 158.15
Taylor	Town of Chelsea	ES&S DS200	449	$ 207.15
Taylor	Town of Little Black	ES&S DS200	609	$ 263.15
Taylor	Town of Medford	ES&S DS200	1445	$ 555.75
Taylor	Town of Molitor	ES&S DS200	202	$ 120.70
Taylor	Town of Roosevelt	ES&S DS200	140	$ 99.00
Trempealeau	City of Galesville	Sequoia Voting - Optech Insight/ Sequoia Voting - AVC Edge with	883	*
Trempealeau	Village of Ettrick	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	233	$ 131.55
Trempealeau	Village of Strum	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	294	$ 152.90
Vernon	Town of Forest	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	218	$ 126.30
Vernon	Town of Greenwood	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	111	$ 88.85
Vernon	Town of Kickapoo	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	123	$ 93.05
Vernon	Village of De Soto	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	105	$ 86.75
Vilas	City of Eagle River	Dominion Voting - ImageCast Evolution (ICE) (ImageCast PCOS-	930	$ 375.50
Vilas	Town of Lac Du Flambeau	Dominion Voting - ImageCast Evolution (ICE)	1630	*
Walworth	Village of Darien	Dominion Voting - ImageCast Evolution (ICE)	756	$ 314.60
Washburn	City of Spooner	Sequoia Voting - Optech Insight/ Sequoia Voting - AVC Edge with	1237	$ 482.95
Washington	City of West Bend	Dominion Voting - ImageCast Evolution (ICE) (central count	839	$ 343.65
Washington	Village of Richfield	Dominion Voting - ImageCast Evolution (ICE)	1040	$ 414.00

Waukesha	City of New Berlin	ES&S DS200 / DS450 (central count muni)	477	**
Waukesha	City of New Berlin	ES&S DS200 / DS450 (central count muni)	110	**
Waupaca	Village of Iola	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	280	$ 148.00
Waushara	Town of Aurora	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	411	$ 193.85
Waushara	Village of Coloma	Sequoia Voting - AVC Edge with VeriVote Printer DRE system	205	$ 121.75
Winnebago	City of Neenah	Dominion Voting - ImageCast Evolution (ICE) (central count	864	$ 352.40
Winnebago	City of Oshkosh	Dominion Voting - ImageCast Evolution (ICE)	1057	$ 419.60
Winnebago	City of Oshkosh	Dominion Voting - ImageCast Evolution (ICE)	1117	$ 440.95
Wood	City of Marshfield	ES&S DS200	886	$ 360.10
Wood	Town of Saratoga	ES&S DS200	3094	$ 1,132.90
Wood	Village of Hewitt	ES&S DS200	528	$ 234.80
Wood	Village of Vesper	ES&S DS200	304	$ 156.40

* denotes zero-population reporting unit
** denotes reporting units for which no reimbursement request has been received

Appendix B: Democracy Suite 4.14 Approval Letter

Via Email

June 29, 2015

Mr. Ian S. Piper
Director of Federal Certification
Dominion Voting Systems, Inc.
1201 18th Street, Suite 210
Denver, CO 80202

Mr. Piper:

On June 18, 2015, the Wisconsin Government Accountability Board (Board) granted approval of the Dominion Democracy Suite 4.14-D and 4.14-DS voting systems.

Board Staff tested and the Board approved the following hardware for the 4.14-D and 4.14-DS:

Equipment	***Hardware Version(s)/Make and Model***	***Firmware Version***	***Type***
ImageCast Precinct (ICP) Ballot Marking Device (ICP-BMD Audio)	320A, 320C HP Office Jet 7110*	4.14.17-US**	Polling place scanner and tabulator Accessibility add-on
ImageCast Central (ICC)	Canon Scanner DR-X10C/G1130* OptiPlex 9020/9030 Desktop*	4.14.17**	Central count scanner and tabulator
ImageCast Evolution (ICE)	410A External Monitor AOC 156LM00003*	4.14.21**	Polling place scanner and tabulator w/ accessibility functionality
Compact Flash Cards*	SanDisk Ultra***: SDCFHS-004G SDCFHS-008G		Memory device for ICP and ICE tabulators.

	RiData: CFC-14A RDF8G-233XMCB2-1 RDF16G-233XMCB2-1 RDF32G-233XMCB2-1 SanDisk Extreme: SDCFX-016G SDCFX-032G SanDisk: SDFAA-008G		
Modems (4.14-DS only)*	Verizon USB Modem Pantech UML295 USB Modem MultiTech MT9234MU CellGo Cellular Modem E-Device 3GPUSUS AT&T USB Modem MultiTech GSM MTD-H5 Fax Modem US Robotics 56K V.92.		Analog and wireless modems for transmitting unofficial election night results.

* COTS devices used by the Democracy Suite Voting System.
** Board staff visually inspected firmware versions on each piece of voting equipment.
*** Dominion recommended flash cards.

Board staff tested and the Board approved the following software for the 4.14-D and 4.14-DS:

Software	***Version***
Democracy Suite Election Management System (EMS)*	4.14.37
1. Election Event Designer 2. Results Tally and Reporting 3. Audio Studio 4. Data Center Manager 5. Election Data Translator 6. Application Server 7. Network Attached Storage Server 8. EMS File System Service 9. Database Server Application	
ImageCast Listener (4.14-DS only)	2.1.1.5301

*The EMS version presented for approval excluded any Adjudication or AIMS software components (which received approval by the EAC) due to scheduling of testing and limited practical uses of the Adjudication software in Wisconsin.

In order to maintain approval for use of the 4.14-D and 4.14-DS in Wisconsin, Dominion must comply with the requirements of Chapter 7 of the Government Accountability Board Administrative Code. A copy of this chapter has been enclosed for your review. Specifically, Dominion must:

1. Timely pay the Board's costs for testing and approving these voting systems. An invoice will arrive separately.

2. Immediately notify the Board of any changes to these voting systems. The Board will determine the procedures for approving any changes for use in Wisconsin on a case-by-case basis.

3. Furnish a copy of the programs, documentation, and source code for these systems to be placed in escrow with EscrowTech International, Inc within 90 days from the date of this letter, in accordance with Wis. Stat. § 5.905(2).

4. Ensure that the election results from these systems can be exported on election night into the Statewide Voter Registration System (SVRS) in a format specified by the Board.

5. Inform the Board regarding any municipalities in Wisconsin which agree to use these voting systems, as well as any states or other jurisdictions which approve this voting system for use.

6. In the instance of voluntary withdrawal, involuntary decertification by the US EAC (or other Federal agency responsible for voting systems certification), or revocation of approval by the Board of the Dominion Democracy Suite 4.14-D or 4.14-DS (including any component), Dominion shall provide affected customers with substitute tabulation equipment so that any impacted election may be properly tabulated pursuant to Wis. Stat. § 5.40.

7. Submit an Application for Modification for *de minimis* or non-*de minimis* changes; however, any non-*de minimis* changes may require a full or limited application and testing process.

8. Complete the attached Certificate of Performance Compliance: Delivery of Voting System for each municipality when the 4.14-D or 4.14-DS is purchased. One certified copy must be provided to the municipality upon delivery of the voting system and one certified copy must be provided to the Board.

   Furthermore, the Board enacted additional requirements for the Dominion Democracy Suite 4.14-D and 4.14-DS voting systems. The Board determined that the following continuing conditions shall remain ongoing for Dominion and purchasing localities.

   1. Dominion may not impose customer deadlines contrary to requirements provided in Wisconsin Statutes, as determined by the Board. In order to enforce this provision, local jurisdictions purchasing Dominion equipment shall also include such a provision in their respective purchase contract or amend their contract if such a provision does not currently exist.

   2. The 4.14-D or 4.14-DS must always be configured to include the following options:

      a. Automatically reject all overvoted ballots, without the option to override.
      b. Store election set-up, results, and ballot images on both compact memory cards. Each memory card must be retained, with the data intact, for the required retention period. If a jurisdiction transfers the data from the memory cards to a digital storage device after the recount period they must transfer all files from both memory cards into two separate files.
      c. Prohibit the use of the Write-In Preference feature, which causes write-in votes to always count over a ballot candidate.
      d. Provide an audible warning tone and visual warning message when a crossover, overvote, blank, or ambiguous ballot is fed into the voting equipment.

e. Return a marked ballot to the voter for review prior to casting the ballot when ballots are marked using the ICE on-board marking device system.
f. The ambiguous mark threshold ranges must be set per Dominion's recommendation, which are 15%-35% for the oval and 12%-35% for the write-in box. The Board retains the discretion to alter these ranges.
g. Capture digital ballot images of all ballots cast by the system.

3. Election inspectors shall continue to check the main bin and review all ballots for validly cast write-ins at the close of the polls at every election.

4. Election inspectors shall remake all absentee ballots automatically rejected by the voting equipment so that the ballot count is consistent with total voter numbers.

5. Clerks and election inspectors shall ensure that external modems are secured prior to, during, and after every election.

6. Election inspectors shall enable an on-screen review of the ballot on the ICE for every ballot marked using the on-board ballot marking device.

7. As part of US EAC certificate: DVS-DemSuite4.14-D, only equipment included in this certificate are allowed to be used together to conduct an election in Wisconsin. Previous systems that were approved for use by the former Elections Board and the G.A.B. are not compatible with the new Dominion voting system, and are not to be used together with the equipment seeking approval by the Board, as this would void the US EAC certificate. If a jurisdiction upgrades to 4.14-D, they need to upgrade each and every component of the voting system to the requirements of what is approved herein. Likewise, if a jurisdiction upgrades to 4.14-DS, they need to upgrade each and every component of the voting system to the requirements of what is approved herein. The 4.14-D and 4.14-DS voting systems require a hardened computer terminal to program elections. Municipalities may not use an AutoMARK as a ballot marking device for ballots that will be fed into a 4.14-D or 4.14-DS piece of equipment.

8. Dominion shall abide by applicable Wisconsin public records laws. If, pursuant to a proper public records request, the customer receives a request for matters that might be proprietary or confidential, customer will notify Dominion, providing the same with the opportunity to either provide customer with the record that is requested for release to the requestor, or shall advise Customer that Dominion objects to the release of the information, and provide the legal and factual basis of the objection. If for any reason, the customer concludes that customer is obligated to provide such records, Dominion shall provide such records immediately upon customer's request. Dominion shall negotiate and specify retention and public records production costs in writing with customers prior to charging said fees. In

absence of meeting such conditions of approval, Dominion shall not charge customer for work performed pursuant to a proper public records request, except for the "actual, necessary, and direct" charge of responding to the records request, as that is defined and interpreted in Wisconsin law, plus shipping, handling, and chain of custody.

Please note that noncompliance with these, or any other requirements contained in Wisconsin Statutes or the Government Accountability Board Administrative Code, may result in the suspension or withdrawal of the Board's approval of these voting systems.

We require written acceptance of the terms specified in this letter within 20 business days from the date of this letter. If you have any questions, please do not hesitate to contact either myself or Matthew Kitzman of the Wisconsin Government Accountability Board.

Sincerely,

Wisconsin Government Accountability Board

Kevin J. Kennedy
Director and General Counsel

cc:

Dana LaTour
Regional Sales Manager
Dominion Voting Systems

Chad Trice
President
Command Central

Michael Haas
Elections Administrator
Wisconsin Government Accountability Board

Ross Hein
Elections Supervisor
Wisconsin Government Accountability Board

Matthew Kitzman
Electronic Voting Equipment Election Specialist
Wisconsin Government Accountability Board