MERISSA HAMILTON
STAY INFORMED. TAKE ACTION.

May 19th, 2023

# ARIZONA SECRETARY OF STATE EQUIPMENT CERTIFICATION OF DOMINION VOTING SYSTEMS VERSION 5.17.15.1 ON MAY 19TH, 2023

## REPUBLICAN PARTY OF ARIZONA OFFICIAL OBSERVER

### PURPOSE

On May 19th, 2023, I observed the Arizona Secretary of State's Equipment Certification meeting for the Republican Party of Arizona. I observed the Equipment Certification process for the new version enhancements of Dominion 5.17.15.1. Below is the statement I submitted for the official public comment record.

### OBSERVER EXPERIENCE

As an observer I felt very well accommodated with Lisa Marra spending an exceptional amount of time answering our questions. It was very difficult to hear most of the discussions between the Board, the Dominion vendor employees, and Ryan Macias. There was a lot of whispering between Dominion employees and others. I appreciate Tonia Tunnell recognizing this from time to time and trying to give us an update of what we observed but could not hear and often see. The Dominion employees often stood in front of the computer monitors being used to conduct the test. We were permitted to come closer to the screen to observe the adjudication tests, which was very helpful. The test was conducted with the utmost professionalism in conduct. I thank the Secretary of State staff for making the observation process a welcoming experience.

### TEST PROCESS

A.R.S. 16-449A defines the equipment test process with the scope of the test including the following:

- Shall have the automatic tabulating equipment and programs tested to ascertain that the equipment and programs will correctly count the votes cast for all offices and on all measures
- The test shall be conducted by processing a preaudited group of ballots so marked as to record a predetermined number of valid votes for each candidate and on each measure and shall include for each office one or more ballots that have votes in excess of the number allowed by law in order to test the ability of the automatic tabulating equipment and programs to reject such votes.
- If any error is detected, the cause therefor shall be ascertained and corrected and an errorless count shall be made before the automatic tabulating equipment and programs are approved

Observers were not presented with a test script outlining the tests being performed. We were presented with the Zero Tape receipts before each test. We were not presented with a visual of the results of the tests, so I cannot confirm if the tests were indeed completed with full certainty. We could hear the Board, Dominion employees, and Ryan Macias running through the tallies of each test.

At one point the write-in vote scenarios did not match up to the test script. This was determined at approximately 11:48 am before we took a break for lunch. When we returned at 1:14, the Board decided they would rerun the scenario with two new ballots and changing the Dominion settings. I believe the adjudication settings were changed to "all contests" and this resulted in the test reconciling to the machines.

The resolution was concerning because the test was adjusted to accommodate the design of the Dominion system rather than holding a standard of the Dominion system being able to successfully complete the test as the Secretary of State designed the script. Rather than "ascertaining that the equipment and programs will correctly count the votes," the resolution was to essentially change the test script.

Since the equipment was operated by Dominion employees throughout the entire session, in the real-life application of the Dominion system, unless Dominion employees are conducting every aspect of the election, it will not be known if the equipment will indeed correctly count the votes. Indeed, the process I observed ascertained that election officials will need to adjust processes to Dominion's design as it did not successfully complete the original test plan.

As I have a professional background in testing software for supply chain processes, my observation is that the test process is comparable to a vendor sales demo since it is vendor driven. To meet the A.R.S. requirement, election officials should be the ones to drive the equipment during the test while following a step-by-step test script. Election officials completing a test script and filling out a pass/fail document would be able to identify if the user experience "correctly counts the votes cast for all offices and on all measures."

As a side note, I did not observe any measures were included in the demonstration --- only elected office elections were on the zero tapes of the contests.

The adjudication test I observed did not include a test case with a scenario of a user nefariously flipping the vote in opposition to clear voter intent. It is not known if an adjudicator team would get a warning screen or if the Dominion system simply allows this selection through. Without guardrails to protect against this, it cannot be ascertained if the "equipment and programs will correctly count the votes cast." Are there any audit processes that are part of the process to catch bad actors or unskilled users?

The test plan I observed did not include a test case of all setting options in the adjudication process and thus is insufficient in determining if the Dominion software meets the standard of correctly

counting the votes as the administrators during the election are not limited to the setting options I observed today. Since one setting caused the test plan to fail and another setting caused the test plan to pass, expanded testing of the settings seems to be imperative to meet the ARS testing requirement.

The design of the Dominion adjudication program is another example of why the test plan must take into consideration if the user experience is functional enough for a lay person to correctly count the votes cast for all offices and on all measures.

Before I continue, it must be noted, the Dominion Adjudication program test was conducted while in the ADMIN system experience. I did not observe the generic user experience was tested. The generic user experience is what the adjudication teams would use in the real-life application. I did bring this to the attention of Lisa Marra in the presence of the Chair of the Board multiple times. I did not observe this concern was presented to the Board to vote on.

The program I observed in the ADMIN experience displayed an image of the ballot on the screen with different votes circled. It was not tested if the user could change the vote selections on line items not circled. On the votes I observed that were adjudicated, the user experience is difficult to view what was clicked as the voter intent. This is because the Dominion program selects the new vote in a black color as an overlay while the original ballot is displayed in black and white with black markings. It's very difficult to tell if the correct option was selected. I did not observe the user could zoom in the screen to get a closer look at markings to determine voter intent. After clicking the button to process the selection, the screen displays a red or green bar at the top with a message. In some cases, a gray box pops up with a message in the middle of the screen. Since a Dominion employee is navigating this process and there is not a step-by-step process identified in a test plan, the standard of "tested' did not occur in practice. An election official or government employee would need to actually drive the test process to determine if the test was successful. This likely could be applied to the entire test but I was not able to see the monitors for the majority of the testing process. The Dominion employees operated the equipment the entire time.

Many other states require a test process that includes test cases that are not operated by Dominion employees, but rather the election officials and their direct reports. Texas is an example of such a state. It should be noted they have failed Dominion for certification for over the complicated user experience. If the counties do not create detailed manuals with consistent setting requirements outlined, my observation is this equipment and the program has a high likelihood of failing or having inconsistent application in the treatment of ballots.

Thus, the Secretary of State process should thoroughly test all settings to document which settings failed to meet the test plan.

As a separate note, I did not notate UOCAVA ballots were tested today.

## SECURITY CONCERNS IMPACTING THE VOTE COUNT

It seems imperative that to determine if "equipment and programs will correctly count the votes cast", security considerations should also be tested.

Here is a list of security concerns I observed:

- When the batch loading from an SD card occurs, I did not observe a security process to ensure the user is authorized to import a batch or a log to document the SD card seal #.
- I did not observe if there is a log process that tracks the source of the batch uploads or if the batch can later be quality assurance reviewed and isolated
- The Dominion employee said the adjudication process has two login profiles – one for the adjudicator teams and one for the administrators. I did not observe the program logging the unique user actions. It is not clear if each user has their own personal login profile.
- Dominion said the security key only expires every year – this is well beyond the normal best practice length of time in the private sector in my experience
- Dominion said Administrators can also adjudicate ballots. This would violate the ARS requirement that bipartisan teams are the only authorized users to complete this task. Also, Admins can override adjudicator team decisions. There is no security screen to document that a bipartisan board agreed to the override of their decision. I did not observe a system log is generated identifying who adjudicated each vote on each ballot.
- Based on some statements by Dominion, I was given the impression it may be possible for ADMINS to resubmit the same batches to another bipartisan team to adjudicate. I did not observe if there is a log that would track more than two sessions of adjudication for the same ballot and votes. Is there a reporting or audit process to catch if this occurs?
- I observed there is no way to designate non-qualified write-ins
- I did not observe the printing process of the adjudication process to determine if the ARS requirements are met
- I wrote down a note that the big tabulator cannot physically outstack, but can electronically outstack. I was told outstacking is where the machine kicks out the unreadable or damaged ballots. If the physical ballots cannot be kept in the same batches as the electronic outstack, there could be chain of custody and ballot traceability issues
- I was told only Pima and Maricopa County adjudicate damaged ballots. Does this mean all ballots are treated equally under the law? It seems some counties discriminate against voters.
- The large tabulator has a security key that can also open the IC scanner. If the security key is left in the machine, there is no message or sound that pops up to alert the user they left their security key behind. Is there a concern an unauthorized person could take the security key?

- When the in-person tabulator is disconnected from power, the device will put up a message it was disconnected when it powers back up and requires the poll worker to enter their credentials. I did not observe if there is a system log that documents this occurred.
- In the new Dominion version, the accessible voting machines print out a ballot format that is identical to the in-person ballot format including the identical ballot style numbers and barcodes. The only recognizable difference is the vote ovals will be machine-filled in. The previous process created a unique mini ballot on regular 8.5x11 paper that was extremely distinguishable from the in-person ballots. It is vital for chain of custody and traceability purposes to be able to isolate and track the ballots by the source they came from – meaning early, in-person, accessible, etc. This matters because the Official Ballot reports do not track the number of check-ins and reconciliation doesn't occur at the voting center before the ballots are transported – breaking the known chain of custody. Also, the machine-filled ballots would be tabulated perfectly with no chance to ensure no ballots were illegally added to tabulation. Machine-filled ballots that are identical to in-person and/or early ballots will create a massive invitation for fraud and may be the final nail in the coffin for eroding public confidence in the election process. I recommend machine-filled ballots be prohibited in Arizona for the security of our elections. Additionally, the chain of custody and traceability procedures must be strengthened, and the counties must adopt a strict code of discipline and enforcement.

## CONCLUSION

In my observation and professional experience, due to the reasons stated above including an insufficiently documented test process, an incomplete "vendor-driven sales demo-like" test process, an overly complicated & confusing administrative and user experience, and significant security concerns, I did not observe a process that could ascertain per A.R.S. 16-449 that the Dominion equipment and programs meet the standards set by our statutes. Indeed, I observed the Dominion equipment and programs failed this process and only reconciled after a new test process was invented during the meeting to accommodate the Dominion system design.

It is to the benefit of Arizonans for the Legislature to evaluate the A.R.S. language versus the advanced and unique needs of the counties to ensure the certification process is thorough from an outcomes-based perspective in a real-life application of the equipment and programs. This may avoid some of the failures that Arizona has experienced tarnishing the reputation of our elections.

I declare that the facts and statements contained herein are true, correct, and based upon my personal knowledge and observation.