BRANDON T. HURLEY

October 27, 2025

Ms. Christina Adkins
Director of Elections
Texas Secretary of State
Election Division
208 East 10th Street
Austin, Texas 78711

    Re: Hart Verity Vanguard 1.0 Voting System ("Vanguard 1.0")

Dear Ms. Adkins:

Pursuant to my appointment by the Texas Secretary of State as a voting systems examiner under TEXAS ELECTION CODE § 122.035, please allow this letter to serve as my report concerning the above referenced examination. I, along with the other statutory examiners and staff from the Secretary of State's office, attended an in-person examination Vanguard 1.0 from September 16th through the 18th of 2025, at which time the Vanguard 1.0 System was discussed, tested and reviewed. The same group conducted a phone call with Hart officials about follow up questions on October 17, 2025.

The other examiners, Secretary of State staff and I inspected the above referenced software and equipment and accompanying written materials for compliance with the relevant provisions of the TEXAS ELECTION CODE, Texas Administrative Code and all other applicable laws, regulations and executive orders related to the requirements for election machines and software. I was unable to attend the first two days of the in-person exam when the trusted build, hash validation and logic and accuracy tests were completed; however, I was able to watch the video of those two days. On the third day of the in-person examination, we again tested the equipment, did disability testing, heard the presentation of the vendor and further investigated issues that had been raised to that point.

The Vanguard 1.0 System is the first version of a new Voting System produced by Hart Intercivic to replace its previous certified system. It is also the first voting system inspected by the Texas examiners that has been subject to the new 2.0 Voluntary Voting System Guidelines ("VVSG") standards published and approved by the Election Assistance Commission. While adherence to these new guidelines are voluntary, they provide the most up-to-date standards for the security, effectiveness and usability of voting

systems. The Vanguard 1.0 System contains a full suite of hardware and software for a complete voting system. The Vanguard Adapt component was not part of the hardware listed in the documentation for the Texas exam. Initial concerns were raised about whether the Vanguard 1.0 System (as presented) would meet the accessibility requirements of Texas law since the Adapt device was intended for this purpose. However, another piece of hardware, the ballot marking device known as "Flex" can also be used for accessibility compliance. Also, Hart did decide to bring the Adapt hardware to the in-person examination.

ACCESSIBILITY TESTING

On the last day of the inspection, I and others tested the physical equipment of the Vanguard 1.0 System to ensure it complied with the accessibility standards adopted by Texas law and regulation. The testing confirmed that the Adapt and Flex machine met the requirements for accessibility voting called for in Texas law and regulation. There were a few minor issues using the Adapt machine that the ballot review screen (that presents the actual physical ballot under glass) it is impossible to reach the volume or the help screen. Also, on the audio portion of the accessibility assistance with headphones, the "write in" option read the alphabet for purposes of writing in a candidate in the "QWERTY" order like the lay out of a key board. Further investigation suggested that this format is acceptable to the disability community.

TESTING OF HARDWARE AND SOFTWARE

On the first two days of the examination (that I observed via video), Hart completed the loading and installation of the trusted build of Vanguard 1.0 System, the hash validation and logic and accuracy testing. As has been the case with past examinations, the hash validation process is always a point of emphasis. All of the testing proved the system to be safe, secure and proper for its various intended purposes. There was some discussion about the use of automated or manual hash validations that may require clearer instructions in the Vanguard 1.0 System documentation.

On the final day of the examination, Hart provided a presentation of the new System. The examiners posed multiple questions that were all answered by Hart. It should be noted that the capacity of the machines as to the total number of ballots that can be processed and stored in the system. There are clear limits; however, there was some confusion about the actual number of pages (since ballots can vary in page number) that could be handled. In the end, it appears that the national testing lab "stress tests" the machines to the stated limit plus 10%; however, if the number exceeds this total number of pages (which is quite large), then an error protocol is initiated; however, it may require bringing in new machines. Similarly, the Vdrive used to store cast vote records also have volume limits that may require the changing out of the drives during a voting cycle. This could create confusion

and open the door for human error, making the training and instructions for the process very important.

The examiners were also allowed to inspect and test each piece of equipment and software for security, functionality and accuracy on the third day. The one issue that I observed is that the process for casting a provisional ballot on the Adapt device is problematic under Texas law. That suggests that anyone that is needed of accessibility assistance while voting should use the Flex machine if they intend (or need) to cast a provisional ballot.

OBSERVATIONS

1. Each of the separate pieces of hardware and software examined substantially met the listed requirements of the TEXAS ELECTION CODE and TEXAS ADMINISTRATIVE CODE.

2. The interplay of the required randomized ballot numbering, real time limited audit numbering and imprinting process with many ballot marking devices seems to be an area that could confuse local election officials. The process now allows for identification of machines used for voting and precinct locations, but it would be beneficial if all of these different processes could somehow be merged into a single number (or at least a multi-faceted number) that provides a clear process that meets all the various goals for the various numbering and other identifiers on ballots.

3. As all voting systems grow more complicated, the improvement of training processes, instruction manuals and minimization of the chance for "human error" should be an emphasis and a stated goal. Hart's manuals appear to be adequate, but things like the hash validation process and other technical aspects of the operation of the system seem like opportunities for complication and confusion. Continued efforts to simplify those processes would be advisable,

RECOMMENDATION

Based on the foregoing observations and my examination of the Hart Verity Vanguard 1.0 System, its accompanying literature and the representations made by Hart officials both in its literature and at the examination, I recommend that the Hart Verity Vanguard 1.0 System be certified as compliant with the requirements of the TEXAS ELECTION CODE and the TEXAS ADMINISTRATIVE CODE with the following conditions to certification:
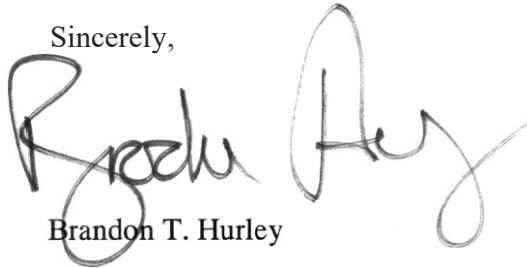
(1) The "Adapt" device should not be allowed to be used as a certified device for the casting of any provisional ballots. If the issue with casting provisional ballots on the Adapt device is corrected, this condition may be

revoked.

This report should not be construed as a tacit or implied comment on any of the technical aspects of the Hart Verity Vanguard 1.0 System except as expressly stated herein. In the event any of the equipment, software or security devices examined are altered, changed or decertified by any accrediting agency (other than a "minor modification qualified for administrative certification process" as that term is defined in § 81.65 of the Texas Administrative Code), this report should be considered withdrawn .

Thank you for the opportunity to serve as an examiner and participate in this important process that protects the integrity of Texas' voting systems.

Sincerely,

Brandon T. Hurley