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Mr. Keith Ingram
Director of Elections
Texas Secretary of State
Elections Division
208 East 10th Street
Austin, Texas 78711

> Re: Inspection of the Hart Intercivic Verity Voting 2.4.2 System conducted on April 14-17, 2020

Dear Mr. Ingram:

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. Because of the current public health crisis, the statutory examiners and staff from the Secretary of State's office, examined the Hart Intercivic Verity Voting 2.4.2 voting system ("**Hart 2.4.2 System**") in groups of two examiners on April 14 to April 17, 2020, at the offices of Hart Intercivic in Austin, Texas. The room used at Hart's offices from April 14th to 17th was under constant camera surveillance, locked when no one was present and all inspection proceedings were broadcast live so all inspectors not physically present could watch the proceedings. I physically attended the inspection conducted on April 15, 2020 along with Chuck Pinney from the Secretary of State's office.

Chuck and I inspected the above referenced software and equipment on April 15th. Prior to and after that inspection, I reviewed the written materials for the Hart 2.4.2 System. The physical inspection and review of written materials show Hart Intercivic's compliance with the relevant provisions of the TEXAS ELECTION CODE and Texas Administrative Code related to the requirements for election machines and software.

The Hart 2.4.2 System is the next version of the Hart Intercivic Verity Voting system that has similarities to the previous Hart system approved by the Secretary, including the Hart 2.3 System. The only substantive changes from previous systems relates to ballot numbering and the end of life issues for some of the commercial off-the-shelf printers and scanners.

<u>ACCESSIBILITY TESTING</u>

On April 15, 2020, Chuck and I tested the physical equipment of the Hart 2.4.2 System for accessibility compliance with the applicable state laws and regulations. These tests confirmed that the Hart 2.4.2 System complied with the accessibility requirements of Texas law.

<u>TESTING OF HARDWARE AND SOFTWARE</u>

On the first day of the examination (the 14th), Hart completed the loading and installation of the Hart 2.4.2 System.

On the second day of the examination (on which I was physically present), Hart provided the examiners an overview of the 2.4.2 System. There was an initial discussion on the new ballot numbering functionality under the new system. There was also questions posed about the ability to connect the Hart 2.4.2 System to the internet. Hart officials assured the examiners that the option for internet connectivity was only available in a version sold in Michigan and would not be available on any system sold in Texas.

Later on the second day, Chuck and I tested each piece of equipment and software for security, functionality and accuracy. Chuck and I cast a script of ballots on each voting machine and paper ballots and cast vote records were fed into the optical scanners. ***Although not required under Texas law or administrative rule, we also tested the touch screens for the Hart 2.4.2 System with various devices such as pencils, beverage straws and gloved hands. Later, other examiners tested the touch screens with a que tip. These tests were done under the expectation that the new Hart System may be used under unique restrictions in light of the Covid 19 outbreak.*** The mock votes were tabulated and sorted with the new election software. The results of the tabulation matched the verified voting numbers from the Secretary's office. In addition, Hart and the examiners in attendance also reviewed the adjudication features of the System.

After the voting tests were verified, an additional discussion about the ballot numbering occurred. Ultimately, it appeared that the ballot numbering system actually can be used on two formats. One system provides specific information about polling location, machine used and voting session at which a ballot is cast. The other seems more of a simple number that is randomized on pre-printed ballots.

On subsequent days, the other examiners also voted ballots and inspected the machines. Also, the audit logs for each machine and programs were provided to the examiners.

<u>OBSERVATIONS</u>

General Observations

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

2.   The changes to address the ballot numbering requirements in Texas are a little difficult to navigate and understand. It appears some of the numbering options will reveal the specific machine, session and a random identifying number on each ballot as it is voted, but other numbering options are available that will need to be assigned in tranches to individual precincts. There are reports that may potentially lead to the tracing ballot numbering to voters and must be turned off. However, because the generation of the numbers is randomized, this may be difficult to achieve.

3.   There were some issues with paper jams in the scanners.   However, it appears all of these issues would create warnings that would allow a poll worker to assist a voter in correcting the problem.

4.   In the voting process, an "over-vote" bring up a warning when more than one candidate can be voted for in a specific race. However, when you make your selection to continue, there is an automatic de-selection of another candidate chosen rather than allowing the voter to decide who gets deselected. This could lead to voter confusion and a casting of an unintended vote without the voter's knowledge.

RECOMMENDATION

Based on the foregoing observations and my examination of the Hart 2.4.2 System, its accompanying literature and the representations made by Hart officials both in its literature and at the examination, I recommend that the Hart 2.4.2 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)   Hart should be required to provide a specific set of instructions and explanations to its Texas customers concerning the proper way the ballot numbering functions should be utilized to comply with the requirements of Texas law; and

(2)   Hart should provide end users with specific instructions on how to deal with voter confusion arising from over-voting.
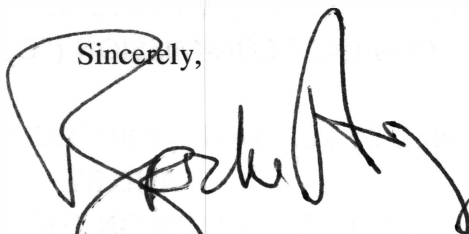
This report should not be construed as a tacit or implied comment on any of the technical aspects of the Hart 2.4.2 System except as expressly stated herein. In the event any of the equipment, software or security devices examined are altered, changed or decertified by any accrediting agency (other than 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.

This inspection was more challenging based on the unique circumstances created by the Covid 19 pandemic; however, I think it was very informative for the way the system may also be

used in upcoming elections conducted under stricter public health rules. I feel confident that Hart has already designed machine configurations that would comply with social distancing and safety precautions such that the 2.4.2 System could be safely used with the proper precautions and restrictions that would ensure a safe election for the voting public.

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