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August 2, 2016

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

VIA EMAIL

Re: Inspection of Hart Verity 2.0 System Application on June 29th and 30th, 2016

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. All of the statutory examiners and various members of the Secretary of State staff examined the Hart InterCivic Verity 2.0 voting system on June 29th and 30th of 2016, at the offices of Elections Division of the Texas Secretary of State in Austin, Texas.

We examined the above referenced software and equipment (collectively referred to herein as "the Hart 2.0 System") for compliance with the relevant provisions of the Texas Election Code and Texas Administrative Code related to the requirements for election machines and software. I also reviewed the written materials submitted by Hart for compliance with the Texas Election Code and Texas Administrative Code requirements for voting equipment.

ACCESSIBILITY TESTING

The examiners and staff tested the physical equipment for the Hart 2.0 System, including different voting terminals and accompanying software for accessibility compliance with the applicable state laws and regulations. All of the equipment and software complied with requirements set out in the applicable statutes and regulations for accessibility for voters with physical disabilities.

TESTING OF HARDWARE AND SOFTWARE

Hart officials explained the new 2.0 system. This system was an upgrade of many of the elements of the Hart Verity 1.0 system. For this reason, all the components of the 1.0 system that were carried over to the 2.0 system have already been examined (and certified). The new portions of the system in included a new DRE device and other improvements. Examiners cast a 2224658_1

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script of paper ballots on each voting machine into the optical scanners. The mock votes were tabulated and sorted with the Hart software.

OBSERVATIONS

General Compliance with Texas Election Code. Each of the separate pieces of hardware and software examined that were used for actually casting a ballot complied with t requirements listed in §§ 122.001 et seq. of the Texas Election Code and the related regulations in Texas Administrative Code

<u>Use of COTS printers and scanners.</u> Different from other vendors, Hart allows commercial over-the-counter printers and scanners to be used in its system. Initially, this caused me some concern simply because it would appear that it would create an opportunity for security breaches and simple human errors. However, these concerns were later alleviated when it was shown that the applicable software provides adequate safeguards that would prevents any issues with the use of COTS devices.

<u>Internal Audit Logs.</u> The internal audit logs of the Hart 2.0 System present an upgrade from previous systems. Improved digital signatures and ability to run audit reports from each device make the security and utility of the logs better than in past versions.

<u>Distinction of Functions of "Count" vs. "Central".</u> I was also initially confused by the function of the "Count" portion of the system as process to only *count* case ballots, *but not tabulate them*. The name clearly suggests this, but the fact that "Central" is the location where ballots are actually tabulated is something that should be made clear to the end-user of the Hart 2.0 System to ensure no one has unreasonable expectations about what the various components of the system will do in the field.

CONCLUSION

Based on the examination and review of the materials, it is my opinion that the Hart 2.0 System meets the requirements of Texas law and the applicable administrative rules.

This report should not be construed as a comment on any of the technical aspects of the Hart 2.0 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.

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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