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IN THE COMMONWEALTH COURT OF PENNSYLVANIA

MARK BANFIELD
419 N. Saddlebrook Circle
Chester Springs, PA 19425,

SARAH BECK
241 McIntosh Road,
West Chester, PA 19382,

JOAN BERGQUIST
217 Devon Boulevard
Devon, PA 19333,

ALAN BRAU
483 Sugar Maple Court
Bethlehem, PA 18017,

LUCIA DAILEY
132 Clark Street
Clarks Green, PA 18411,

Docket No: _____

PETER DEUTSCH
153 Cherry Lane
Aliquippa, PA 15001,

CONSTANCE FEWLASS
2543 Brownsville Road
Langhorne, PA 19053,

BARBARA GLASSMAN
4907 Cabin Run Road
Pipersville, PA 18947,

MARIJO HIGHLAND
Center Square Towers Apts.
555 Broad Street
Doylestown, PA 18901,

JANIS HOBBS-PELLECHIO
106 Beulah Road
Doylestown, PA 18901,

DEBORAH JOHNSON
10 Hayden Heights Road
York, PA 17404,

ROBERT MAXWELL McCORD
135 Fishers Road
Bryn Mawr, PA,

ANDREW MCDOWELL
1102 Winchester Trail
Downingtown, PA 19335,

JAMES MICHAELS
132 Clark Street
Clarks Green, PA 18411,

J. WHYATT MONDESIRE
213 E. Phil Ellena Street
Philadelphia, PA 19119,

MARY MONTRESOR
825 Conewago Creek Road
Manchester, PA,

REV. JAMES MOORE
904 East Gowen Avenue
Philadelphia, PA 19150,

CATHY REED,
619 Greenleaf Street
Allentown, PA 18102,

REGINA SCHLITZ
1401 W. Schwenkmill Road
Perkasie, PA 18944,

ALEXANDER SICKERT
10 Pearl Drive
Doylestown, PA 18901,

DANIEL SLEATOR
15 Hollenden Place
Pittsburgh, PA 15217,

SUSANNA STAAS
4 Hana Lane
Phoenixville, PA 19460,

STEPHEN J. STRAHS
921 Melrose Avenue
Melrose Park, PA 19027,

MARY VOLLERO
137 N. Spring Street
Bellefonte, PA 16823

JEANNE ZANG
310 Challis Lane
Sewickley, PA 15143

Petitioners,

v.

PEDRO CORTÉS, Secretary of the Commonwealth

Respondent.

**PETITION FOR REVIEW
ADDRESSED TO THE COURT'S ORIGINAL JURISDICTION**

I. INTRODUCTION

1. Petitioners are Pennsylvania voters. They bring this lawsuit to challenge the Secretary of the Commonwealth of Pennsylvania's ("the Secretary") certification, without adequate testing, of paperless electronic voting machines for use in Pennsylvania elections that do not and will not reliably and consistently record, tally and weigh the votes of Pennsylvania's citizens or produce any permanent physical record of any elector's actual vote.

2. Petitioners seek through this litigation to compel the Secretary to comply with those requirements of the Pennsylvania Election Code which, among other things, are intended to protect the right to vote and the integrity of the election process.

3. The Secretary has certified for purchase and use in Pennsylvania paperless electronic voting machines and systems that a) have not been adequately tested for reliability, accuracy or security; b) cannot be relied upon to consistently and accurately tally each vote cast; c) do not provide any mechanism to verify that they have properly recorded any individual voter's choices or have properly tallied the votes of Pennsylvania voters; and d) lack meaningful and appropriate security measures to prevent tampering and vote manipulation.

4. As a consequence, the machines do not meet the requirements of the Pennsylvania Election Code because they:

a) Do not retain a "permanent physical record of each vote cast." § 1101-A, 25 P.S. § 3031.1.

b) Are not adequately tested to determine that the machines will be "[s]afely and efficiently usable in the conduct of elections." § 1107-A (11), 25 P.S. § 3031.7 (11).

c) Do not have “acceptable ballot security measures.” § 1107-A (12), 25 P.S. § 3031.7(12).

d) Do not routinely and consistently “record[] correctly and compute[] and tabulate[] accurately every valid vote registered.” § 1107-A (13), 25 P.S. § 3031.7 (13).

e) Are not “suitably designed and equipped to be capable of absolute accuracy.” § 1107-A (11), 25 P.S. § 3031.7(11).

f) Do not “preclude every person from tampering with the tabulating element.” § 1107-A (16), 25 P.S. § 3031.7(16) and § 1107-A (17), 25 P.S. § 3031.7(17).

g) In the case of those electronic voting machines with precinct based tabulation, do not reliably and consistently “generate[] a printed record at the beginning of operation which verifies that the tabulating elements . . . are all set to zero.” § 1107-A (16)(v), 25 P.S. § 3031.7(16)(v).

5. Petitioners seek a declaration that the certification of the paperless electronic voting machines identified herein violates those provisions of the Pennsylvania Constitution which protect their right to vote and to have their votes properly counted and weighted in any election, including Pennsylvania Const. Art. I, § 1, (due process), § 5 (providing for free and equal elections and protecting right to vote), § 26 (protecting fundamental civil rights, including the right to vote), and Art. VII, § 6 (requiring uniformity in the laws regulating the holding of elections and guaranteeing the equal protection of laws).

6. Petitioners seek an Order directing the Secretary to decertify those electronic voting systems identified herein as certified for use and purchase in Pennsylvania because the Secretary’s testing procedures are flawed and inadequate.

7. Finally, in addition to any additional relief the facts may show is appropriate upon a trial in this matter, Petitioners seek an order in the nature of a writ of mandamus requiring the Secretary of the Commonwealth to properly and lawfully perform his nondiscretionary duty to re-examine voting systems for which he has received a request from Petitioners pursuant to Pennsylvania Election Code Section 1105-A, 25 P.S. § 3031.5, for re-examination.

II. JURISDICTION

8. The Court has original jurisdiction over this Petition for Review pursuant to 42 Pa. C.S. § 761(a).

III. PARTIES

9. Petitioner Mark Banfield is an adult individual who resides at 419 N. Saddlebrook Circle, Chester Springs, PA 19425. Mr. Banfield is a duly qualified elector of Chester County.

10. Petitioner Sarah Beck is an adult individual who resides at 241 McIntosh Road, West Chester, PA 19382. Ms. Beck is a duly qualified elector of Chester County.

11. Ms. Beck is a duly elected and sworn Judge of Elections of East Bradford Township, Chester County.

12. Petitioner Joan Bergquist is an adult individual who resides at 217 Devon Boulevard, Devon, PA 19333. Ms. Bergquist is a duly qualified elector of Chester County.

13. Petitioner Alan Brau is an adult individual who resides at 483 Sugar Maple Court, Bethlehem, PA 18017. Mr. Brau is a duly qualified elector of Northampton County.

14. Petitioner Lucia Dailey is an adult individual who resides at 132 Clark Street, Clarks Green, PA 18411. Ms. Dailey is a duly qualified elector of Lackawanna County.

15. Petitioner Peter Deutsch is an adult individual who resides at 153 Cherry Lane, Ailquippa, PA 15001. Mr. Deutsch is a duly qualified elector of Beaver County.

16. Petitioner Constance Fewlass is an adult individual residing at 2543 Brownsville Road, Langhorne, PA 19053. Ms. Fewlass is a duly qualified elector of Bucks County.

17. Petitioner Barbara Glassman is an adult individual who resides at 4907 Cabin Run Road, Pipersville, PA 18947. Ms. Glassman is a duly qualified elector of Bucks County.

18. Petitioner MariJo Highland is an adult individual who resides at Center Square Towers Apts., 555 Broad Street, Doylestown, PA 18901. Ms. Highland is a duly qualified elector of Bucks County.

19. Petitioner Janis Hobbs-Pellechio is an adult individual who resides at 106 Beulah Road, Doylestown, PA 18901. Ms. Hobbs-Pellechio is a duly qualified elector of Bucks County.

20. Petitioner Deborah Johnson is an adult individual who resides at 10 Hayden Heights Road, York, PA 17404. Ms. Johnson is a duly qualified elector of York County.

21. Petitioner Robert Maxwell McCord is an adult individual who resides at 135 Fishers Road, Bryn Mawr, PA. Mr. McCord is a duly qualified elector of Montgomery County.

22. Petitioner Andrew McDowell is an adult individual who resides at 1103 Winchester Trail, Downingtown, PA 19355. Mr. McDowell is a duly qualified elector of Chester County.

23. Mr. McDowell is a duly elected and sworn Judge of Elections in East Bradford Township, Chester County.

24. Petitioner James Michaels is an adult individual who resides at 132 Clark Street, Clarks Green, PA 18411. Mr. Michaels is a duly qualified elector of Lackawanna County.

25. Petitioner J. Whyatt Mondesire is an adult individual who resides at 213 E. Phil Ellena Street, Philadelphia, PA 19119. Mr. Mondesire is a duly qualified elector of Philadelphia County.

26. Petitioner Mary Montresor is an adult individual residing at 825 Conewago Creek Road, Manchester, PA. Ms. Montresor is a duly qualified elector of York County.

27. Petitioner Reverend James Moore is an adult individual who resides at 904 East Gowen Avenue, Philadelphia, PA 19150. Rev. Moore is a duly qualified elector of Philadelphia County.

28. Petitioner Cathy Reed is an adult individual who resides at 619 Greenleaf Street, Allentown, PA 18102. Ms. Reed is a duly qualified elector of Lehigh County.

29. Petitioner Regina Schlitz is an adult individual who resides at 1401 W. Schwenkmill Road, Perkasio, PA 18944. Ms. Schlitz is a duly qualified elector of Bucks County.

30. Petitioner Alexander H. Sickert is an adult individual who resides at 10 Pearl Drive, Doylestown, PA 18901. Mr. Sickert is a duly qualified elector of Bucks County.

31. Petitioner Daniel Sleator is an adult individual who resides at 15 Hollenden Place, Pittsburgh, PA 15217. Mr. Sleator is a duly qualified elector of Allegheny County.

32. Petitioner Susanna Staas is an adult individual who resides at 4 Hana Lane, Phoenixville, PA 19460. Ms. Staas is a duly qualified elector of Chester County.

33. Petitioner Stephen J. Strahs is an adult individual who resides at 921 Melrose Avenue, Melrose Park, PA 19027. Mr. Strahs is a duly qualified elector of Montgomery County.

34. Petitioner Mary Vollero is an adult individual who resides at 137 N. Spring Street, Bellefonte, PA 16823. Ms. Vollero is a duly qualified elector of Centre County.

35. Petitioner Jeanne Zang is an adult individual who resides at 310 Challis Lane, Sewickley, PA 15143. Ms. Zang is a duly qualified elector of Allegheny County.

36. Petitioners belong to different political parties, reside in different counties and have been required to use the various electronic voting machines that are the subject of this suit.

37. Each Petitioner cast a ballot in the 2006 Primary Election, each wants to cast a ballot in all future elections, and each wants their future votes and the votes of all Pennsylvanians to be properly counted and weighted.

38. Respondent Pedro Cortés is the Secretary of the Commonwealth and is charged with the general supervision and administration of Pennsylvania's elections laws, including among other things, the duty "to examine and re-examine voting machines, and to approve or disapprove them for use in this State, in accordance with the provisions of [the Election Code]", 25 P.S. § 2621.

IV. STATEMENT OF FACTS

39. Direct Recording Electronic voting systems are devices that display ballots with candidates for offices and referendum questions and allow a voter to select his choices either with a push button, a dial or a touch screen and then cast his vote. When the vote is cast, the machine is supposed to record the vote on an electronic storage device or devices in the form of digital markings.

40. The Secretary has certified for use in Pennsylvania elections the following DRE voting machines and associated voting systems:

a. **AVC Edge II electronic voting system**, version 5.0.24, and WinEDS Election Database System, version 3.0.012, made by Sequoia Voting Systems, Inc. The AVC Edge II and all accompanying software is collectively referred to hereafter as "AVC Edge II".

b. **AVC Advantage electronic voting system**, version 10.1.5, made by Sequoia Voting Systems, Inc. The AVC Advantage and all accompanying software is collectively referred to hereafter as "AVC Advantage".

c. **AccuVote TSX touch screen voting machine** version 4.6.4 and GEMS election management system software version 1.18.25 made by Diebold Election Systems, Inc.

The AccuVote TSX and all accompanying software is collectively referred to hereafter as “AccuVote” TSX.

d. **iVotronic direct recording electronic voting system**, version 9.1.4.1 with Unity election management software, version 3.0.1.0, made by Elections Systems & Software, Inc. (“ES&S”). The iVotronic and all accompanying software is collectively referred to hereafter as the “iVotronic”.

e. **eSlate version 4.1.3**, and accompanying software made by Hart InterCivic, Inc. The eSlate and all accompanying software is collectively referred to hereafter as “eSlate”.

f. **ELECTtronic 1242**, with firmware 5M and 5Ma used with Guardian Election Management System, made by Danaher Industrial Controls. The ELECTTronic 1242 and all accompanying software is collectively referred to hereafter as “Danaher 1242”.

g. **WINvote electronic voting system**, version 2.0.2, made by Advanced Voting Solutions. The WINvote and all accompanying software is collectively referred to hereafter as “WINvote”.

A. The Accuracy Of The DRE Paperless Electronic Voting Systems Can Not Be Verified By An Independent And Permanent Record Of Each Voter’s Vote.

41. The DRE voting systems identified in paragraph 40 of this Petition (hereinafter called “the certified DREs”) are “paperless” because they produce no contemporaneous, external paper record that the voter may review to verify that his vote was accurately recorded by the DRE when he casts it. Instead, the voter’s vote is recorded on the DRE’s electronic storage device, which uses software that is supposed to convert the voter’s selection of, for example, Candidate “A” on the DRE’s screen into a digital record. As a result, when voting on the certified DRE machines, the voter has no way of knowing whether the DRE in fact recognizes his selection of “A” as a vote for “A” rather than for “B”.

42. Because the certified DRE’s are paperless, votes are cast without the simultaneous creation of any printed confirmation or ballot that can be retained by elections officials for comparison with what the machine records electronically. Instead, the votes are tabulated

electronically and the electronic record (or, in some machines, a duplicate of it) is the only record of the number and nature of votes.

43. As a consequence, election officials have no permanent, independent physical record that can be used to audit, or double check, the total vote counts as tallied by the machine.

44. The Pennsylvania Election Code, including especially its mandate that a permanent physical record be provided for every vote cast, required the Secretary to certify only voting machines that can be audited, or double checked, using independent permanent records, verified by the voter as his vote before being cast.

45. The foregoing legal requirement is not met with the certified DREs here because the machines cannot be audited by review of an independent, permanent record of each vote cast, because no voter can see the electronic record before casting his vote to be sure that his vote was properly recognized by the machine and because the votes are stored as electronic data that can be altered or erased.

46. Because there is no permanent, independent physical record that can be used to audit the DRE, either in random audits or following an accusation that the machine has been tampered with or has malfunctioned, there can be no assurance that either the Petitioners' votes or the votes of any other Pennsylvania voter have been properly counted or weighted.

47. The certified DREs have repeatedly malfunctioned in Pennsylvania and in other states, and are known to be vulnerable to malicious tampering, all of which underscores the importance of the Election Law's requirement of a permanent record of each voter's vote that can be used to audit the accuracy of the results reported by the machines.

48. Some certified DREs are capable of producing a paper audit trail. However, the Secretary has not certified any machines with that capability because the DREs' paper trail allegedly operated in a way that would allow later identification of the voter and his votes.

49. In addition, some of the certified DREs contain a Ballot Image Retention (BIR) function, which purports to record electronically each individual's vote. However, because the voter never sees the BIR, the voter cannot verify that it accurately reflects his choices. Moreover, the BIR is the same data which is recorded by the voting system software to generate election results. The BIR thus cannot serve as an independent record of a voter's votes that can be used to conduct an audit of the machine's performance or recount of the election.

B. The Remarkable History Of Failures Experienced By The DREs When Used In Other States, Coupled With The Failures Of Certified DREs In Pennsylvania, Establish That The Secretary's Process Is Inadequate To Uncover Defects In DREs.

50. Pennsylvania law requires that the Secretary certify voting machines and systems before they can be purchased or used by any county in an election.

51. The Election Code requires that, during the certification process, each machine vendor demonstrate to the Secretary that its machine is capable of "absolute accuracy" and the counting of "every" valid vote. § 1107-A (11), (13), 25 P.S. § 3031.7(11), (13). The Secretary of State is required to "examine" every machine, § 1107-A, 25 P.S. § 3031.7, and ascertain if it meets the statutory standard of absolute accuracy, among others, and of having ballot security sufficient to "preclude . . . tampering." § 1107-A (12), 25 P.S. § 3031.7(12).

52. The Secretary's examination procedures did not, and were not reasonably designed to, adequately determine whether the certified DREs meet the requirements of the Election Code for accuracy and security, as evidenced by the number of problems experienced by

DREs in other states and in Pennsylvania that were not uncovered by the Secretary's procedures and which should have and would have been uncovered in any reasonable process designed to investigate the security of electronic voting machines.

1. DRE Failures in Other States

53. The AVC Edge II and AVC Advantage lost votes, failed to register votes, "switched" votes from a selected candidate to a non-selected candidate, failed to record votes stored on data cartridges and failed adequately and accurately to process and retain voting data while being used in other states.

54. For example, during the November 2002 General Election in New Mexico, the AVC Edge machines used in one county lost almost 13,000 votes. In the November 2004 General Election, the AVC Edge's touch screen machines repeatedly registered votes for one presidential candidate when the voter was attempting to vote for that candidate's opponent.

55. In a Florida election, precincts that used the AVC Edge caused "undervote" rates (where a cast ballot is not recorded) as high as 17%. In another election, involving only a single ballot question, certain AVC Edge machines failed to register any votes.

56. In the 2004 general election in New Mexico, some precincts had very high presidential undervote rates when voters used Sequoia Advantage voting machines on Election Day but not when using optically scanned paper ballots in early voting or absentee voting. The president of a New Mexico vendor for Sequoia gave deposition testimony that this was a predictable result of the design of the Sequoia AVC Advantage machine.

57. The iVotronic lost votes, registered "phantom" votes, counted votes twice, inaccurately tabulated votes, switched votes, failed to produce "zero tapes", reached its capacity and started counting backwards, and recorded wrong votes during elections in other states.

58. For example, during a 2002 election in Miami-Dade County, Florida, certain iVotronic machines appeared to have lost the votes of 8.2% of the voters who signed in at the polls.

59. In the March 2006 Texas Primary Election, iVotronic machines used in Jefferson County counted more than 1500 votes twice.

60. The eSlate recorded “phantom” votes, lost votes, switched votes because of a machine “default” setting; failed to boot and froze while being used during elections in other states.

61. For example, in the March 2006 Texas Primary Election, eSlate machines used in Tarrant County, county officials reported 100,000 “phantom” votes (i.e., votes that were not cast by voters).

62. The AVC Edge, iVotronic and eSlate machines involved in the incidents described above were models either essentially identical to or identical to those certified by the Secretary, particularly in relation to the machine and software functions that caused the failures outlined above. The Secretary did not confirm whether the malfunctions described above had been fixed on the versions of the machines or software certified in Pennsylvania.

2. DRE Failures in Pennsylvania Elections

63. Because it is impossible to conduct an independent audit on the performance of the certified DREs, it is likewise impossible to know exactly when, where and how frequently their use has harmed Petitioners and other Pennsylvania voters. Even without the ability to audit, however, the defects in the certified DREs used in Pennsylvania have become apparent as they were used in actual elections, rather than discovered, as the legislature intended, by the Secretary during a properly conducted certification process.

64. During the May 16, 2006 Primary Election, iVotronic machines used in Allegheny and Centre Counties failed to print the “zero tapes” required under the Election Code to demonstrate that no unlawful votes were stored on the machines before the election started. In both counties, some iVotronic machines failed to print “zero tape” reports at the opening of the polls during the day, so voters had no assurance that votes had not been stored on the machine before the election began. After voters had cast their votes on some iVotronic machines, the machines generated a “zero tape” (i.e., at a time when the machines should **not** have reported zero votes) or generated tapes that did not contain all necessary identifying information.

65. During the May 2005 Primary Election in Berks County, the ELECTronic 1242 machines used in four precincts failed to record the votes cast because of programming errors. Because of the inability to determine the votes lost by the ELECTronic 1242 by consulting a permanent record of the vote verified by the voter, the Board of Elections was forced to certify election results without counting any votes from the four precincts.

66. During the May 2006 Primary Election, approximately 200 Danaher 1242 voting machines used in Philadelphia County failed to activate or were unable to record write-in votes, thereby preventing some Philadelphia voters from voting.

67. Immediately before the May 2006 Primary, Diebold acknowledged a severe security breach in its machines, including the AccuVote TSX, that would make it possible to alter election results by loading malicious software directly into the machine.

68. In the November 2004 Election, a DRE since decertified by the Secretary, the Unilect Patriot voting system, failed to record 10,000 votes in three Pennsylvania counties as the result of a machine defect that had not been discovered by the Secretary during his certification process.

C. The Secretary's Certification Process Is Flawed For The Additional Reason That It Ignored Documented Security Flaws In The DREs That Allow Them To Be Tampered With And Their Results Altered Or Obliterated.

69. The certified DRE voting systems have serious, documented security vulnerabilities that may be exploited to alter the results of an election and thus deprive Petitioners of their rights under the Pennsylvania Constitution and laws.

1. AccuVote TSX

70. During 2005, for example, computer security investigator Harri Hursti, PhD. issued a report (hereinafter called "Hursti I") demonstrating the ease with which the AccuVote OS voting machine could be tampered with to alter vote totals in an undetected manner. Specifically, Dr. Hursti reported that an individual with only brief access to the machine could remove its memory card, modify the card's scripts, alter the vote counts stored on the card in a manner that would not be detected by the post-election canvass procedures and then replace the card in the machine.

71. While the Diebold AccuVote OS was not certified by the Secretary, the Secretary did certify the AccuVote TSX, which suffers from the same lack of security features, including the removable memory card, as the AccuVote OS and can thus be tampered with in the same facile way.

72. In 2006, Dr. Hursti examined the AccuVote TSX itself and found that it suffered from security flaws even more dramatic than those found in the AccuVote OS. Dr. Hursti found that anyone with brief access to the AccuVote TSX could readily corrupt the machine's application loader software, the operating system software that the application loader loads each time the

machine is used, and/or the voting application software in a way that would be difficult to detect and which would render the machine vulnerable to tampering despite future efforts to secure it.

73. Specifically, Dr. Hursti reported that a person could tamper with the AccuVote TSX machine using only a standard PC memory card, naming the files according to Diebold's naming scheme, and a minute or two of access to the AccuVote TSX machine during which the PC memory card could be used to infect the machine's operating system with a malicious code.

74. The AccuVote TSX runs on the Windows CE operating system. The central tabulator computer software used in conjunction with the AccuVote TSX runs on the Windows operating system. The Windows and Windows CE operating system have a history of security vulnerabilities and tampering thus making votes cast on the AccuVote TSX similarly insecure and subject to tampering.

2. AVC Edge II

75. The AVC Edge II has inadequate password protocols leaving the system vulnerable to the installation of a vote manipulating program by a person with access to the machine for a short time. A person with access to the AVC Edge II can replace its "chip" with one that will re-program the machine and cause it, for example, it to give all votes cast to a particular candidate.

76. The AVC Edge II's lack of security would also permit unauthorized users to easily modify unencrypted data stored on memory cards, including ballot definitions and voting results in order to effect election outcomes.

3. eSlate

77. The eSlate voting machines are connected to a central terminal at the polling place, where the data from each individual machine is transmitted in unencrypted form along

cables. While the ballot data is being transmitted, it may be accessed by unauthorized people, monitored or even altered.

78. The Secretary identified this problem in his certification report but certified the system anyway.

4. iVotronic

79. The iVotronic works using a personal electronic ballot (“PEB”) to activate and deactivate numerous iVotronic voting machines. The PEB contains control circuitry and software purportedly to ensure correct loading of the ballot configurations, vote images and totals. However, because it is inserted and removed again and again from different machines, any corruption, malfunction or contamination in one machine (or in the PEB itself) may be transmitted to all other machines. In addition, the use of a device like a PEB that has to be moved from place to place increases the number of occasions during which it is exposed to tampering and theft.

80. The central tabulator computer software used in conjunction with the iVotronic runs on the Windows operating system. The Windows operating system itself has a history of security vulnerabilities and tampering thus making votes cast on the iVotronic similarly insecure and subject to tampering.

D. The Secretary’s Certification Procedures Are Inadequate Because They Do Not Adequately Test The DRE Software To Determine Whether It Renders The Machine Defective Or Vulnerable To Security Breaches.

81. The Secretary’s testing procedures are not suitably designed and do not even approximate testing of the type that is customary in the information technology industry for systems that perform important tasks requiring a high level of security.

82. In order to determine if a software program contains the programming code necessary to meet Pennsylvania's standards, the Secretary or his designee must review the source code in a procedure called a code "audit." Upon information and belief, the Secretary or his designee do not perform such a review of the source code.

83. The certified DRE voting systems use proprietary firmware and software either designed by the vendor or which the vendors have designated as "commercial off-the-shelf" programs, such as the Microsoft Windows operating system, the Microsoft Windows CE operating system and the Microsoft Access database application. These software programs are not disclosed to state or county officials. The Secretary, therefore, cannot verify that the computer programs used in Pennsylvania elections are the same as the programs he certified, or even whether the programs function as the vendor represented they would at the time of certification.

84. By certifying the DREs without adequate information about the software they use or an audit of the software source code, the Secretary has failed in his obligation to certify voting machines only after the process and review required by the Election Code.

E. The Secretary's Certification Process, To The Extent It Relied Upon Federal ITA Certification Of The DRE Machines, Was Flawed Because Pennsylvania Law Requires A Higher Standard Than ITA Certification And Because The Secretary Knew That ITA Certification Was Profoundly Flawed.

85. Under Pennsylvania law, the Secretary may not certify a DRE machine unless that machine has also been certified by Independent Testing Authorities ("ITA") who test the machines under standards developed by the Federal Election Commission.

86. The Secretary may not rely upon the approvals granted to the DREs in the Federal ITA process, because Pennsylvania certification requirements as outlined in the Pennsylvania Election Code are more stringent than those in the ITA process.

87. The ITA applies security standards in the testing of electronic voting systems that do not and cannot reveal whether the system is vulnerable to tampering in the hardware, firmware or software.

88. For example, in 2006, computer security expert, Harri Hursti, discovered three different flaws in the software of the Diebold TSX voting machines challenged in this lawsuit even after the software had been certified by the ITA and by the Secretary.

89. ITAs routinely interpret and apply industry security standards in such a way to avoid examining or testing software that the standards, properly interpreted, require them to examine and test.

90. For example, the standards require examination and testing of any third-party software used in a voting system unless the software qualifies as commercial off-the-shelf (“COTS”), meaning that it is used in the voting system with no customization or modification by the voting system vendor.

91. Diebold Election Systems, Inc. uses the Windows CE operating system in the AccuVote TSX voting machines certified by the Secretary.

92. Windows CE cannot be used in a computerized device like the AccuVote TSX without customization and modification and thus it can no longer be considered commercial, off-the-shelf software.

93. Nonetheless, the ITA that recommended certification of the AccuVote TSX has done so without examining or testing the customized and modified Windows CE operating system used in the machine.

94. As the Secretary is aware, any reliance upon ITA approvals or testing is no assurance that DRE machines comply with Pennsylvania law because:

- (a) The ITAs are fraught with conflicts of interest;
- (b) The ITAs are hired and paid for exclusively by the voting system manufacturers;
- (c) The ITAs are not, and have never been, regulated by any agency of the federal government;
- (d) The ITAs show their test results only to the manufacturers, leaving it to the manufacturers to determine whether the results will be shared with state or local elections officials or with the public; and
- (e) The ITAs have repeatedly approved voting systems later found to have security vulnerabilities that would permit outside hackers, elections officials or employees of the voting machine vendors to alter the results of elections without detection.

F. The Secretary Has Improperly Denied Requests for Re-Examination of Voting Systems

95. By letter dated March 7, Petitioner Alan Brau asked the Secretary for a re-examination of the Advanced WINvote electronic DRE voting system. Petitioner Brau included a check in the amount of \$450.00 and the signatures of 10 qualified registered electors of Northampton County. See Exhibit “A”.

96. By letter dated March 27, 2006, the Secretary denied Petitioner Brau’s request stating that “no credible evidence has been provided to this Department or come to our attention that any change or modification has been made to this system.” Under the applicable law, this is not a ground for denying a re-examination. See Exhibit “B”.

97. By letter dated March 25, 2006, the Secretary received a request for re-examination of the AccuVote TSX voting system. The letter specifically referenced “Hursti I”

and was accompanied by a check in the amount of \$450.00 and the signatures of 14 qualified registered electors of Lehigh County, including Petitioner Cathy Reed. See Exhibit “C”.

98. By letter dated April 18, 2006, the Secretary denied the request to re-examine the AccuVote TSX by stating that “no credible evidence has been provided to this Department or come to our attention that any change or modification has been made to this system.” Under the applicable law, this is not a ground for denying a re-examination. See Exhibit “D”.

99. By letter dated March 24, 2006, the Secretary received a request for re-examination of the ELECTronic 1242 voting system. The letter specifically referenced “Hursti I” and was accompanied by a check in the amount of \$450.00 and the signatures of 23 qualified registered electors of Bucks County, including Petitioner Constance Fewlass. See Exhibit “E”.

100. By letter dated April 7, 2006, the Secretary denied the request to re-examine the ELECTronic 1242 by stating that “no credible evidence has been provided to this Department or come to our attention that any change or modification has been made to this system.” Under the applicable law, this is not a ground for denying a re-examination. See Exhibit “F”.

101. By letter dated January 20, 2006, the Secretary received a request for re-examination of the iVotronic voting system. The letter specifically referenced “Hursti I” and was accompanied by a check in the amount of \$450,000 and the signatures of 33 qualified registered electors of Chester County, including Petitioner Joan Bergquist. See Exhibit “G”.

102. By letter dated February 3, 2006, the Secretary denied the request to re-examine the iVotronic by stating that “no new facts are brought to light concerning potential irregularities or deficiencies in the system.” Under the applicable law, this is not a ground for denying a re-examination. See Exhibit “H”.

G. Petitioners Are Entitled To Injunctive Relief *Pendente Lite* Because The Conduct Of Elections In Violation Of Their Rights Under The Election Code And Constitution Will Cause Them Irreparable Harm, Because They Are Likely To Prevail On The Merits And Because The Balance Of Equities And The Public Interests Favor Petitioners

103. Approximately fifty-six out of sixty-seven counties in the Commonwealth will use one or more of the certified DREs in the upcoming November election. Consequently, the overwhelming majority of Pennsylvania voters, including the Petitioners, will be required to vote on the problem-plagued, insecure and unreliable certified DRE systems in the November elections.

104. Petitioners will suffer irreparable harm if faulty machines that do not function properly and have security flaws are used in Pennsylvania elections because their votes may be ignored, counted incorrectly, given inadequate weight and the election may result in the certification of winners not supported by the majority of voters.

105. Petitioners have no adequate remedy at law.

106. The public interest would not be harmed and would instead be benefited by an injunction *pendente lite*.

107. The inaccuracy, unreliability and lack of a permanent record not only violates the Pennsylvania Election Code and Constitution, but in addition has eroded the public's confidence in the election process because there can be no audit or effective recount following machine failures or accusations of unreliability or tampering. The Pennsylvania public's lack of confidence is reflected in the results of a May 10, 2006 poll of Pennsylvanians, conducted by Zogby International for OpEdNews.com, which found that 87% of Pennsylvanians preferred a paper record of their vote to ensure that their vote was counted the way they intended.

108. The balance of hardships weighs strongly in Petitioners' favor and against the Secretary since upcoming elections can be conducted easily in any manner that complies with Pennsylvania law, including use of paper ballots tabulated with optical scanners.

109. The public interest in protecting the right to vote, in preserving the integrity of the electoral process, in having electronic voting systems that do not violate Pennsylvania's Constitution or statutory law weighs heavily in Petitioners' favor.

110. To the extent the Secretary contends that the certified DREs must be used in order to insure voting access to disabled Pennsylvanians, that contention does not shift the balance of equities on any motion for temporary injunctive relief.

111. Alternative voting methods exist, including some already certified by the Secretary, that provide access to disabled voters that is as good as, if not better, than any access provided by the certified DRE machines. Consequently, the relief sought in this case would not jeopardize access to independent and private voting by disabled voters or in any way run afoul of federal or state laws.

COUNT I

Violation Of The Pennsylvania Election Code, § 1101-A, 25 P.S. § 3031.1

112. Petitioners incorporate by reference as of fully set forth herein each of the preceding allegations.

113. The Secretary's certification for use in Pennsylvania elections of the DRE machines identified in paragraph 40 of this Petition violates the Pennsylvania Election Code Section 1101-A, 25 P.S. § 3031.1, because the machines do not create a permanent physical record which can be retained. Retention of a permanent physical record that the voter can verify is necessary for a meaningful, independent audit or recount of the voting results electronically

recorded, stored, tallied and reported by the certified DREs and to assure compliance with the other provisions of the Pennsylvania Election Code.

WHEREFORE, Petitioners respectfully request that this Honorable Court enter judgment in their favor and against the Secretary and:

a. Direct the Secretary immediately to de-certify the DRE voting systems identified in paragraph 40 of this Petition;

b. Declare that the DRE electronic voting systems identified in paragraph 40 of this Petition violate the Pennsylvania Constitution and Pennsylvania Election Code because they are used without the creation of a voter verified independent record that can be used to audit voting results; and

c. Award Petitioners reasonable attorneys fees and costs and such other and further relief that this Honorable Court deems just and appropriate.

COUNT II

Violation Of The Pennsylvania Election Code, § 1107-A, 25 P.S. § 3031.7(11), § 3031.7(12), § 3031.7(13), § 3031.7(16) and § 3031.7(17).

114. Petitioners incorporate by reference as if fully set forth herein each of the preceding allegations.

115. The certification and use in Pennsylvania elections of the DRE voting systems identified in paragraph 40 of this Petition violate Pennsylvania Election Code Section 1107-A, 25 P.S. § 3031.7 because the DREs' operating defects, the lack of a voter verifiable physical record of the voter's intent and security flaws that allow tampering or unauthorized access into the machines demonstrate that the certified DREs:

- (a) are not "suitably designed for the purpose used," or "safely and efficiently useable in the conduct of elections" or "designed and equipped to be capable of absolute

accuracy” as required by Pennsylvania’s Election Code Section 1107-A, 25 P.S. § 3031.7(11);

- (b) are not able “to prevent tampering with or substitution of any ballots” or “tampering with the tabulating element” as required by Sections 1107-A (12), (16)(iii) and (17)(1), 25 P.S. §§ 3031.7(12), (16)(iii) and (17)(i)”;
- (c) do not “record. . . correctly. . . every valid vote registered” as required by Section 1107-A (13), 25 P.S. § 3031.7(13);
- (d) do not provided “acceptable ballot security procedures,” Section 1107-A (12), 25 P.S. § 3031.7(12); and
- (e) do not “record [] correctly and compute[] and tabulate [] accurately every valid vote registered,” Section 1107-A (13), 25 P.S. § 3031.7(13).

WHEREFORE, Petitioners respectfully request that this Honorable Court enter judgment in their favor and against the Secretary and:

- a. Direct the Secretary to immediately de-certify the DRE systems identified in paragraph 40 of this Petition;
- b. Declare that the DRE electronic voting systems identified in paragraph 40 of this Petition do not meet the requirements of Pennsylvania Election Code §§ 1107-A, 25 P.S. §§ 3031.7(11), (12), (13), (16) and (17); and
- c. Award Petitioners reasonable attorneys fees and costs and such other and further relief that this Honorable Court deems just and appropriate.

COUNT III
Violation Of The Pennsylvania Election Code, § 1107-A, 25 P.S. § 3031.7(11),
25 P.S. § 3031.7(12), 25 P.S. § 3031.7(13)

116. Petitioners incorporate by reference as if fully set forth herein each of the preceding allegations.

117. The Secretary's testing procedures were superficial and insufficient to determine whether any DRE voting systems identified in paragraph 40 of this Petition was:

a. "Suitably designed" for its purpose as required by Pennsylvania Election Code Section 1107-A (11), 25 P.S. § 3031.7 (11);

b. Could be "safely and efficiently useable in the conduct of elections" as required by Pennsylvania Election Code Section 1107-A (11), 25 P.S. § 3031.7(11);

c. "With respect to the counting of ballots cast at each district, is suitably designed and equipped to be capable of absolute accuracy" as required by Pennsylvania Election Code Section 1107-A (11), 25 P.S. § 3031.7(11);

d. Provided "acceptable ballot security procedures," as required by Pennsylvania Election Code Section 1107-A (12), 25 P.S. § 3031.7(12); and

e. Could "record[] correctly and compute[] and tabulate[] accurately every valid vote registered," as required by Pennsylvania Election Code Section 1107-A (13), 25 P.S. § 3031.7(13).

WHEREFORE, Petitioners respectfully request that this Honorable Court enter judgment in their favor and against the Secretary and:

a. Direct the Secretary immediately to de-certify all the DRE voting systems identified in paragraph 40 of this Petition;

b. Direct the Secretary of the Commonwealth to establish uniform testing

criteria for the certification of voting systems that comply with the Pennsylvania Election Code;
and

c. Award Petitioners reasonable attorneys fees and costs and such other and further relief that this Honorable Court deems just and appropriate.

COUNT IV
Violation Of The Pennsylvania Election Code, § 1117-A, 25 P.S. § 3031.17

118. Petitioners incorporate by reference as if fully set forth herein each of the preceding allegations.

119. The DRE electronic voting systems identified in paragraph 40 of this Petition cannot meet the requirements of Pennsylvania Election Code Section 1117-A, 25 P.S. § 3031.17, because they do not retain a voter verified record that permits election officials to perform a “statistical recount of a random sample of ballots after each election using manual, mechanical or electronic devices of a type different than those used for the specific election.”

120. Because the DRE voting systems identified in paragraph 40 of this Complaint do not permit statistical recounts and because the Secretary has not otherwise provided for recounts through the use of manual, mechanical or electronic devices of types different than those used in the election, the voting systems do not comply with the Pennsylvania Election Code and the Secretary’s certification process was flawed in that it certified the voting systems in spite of this non-compliance.

WHEREFORE, Petitioners respectfully request that this Honorable Court enter judgment in their favor and against the Secretary and:

a. Direct the Secretary of the Commonwealth to de-certify the DRE voting systems identified in paragraph 40 of the Petition;

b. Declare that use of the certified DRE voting systems violates Pennsylvania Election Code Section 1117-A, 25 P.S. § 3031.17; and

c. Award Petitioners reasonable attorneys fees and costs and such other and further relief that this Honorable Court deems just and appropriate.

COUNT V

Violation Of The Pennsylvania Election Code, § 1701, 25 P.S. § 3261, § 1404, 25 P.S. § 3154

121. Petitioners incorporate by reference as if fully set forth herein each of the preceding allegations.

122. Three registered voters in the Commonwealth of Pennsylvania may obtain a recount in a precinct upon the filing a petition alleging fraud or error in election results with the Court of Common Pleas Pennsylvania Election Code, § 1701, 25 P.S. § 3261.

123. The Pennsylvania Election Code sets out a procedure for the computation of election returns that includes a procedure for recounts in the event of a discrepancy between the number of voters and the number of ballots. See § 1404, 25 P.S. § 3154. However, those procedures cannot be used when an election is conducted with the certified DRE voting systems identified in paragraph 40 of this Petition because the systems do not retain a voter verified independent record that can be used to audit the machine results.

124. The DRE voting systems identified in paragraph 40 of this Petition do not meet the requirements of Pennsylvania Election Code Sections 1404 and 1701, 25 P.S. § 3154, § 1701, 25 P.S. § 3261, because the lack of a voter verifiable physical record of each voter's choices prevents registered voters from exercising their right to demand a recount upon Petition to the Court of Common Pleas alleging fraud or error in election results.

125. The Secretary's certification of the DRE voting systems identified in paragraph 40 of this Petition despite the fact that their use denies registered voters of their recount rights was improper.

WHEREFORE, Petitioners respectfully request that this Honorable Court enter judgment in their favor and against the Secretary and:

- a. Direct the Secretary immediately to decertify the DRE voting systems identified in paragraph 40 of this Petition;
- b. Declare that use of the certified DRE voting systems denies registered voters their recount rights under the Pennsylvania Election Code; and
- c. Award Petitioners reasonable attorneys fees and costs and such other and further relief that this Honorable Court deems just and appropriate.

COUNT VI
Violation Of The Pennsylvania Election Code, § 1105-A, 25 P.S. § 3031.5

126. Petitioners incorporate by reference as if fully set forth herein each of the preceding allegations.

127. Pennsylvania Election Code Section 1105-A, 25 P.S. § 3031.5 requires the Secretary to re-examine a previously certified electronic voting system upon receipt of at least 10 signatures of qualified registered electors and the payment of a \$450.00 filing fee. The Secretary does not have discretion under Section 1105A, or otherwise, to refuse properly made requests for a re-examination but, instead, must undertake same.

128. The Secretary has improperly denied at least four valid requests for re-examination under Section 1105-A, one of which was filed by Petitioners Brau, Reed, Fewlass and Bergquist.

WHEREFORE, Petitioners respectfully request that this Honorable Court enter judgment in their favor and against the Secretary and:

a. Direct the Secretary to re-examine voting systems in accordance with the request made on him by Petitioners Brau, Reed, Fewlass and Bergquist;

b. Declare that the Secretary did not comply with Pennsylvania Election Code Section 1105-A, 25 P.S. § 3031.5, in connection with his responses to the request of Petitioners Brau, Reed, Fewlass and Bergquist for re-examination; and

c. Award Petitioners reasonable attorneys fees and costs and such other and further relief that this Honorable Court deems just and appropriate.

COUNT VII

129. Petitioners incorporate by reference as if fully set forth herein each of the preceding allegations.

130. The Secretary has failed to adopt uniform, rigorous testing procedures that would adequately address the security, reliability and accuracy of voting systems.

WHEREFORE, Petitioners respectfully request that this Honorable Court enter judgment in their favor and against the Secretary and:

a. Direct the Secretary of the Commonwealth to establish uniform testing criteria for the certification of all voting systems that will adequately address all requirements of the Pennsylvania Election Code, including those requirements directed to the security, reliability and accuracy of the voting systems; and

b. Award Petitioners reasonable attorneys fees and costs and such other and further relief that this Honorable Court deems just and appropriate.

COUNT VIII
Violation Of The Pennsylvania Constitution, Article I, § 5

131. Petitioners incorporate by reference as if fully set forth herein each of the preceding allegations.

132. Article I, Section 5 of the Pennsylvania Constitution protects the rights of all Pennsylvanians, including Petitioners, to vote by guaranteeing that “Elections shall be free and equal; and no power, civil or military, shall at any time interfere to prevent the free exercise of the right of suffrage.”

133. The Secretary’s certification of the DRE voting systems identified in paragraph 40 of this Petition, and their subsequent use in Pennsylvania’s elections has caused and will continue to cause violations of and interference with Petitioners’ suffrage rights by making it likely that a significant number of votes will not be counted accurately, or at all.

134. The problems caused and which are likely to be caused by the certified DRE voting systems create the risk that persons for whom the majority of voters have not cast their ballots will be declared the election winners and will take office, in contravention of the very essence of our democracy.

135. Petitioners’ rights under Article I of the Pennsylvania Constitution include not only the right to have their own votes counted but also the right to see that the votes of their fellow citizens will be counted correctly, thereby assuring Petitioners that their votes will have the proper weight and that Pennsylvania’s office holders are democratically elected.

WHEREFORE, Petitioners respectfully request that this Honorable Court enter judgment in their favor and against Respondents and:

a. Direct the Secretary to immediately de-certify the DRE voting systems identified in paragraph 40;

b. Declare that, for all the reasons identified above, the certified DRE voting systems violate the Pennsylvania Constitution; and

c. Award Petitioners reasonable attorneys fees and costs and such other and further relief that this Honorable Court deems just and appropriate.

COUNT IX
Violation Of The Pennsylvania Constitution, Article I, § 26

136. Petitioners incorporate by reference as if fully set forth herein each of the preceding allegations.

137. Pennsylvania Constitution Article I, § 26 provides that “[n]either the Commonwealth nor any political subdivision thereof shall deny to any person the enjoyment of any civil right, nor discriminate against any person in the exercise of any civil right.”

138. The Secretary’s certification of the DRE voting systems identified in paragraph 40 of this Petition, and their subsequent use in Pennsylvania elections, threatens Petitioners’ fundamental civil right to vote because the voting systems’ defects and security flaws create the risk that Petitioners, together with other Pennsylvania voters, have their votes rendered meaningless or, worse yet, deemed cast for a candidate for whom they did not vote.

139. Petitioners’ equal protection rights under the Pennsylvania Constitution are likewise at risk because, while they are compelled to vote in counties using the certified DRE voting systems, other registered voters in Pennsylvania may vote in precincts or counties using voting systems, such as verifiable paper ballots that are counted by hand or by optical scanners, that do not suffer from the defects identified in this Petition.

WHEREFORE, Petitioners respectfully request that this Honorable Court enter judgment in their favor and against the Secretary and:

- a. Direct the Secretary of the Commonwealth de-certify the DRE voting systems identified in paragraph 40 of this Petition;
- b. Declare that the use of the certified DRE voting systems violates the Pennsylvania Constitution; and
- c. Award Petitioners reasonable attorneys fees and costs and such other and further relief that this Honorable Court deems just and appropriate.

COUNT X
Violation Of The Pennsylvania Constitution, Article VII, § 6

140. Petitioners incorporate by reference as if fully set forth herein each of the preceding allegations.

141. Article VII, Section 6 of the Pennsylvania Constitution provides that “all laws regulating the holding of elections by the citizens . . . shall be uniform throughout the state.”

142. The DRE voting systems identified in paragraph 40 of this Petition are not used in the counties or precincts of the Commonwealth that continue to use voting systems that include effective mechanisms to insure that voters can cause meaningful audits of election results and exercise their rights to demand recounts under the Election Code.

143. The Constitution’s requirement of uniform elections is not met when some counties of the Commonwealth use the certified DRE voting systems while other counties use, for example, paper-ballot based voting that permits election audits.

144. Because the likelihood of an inaccurate tally that cannot be audited is greater in counties using the certified DRE voting systems than in counties that use systems that permit independent recounts upon an allegation of error or fraud, the use of the certified DRE voting systems threatens to create an imbalance in the weight given to the votes in the various counties,

thereby depriving all Pennsylvania citizens, including the Petitioners, of the uniformity rights and equal protection rights secured under the Pennsylvania Constitution.

WHEREFORE, Petitioners respectfully request that this Honorable Court enter judgment in their favor and against the Secretary and:

- a. Direct the Secretary immediately to decertify the DRE voting systems identified in paragraph 40 of this Petition;
- b. Declare that the use of various auditable and non-auditable voting systems in Pennsylvania violates the uniformity provisions of the Pennsylvania Constitution; and

c. Award Petitioners reasonable attorneys fees and costs and such other and further relief that this Honorable Court deems just and appropriate.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I, Mary E. Kohart, hereby certify that the foregoing Petition for Review and Notice to Plead was served upon the following via certified mail, return receipt requested:

Honorable Pedro A. Cortés
Secretary of State
Commonwealth of Pennsylvania
Bureau of Commissions, Elections and Legislation
210 North Office Building
Harrisburg, PA 17120

Mr. Tom Corbett
Office of Attorney General
14th Floor, Strawberry Square
Harrisburg, PA 17120

Dated: August 15, 2006

Mary E. Kohart