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1 **I. INTRODUCTION**

2 After review of voluminous evidence, three days of hearings and an outpouring of concern  
3 from California voters, computer security experts, legislators and others, the elected official  
4 charged with protecting elections in California determined that extra security measures must be  
5 applied in order to ensure a proper election and increase voter confidence in November, 2004. The  
6 Plaintiffs now ask that this court substitute its own judgment about the need for additional security  
7 measures to protect California’s upcoming elections for the Secretary of State’s considered  
8 judgment. Amici, a group of nonprofit and grassroots organizations concerned about election  
9 integrity, urge that this request be denied.

10 This case arises from voting technologies, known as direct recording electronic (DRE)  
11 voting systems, that have been aggressively marketed and sold to California counties as a way to  
12 replace discredited punch card voting machines. The previous California Secretary of State  
13 embraced these machines, certifying several for use in the state. Certifications have followed under  
14 the current Secretary. Serious problems have arisen, however, in connection with the DREs used in  
15 California elections as well as elections nationwide. These problems came to a head in California  
16 in March, 2004, when thousands of California voters were disenfranchised due to malfunctioning  
17 DRE voting equipment. The March election came shortly after it had been revealed that a leading  
18 DRE vendor, Diebold Election Systems, Inc., had routinely installed uncertified software in its  
19 machines in violation of state law. Because of these problems, the Secretary ordered a staff  
20 investigation and scheduled three days of public hearings by an expert panel where all sides of the  
21 debate were able to present evidence and argument. Based upon this record, the Secretary of State  
22 gave California counties that had purchased DREs a choice: they could either (1) implement basic  
23 security improvements, including giving polling place voters the option to vote on paper ballots as  
24 absentee voters do, or (2) implement systems that provide for a voter verified paper ballot to ensure  
25 a true audit trail and recount possibility in case of malfunction or malfeasance in the November  
26 election.

27 Plaintiffs ask this court to second-guess the Secretary of State’s decision. This request  
28 should be denied for three reasons:

1           ? First, a growing body of evidence demonstrates that the DREs currently in use are  
2           not sufficiently secure and are causing significant problems for voters both in  
3           California and nationwide.

4           ? Second, there are a variety of available, certified technologies that can be used to  
5           allow accessible voting without compromising security.

6           ? Third, the emerging evidence suggests that currently available DREs are not yet  
7           the panacea for disabled voters that they have been advertised to be. A judicial  
8           mandate that these early-stage machines be required prior to 2006 deadline  
9           contained in the Help America Vote Act<sup>1</sup> may not substantially increase the ability  
10          of those with visual and manual disabilities to vote in private.

11          **A.     Interests of Amici**

12          Electronic Frontier Foundation (“EFF”) is a nonprofit public interest organization dedicated  
13          to protecting civil liberties and free expression in the digital world. Founded in 1990, EFF has over  
14          12,000 paying members and represents the interests of Internet users in court cases and in the  
15          broader policy debates surrounding the application of law in the digital age. EFF publishes a  
16          comprehensive archive of digital civil liberties information at one of the most linked to websites in  
17          the world, <<http://www.eff.org>>. EFF represents individuals and a small Internet Service Provider  
18          threatened with copyright liability by DRE vendor Diebold for publishing embarrassing internal e-  
19          mails online in a case entitled *Online Policy Group v. Diebold*, currently pending in the Northern  
20          District of California.<sup>2</sup> California-based EFF members and supporters sent over 17,000 messages to  
21          Secretary of State Shelley April 2004, alerting him to security problems and urging him to  
22          decertify DREs.

23          The California Voter Foundation (CVF) is a nonprofit, nonpartisan 501(c)(3) organization  
24          dedicated to advancing the responsible use of technology to improve democracy. CVF was re-  
25          founded in 1994 by Kim Alexander and has over ten years of experience working on issues where  
26          democracy and technology intersect, such as online voter education, Internet disclosure of money

27          \_\_\_\_\_  
<sup>1</sup> 42 U.S.C. §15481(a)(3),(d).

28          <sup>2</sup> See [http://www.eff.org/Legal/ISP\\_liability/OPG\\_v\\_Diebold/](http://www.eff.org/Legal/ISP_liability/OPG_v_Diebold/).

1 in politics, and voting technology. CVF's president and board members have served on three task  
2 forces relating to democracy and technology topics under the leadership of two different California  
3 Secretaries of State: the Electronic Filing Task Force (1995); the Internet Voting Task Force  
4 (1999); and the Ad Hoc Touch Screen Task Force (2003). CVF's web site, [www.calvoter.org](http://www.calvoter.org),  
5 provides nonpartisan voter education resources to California voters each election. CVF is  
6 supported through grants from foundations and donations from individuals, and is governed by an  
7 eight-member Board of Directors. The organization is headquartered in Davis, California.

8 The Verified Voting Foundation is a nonprofit organization championing reliable and  
9 publicly verifiable elections. Founded by Stanford University Computer Science Professor David  
10 Dill, the organization supports a requirement for voter-verified paper trails on electronic voting  
11 machines allowing voters to inspect individual permanent records of their ballots and election  
12 officials to conduct meaningful recounts as needed. Over 8,000 computer science professionals  
13 have signed an informal resolution in support of more secure voting at the organization's website at  
14 [www.verifiedvoting.org](http://www.verifiedvoting.org).

15 Voters Unite! Is a nonpartisan national grassroots network for fair and accurate elections.  
16 Voters Unite! Is located on the Internet at [www.votersunite.org](http://www.votersunite.org)

17 **B. The Secretary of State's Decision Was Supported By a Significant Record**

18 As the Ninth Circuit recently noted, "it is the job of democratically-elected representatives  
19 to weigh the pros and cons of various balloting systems. So long as their choice is reasonable and  
20 neutral, it is free from judicial second guessing." *Weber v. Shelley*, 347 F.3d 1101, 1107 (9th Cir.  
21 2003).<sup>3</sup>

22 There can be no serious dispute that the California Secretary of State is in charge of  
23 selection of voting equipment in the State of California.<sup>4</sup> There can also be no serious dispute that  
24 the Secretary's decision here was based upon a substantial and largely unchallenged factual record  
25 of actual malfunctions of DREs in California during California elections and the problems caused

26 <sup>3</sup> The *Weber* court also based its decision on the failure of the *pro se* Plaintiff to put forth  
27 admissible evidence about problems with DREs during actual elections. The record before this  
28 court is dramatically different. The *Weber* case originated under the previous Secretary of State.

<sup>4</sup> California Govt. Code §12172.5; Elections Code §§10, 19100 and 19200.

1 by the fact that the largely volunteer California pollworkers have difficulty correctly using these  
2 complex machines. The Secretary also relied upon several independent studies conducted  
3 elsewhere that found serious security problems with the same voting machines that are used in  
4 California.<sup>5</sup> In addition to evidence relating to California elections, evidence of DRE malfunctions  
5 nationwide also supports the Secretary’s decision to require increased security measures. Indeed, in  
6 light of the evidence, the Secretary’s decision may well have been the only “reasonable” choice  
7 under *Weber*.

8 1. Reported DRE Problems in California

9 The reports of problems in the March, 2004 primary in California alone justify the  
10 Secretary of State’s decision to impose additional security measures. One of the major  
11 manufacturers of DREs, Diebold, sold federally unqualified election machines to several California  
12 counties and installed uncertified software on its election machines in 17 counties.<sup>6</sup>

13 Additionally, the reports of DRE malfunctions plus pollworker errors in using these  
14 complicated technologies during the election were widespread and significant:

15  
16 <sup>5</sup> Kohno, Stubblefield, Rubin, Wallach, *Analysis of an Electronic Voting System*, Johns  
17 Hopkins/Rice University, *IEEE Symposium on Security and Privacy 2004*, IEEE Computer Society  
18 Press, May 2004, at [http://www.eff.org/Activism/E-voting/20030724\\_evote\\_research\\_report.pdf](http://www.eff.org/Activism/E-voting/20030724_evote_research_report.pdf)  
19 (Johns Hopkins/Rice report, originally published in August, 2003); Science Applications  
20 International Corporation (SAIC), *Risk Assessment Report: Diebold AccuVote-TS Voting System  
and Processes* (September 2, 2003)  
21 [http://www.dbm.maryland.gov/dbm\\_search/technology/toc\\_voting\\_system\\_report/votingsystemrep  
ortfinal.pdf](http://www.dbm.maryland.gov/dbm_search/technology/toc_voting_system_report/votingsystemreportfinal.pdf); Compuware, *Direct Recording Electronic (DRE) Technical Security Assessment  
Report*, commissioned by the Ohio Secretary of State (November, 2003)  
22 <http://www.voterwest.org/ohio-compuware-study.pdf>; RABA Innovative Solution Cell (RiSC),  
*Trusted Agent Report Diebold AccuVote-TS Voting System*, (January 20, 2004)  
[http://www.raba.com/press/TA\\_Report\\_AccuVote.pdf](http://www.raba.com/press/TA_Report_AccuVote.pdf).

23 <sup>6</sup> Staff Report on the Investigation of Diebold Election Systems, Inc. presented to Secretary of  
24 State Shelley and the Voting Systems and Procedures Panel (April 20, 2004), at page 4, at  
<http://www.ss.ca.gov/elections/touchscreen.html>.

1 **San Diego County, California (March 2, 2004).<sup>7</sup>**

2 Delayed opening of 55% of the polling places, 573 out of 1038 polling places, due a  
3 problems with the batteries in Diebold voting machines. The problems caused an  
4 unexpected initial login screens to appear on the machines, preventing proper  
5 encoding of electronic ballot cards at those polls. Due to the county's decision not  
6 to provide paper ballots at the polling places as a back up, many voters were turned  
7 away and told to return later. There is no reliable estimate of the number of voters  
8 who returned as opposed to those who were unable to return and vote later.

9 **Alameda County, California (March 2, 2004 and October, 2003).<sup>8</sup>**

10 A report released on April 12, 2004, by Diebold Election Systems shows that nearly  
11 25% of its ballot encoders, 186 of 763 encoders, failed on election day because of  
12 hardware or software problems or both. Local news reported that "no electronic  
13 votes could be cast that morning at Anna Yates Elementary School." Voters were  
14 turned away from the polls, losing their opportunity to vote in the primary as well as  
15 on other issues. Failures of votercard encoders also occurred on Super Tuesday in  
16 Newark, San Leandro, Emeryville, Oakland, and across San Diego County. Diebold  
17 also admitted in its April 12, 2004, report that tabulation errors during the October  
18 2003, recall election were due to software bugs.

19 **San Diego County, California (March 2, 2004).<sup>9</sup>**

20 Ten votes were inexplicably lost at one polling place using the Diebold TSx DRE.  
21 An election inspector in San Carlos said when polls closed at 8 p.m. Tuesday, the  
22 number of people who signed the voter log differed from the number of ballots  
23 counted by computers. "We lost 10 votes, and the Diebold technician who was there  
24 had no explanation," he said.

25 <sup>7</sup> Office of the Secretary of State, *Report on the March 2, 2004 Statewide Primary Election* (April  
26 20, 2004. [http://www.ss.ca.gov/elections/ks\\_dre\\_papers/march\\_2\\_report\\_final.pdf](http://www.ss.ca.gov/elections/ks_dre_papers/march_2_report_final.pdf) (hereinafter  
27 "March 2 Election Report") at 17; Official Report of the Chief Administrative Officer of San  
28 Diego County, at <http://www.signonsandiego.com/news/politics/county/20040310-1315report.html>.  
Jeff McDonald and Luis Monteagudo Jr., *Poll Workers, Voters Cite Tied-Up Hotline, Poor  
Training, Confusion*, UNION TRIBUNE; March 7, 2004,  
<http://www.signonsandiego.com/news/politics/20040307-9999-1n7vote.html>. A more complete  
description of many of the problems with DRE machines included in this brief is included in the  
"Myth Breakers" report attached to the Declaration of Ellen Theisen under Federal Rule of  
Evidence 1006, filed herewith.

<sup>8</sup> March 2 Election Report at 18; Ian Hoffman, *Voters Short Changed At The Polls*, OAKLAND  
TRIBUNE; March 7, 2004, at  
<http://www.oaklandtribune.com/Stories/0,1413,82~1865~2002277,00.html>; Ian Hoffman, *Diebold  
Reports Multiple Problems: Registrar Wants Reason For E-Voting*, TRI-VALLEY HERALD, April  
13, 2004, at <http://www.trivalleyherald.com/Stories/0,1413,86~10671~2080327,00.html>.

<sup>9</sup> See also Jeff McDonald and Luis Monteagudo Jr., *Poll Workers, Voters Cite Tied-Up Hotline,  
Poor Training, Confusion*, *supra*.

1           **Orange County, California (March 2004).**<sup>10</sup>

2           Approximately 7,000 voters were presented with the wrong ballots due to problems  
3           with pollworker understanding of complex Hart Intercivic DREs. In 21 precincts  
4           where the problem was most acute, there were more ballots cast than registered  
5           voters. Tallies at an additional 55 polling places with turnouts more than double the  
6           county average of 37% suggest at least 5,500 voters had their ballots tabulated for  
7           the wrong precincts. “Orange County election officials have traced the problem to  
8           poll workers who were responsible for giving each voter a four-digit code to enter  
9           into the voting machines.”

10           **San Bernardino County, California (March 2004)**<sup>11</sup>

11           In San Bernardino County, officials waited three hours for their new Sequoia vote  
12           counting computer to process the results before resorting to shutting down the  
13           computer and starting over.

14                   2.       Reported DRE Problems Nationwide.

15           Additionally, DRE malfunctions and problems have impacted a significant number of  
16           elections elsewhere, causing voters to be disenfranchised and calling the results of elections into  
17           question. Many of these involved manufacturers and equipment used in California:

18           **Wake County (Raleigh), North Carolina (November 2002).**<sup>12</sup>

19           Electronic voting machines by industry leader ES&S failed to count 436 ballots cast  
20           at two Wake County early voting locations. The vendor confirmed that the machines  
21           had defective firmware that caused some votes not to be recorded. The county  
22           returned to using its optical scan machines and has decided not to purchase DREs.

23           **Fairfax County, Virginia (November 4, 2003).**<sup>13</sup>

24           Some voters using Advanced Voting Solutions DREs watched as the ‘X’ they put  
25           beside the name of Republican School Board Member, Rita Thompson, dimmed out  
26           and moved to her Democratic opponent. Ms. Thompson complained and one  
27           machine was tested. Surprised officials watched as the machine subtracted  
28           approximately 1 out of 100 votes for Ms. Thompson.

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29           <sup>10</sup> March 2 Election Report at 20-21; Ray F. Herndon and Stuart Pfeifer, *7,000 Orange County  
30           Voters Were Given Bad Ballots*, LOS ANGELES TIMES, March 9, 2004, at  
31           [http://story.news.yahoo.com/news?tmpl=story&cid=2026&ncid=2026&e=3&u=/latimests/20040309/ts\\_latimes/7000orangecountyvotersweregivenbadballots](http://story.news.yahoo.com/news?tmpl=story&cid=2026&ncid=2026&e=3&u=/latimests/20040309/ts_latimes/7000orangecountyvotersweregivenbadballots).

32           <sup>11</sup> Elise Ackerman, *Election Officials Report Some E-Voting Glitches*, SAN JOSE MERCURY NEWS,  
33           March 4, 2004 at  
34           [http://www.mercurynews.com/mld/mercurynews/news/special\\_packages/election2004/8103056.ht  
35           m.](http://www.mercurynews.com/mld/mercurynews/news/special_packages/election2004/8103056.htm)

36           <sup>12</sup> See <http://www.verifiedvoting.org/resources/documents/ElectronicsInRecentElections.pdf>.

37           <sup>13</sup> Cho, *Fairfax Judge Orders Logs Of Voting Machines Inspected*, WASHINGTON POST, November  
38           6, 2003, at B01, at [http://www.washingtonpost.com/ac2/wp-  
39           dyn?pagename=article&node=&contentId=A6291-2003Nov5&notFound=true](http://www.washingtonpost.com/ac2/wp-dyn?pagename=article&node=&contentId=A6291-2003Nov5&notFound=true).

1 **Broward Counties, Florida (January 6, 2004).**<sup>14</sup>

2 In a special election for the State House District 91 seat, with only one item on the  
3 ballot, ES&S electronic voting machines showed a total of 134 undervotes – that is,  
4 134 ballots in which voters did not select a candidate even though it was a single-  
5 race election. The winner, Ellyn Bogdanoff, received 12 more votes than the runner-  
6 up. Florida law requires a manual recount of invalid votes when the winning margin  
7 is less than one-quarter of one percent. However, election officials determined that  
8 no recount was required because the 134 invalid votes were cast on electronic  
9 voting machines, and there is no record of the voter’s original votes.

10 **Hinds County, Mississippi (November 4, 2003).**<sup>15</sup>

11 AVS Voting machines at some polling places in District 29 failed to start up. Others  
12 overheated and broke down during the election, and not enough paper ballots were  
13 available to allow all voters to vote. The Mississippi Senate decided it was  
14 impossible to determine the will of the voters. It declared the election invalid, and a  
15 new election was held on February 10, 2004.

16 **Boone County, Indiana (November 2003 Municipal Election).**<sup>16</sup>

17 Electronic vote-tabulation equipment by vendor Microvote reported that 140,000  
18 votes had been cast in a county of 50,000 residents. Only 19,000 of those residents  
19 were registered to vote and only 5,352 voted. The tabulation machine had not been  
20 initialized and it was set to give excessive numbers to call attention to the error. The  
21 county clerk said it was obvious the numbers were wrong since the county is small,  
22 but she wondered if the error would have been noticed in a large county.

23 **Robeson County, North Carolina (November 2002).**<sup>17</sup>

24 Ballot tabulating machines by Diebold failed to work properly in 31 of 41 precincts.  
25 Local election officials said the problem was the result of a software programming  
26 error, and ballots from the individual voting machines had to be retabulated.

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<sup>14</sup> Jeremy Milarsky and Lisa J. Huriash, *Electronic Vote Recount Stumps Broward Officials*, SUN-  
SENTINEL, January 10, 2004.

<sup>15</sup> Clay Harden, *Long lines, machine malfunctions mark today’s voting*, THE CLARION-LEDGER,  
November 4, 2003, at <http://www.clarionledger.com/news/0311/04/mvproblems.html>; Julie  
Goodman, *District vote set; contender may quit, Democrat says he’s “been through enough” in  
disputed Senate race*, THE CLARION-LEDGER, January 21, 2004, at  
<http://www.clarionledger.com/news/0401/21/ma04.html>.

<sup>16</sup> Grant Gross, *Voting machine glitch shows thousands of extra votes*, IDG NEWS SERVICE,  
November 13, 2003, at <http://www.itworld.com/Tech/2987/031113votingglitch/>.

<sup>17</sup> The Associated Press, *Voter turnout surprises officials*, SUN NEWS, September 12, 2002, at  
<http://www.myrtlebeachonline.com/mld/sunnews/news/local/4056664.htm>.

1           **Harris County, Texas (November 4, 2003).**<sup>18</sup>

2           Hundreds of Houston area voters were disenfranchised because of problems with  
3           the Hart Intercivic electronic voting machines. Specifically, voters at two polling  
4           places were told to come back later when machines malfunctioned, and at one  
5           polling place election judges had voters write their choices down on paper.

6           **Muscogee County, Georgia (November 4, 2003).**<sup>19</sup>

7           Allegations of widespread complaints by citizens who voted “no” on a sales tax  
8           proposition but saw Diebold machines register “yes” caused county officials to take  
9           the machine out of service during the election.

10          **Maryland (November 5, 2002).**<sup>20</sup>

11          Voters using Diebold DREs watched as they voted for the Republican candidate for  
12          governor and the ‘X’ appeared beside the name of the Democratic candidate. The  
13          machines used were Diebold DREs with no paper ballot so the machines could not  
14          be audited. “I pushed a Republican ticket for governor and his name disappeared,”  
15          said Kevin West of Upper Marlboro. “Then the Democrat’s name got an ‘X’ put in  
16          it.”

17          **Dallas County, Texas (October 22, 2002).**<sup>21</sup>

18          The Democrats said they received several dozen complaints from people who said  
19          that they selected a Democratic candidate but that their vote on an ES&S DRE  
20          appeared beside the name of a Republican on the screen. Some votes cast for  
21          Republicans were counted for Democrats. The article points out that the previous  
22          year, the outcomes of 18 suburban Dallas County elections remained unclear days  
23          after the election because of vote-counting problems on the same machines. About  
24          5,000 of nearly 18,000 ballots cast during the early voting period were not properly  
25          assigned to candidates.

26          **Miami-Dade County, Florida (May 20, 2003).**<sup>22</sup>

27          An internal review of election results by a Miami-Dade county election official  
28          found that a DRE system sold by ES&S and used in the May 20, 2003 North Miami

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18 11 News Staff Reports, *Polling machine problems anger many voters*, November 4, 2003, 07:27  
PM CST, at

21 [http://www.khou.com/news/local/houstonmetro/stories/khou031104\\_mh\\_pollingprobs.1a536189.htm](http://www.khou.com/news/local/houstonmetro/stories/khou031104_mh_pollingprobs.1a536189.htm)

22 <sup>19</sup> Mark Rice, *NAACP disputes sales tax results, DuBose files complaint in Muscogee Superior*  
23 *Court*, LEDGER-ENQUIRER, November 13, 2003.

24 <sup>20</sup> “Glitches cited at some polls...,” THE WASHINGTON TIMES, November 6, 2002.

25 <sup>21</sup> Ed Housewright and Victoria Loe, *Area Democrats say early votes miscounted, Court hearing*  
26 *delayed as meeting planned on touch-screen problems*, THE DALLAS MORNING NEWS, October 22,  
27 2002.

28 <sup>22</sup> Matthew Haggman, *Count Crisis? Election Officials Warn of Glitches that May Scramble Vote*  
*Auditing*, MIAMI DAILY BUSINESS REVIEW, May 16, 2004, at

[http://www.law.com/jsp/newswire\\_article.jsp?id=1084316008117](http://www.law.com/jsp/newswire_article.jsp?id=1084316008117); Charles Rabin, *Glitch Forces*  
*Change in Vote Audits*, THE MIAMI HERALD, May 15, 2004, at

<http://www.miami.com/mld/miamiherald/news/local/8671922.htm>.

1 Beach runoff election (as well as in earlier elections) was “unusable” for auditing,  
2 recounting or certifying an election due to a “serious bug” in the software.

3 **Montgomery County, Maryland (March 2, 2004).**<sup>23</sup>

4 At least one voter using Diebold election equipment was not presented with a  
5 complete ballot. After casting his vote, he realized that the Senate race had not been  
6 presented to him for his vote. When he complained, the poll workers first told him,  
7 “Once you’ve cast your vote, you can’t vote again.” A poll worker asked if the voter  
8 had pressed the magnification button. The worker said they knew that the error  
9 occurred when the magnification button had been pressed.

10 **Bernalillo County, New Mexico (November 5, 2002).**<sup>24</sup>

11 Insufficient memory capacity for the Sequoia software used to tabulate the votes  
12 caused about 25% of the votes not to be counted in the initial tally. Although about  
13 48,000 people voted on 212 DREs, the initial figures given to the commissioners  
14 indicated that no race – not even for governor – showed a total of more than about  
15 36,000 votes. Apparently the Microsoft SQL 6.5 software program used to report  
16 all of the votes had a capacity of only 64 kilobytes of data at a time. Any more than  
17 that fed to the reporting program in one chunk was simply not tallied.

18 In summary, significant problems with DREs have been reported and continue to be  
19 reported with each election across the country. This record is plainly sufficient to support Secretary  
20 Shelley’s decision to demand that California counties take additional measures to protect the  
21 integrity of the electoral process.

22 **C. This Court Need Not be Forced Into a False Choice Between Accessibility and**  
23 **Security in Voting Machines**

24 In urging this court to second-guess the Secretary of State, Plaintiffs present the court a  
25 false choice. The court need not choose between increased voting security for all Californians and  
26 accessible voting for Californians with visual and manual disabilities. Accessible, auditable,  
27 federally qualified technologies exist currently for both those counties that have already purchased  
28 DREs and counties seeking to purchase new technologies. Plaintiffs’ claim that “DREs are the only  
accessible technologies for people with visual and manual disabilities.” Application for TRO at 1.  
As shown below, this is simply not true.

<sup>23</sup> Jeffrey F. Liss, *Think You Voted in Md.? Think Again*, WASHINGTON POST, March 7, 2004, at <http://www.washingtonpost.com/wp-dyn/articles/A38008-2004Mar6.html>; Viveca Novak, *The Vexation of Voting Machines*, TIME MAGAZINE at 42 (May 3, 2004).

<sup>24</sup> Frank Zoretich, *Election Results Certified After Software Blamed*, ALBUQUERQUE TRIBUNE, November 19, 2002, at [http://www.abqtrib.com/archives/news02/111902\\_news\\_vote.shtml](http://www.abqtrib.com/archives/news02/111902_news_vote.shtml).

1                   1.       Optical Scan Systems that Are Accessible

2                   The first choice for counties that have purchased DREs is to use their currently existing  
3 optical scan systems for the November election. These systems, which counties already use to  
4 count absentee ballots, can be adapted for use by disabled voters by using inexpensive “tactile” or  
5 Braille paper ballots. Tactile ballots are already used in Rhode Island and around the world. These  
6 low-tech paper systems have the support of major disability groups including the leading  
7 spokesperson for Plaintiffs American Association of People with Disabilities, James Dickson.  
8 While called “ballots,” these voting aides are really an overlay or template that, as described by  
9 Mr. Dickson, “fit over the standard ballot and allow blind voters to vote independently.”<sup>25</sup>

10                  Alternately, counties may be able to use their optical scan systems and add electronic ballot  
11 markers to allow those with disabilities to fill out their ballots.<sup>26</sup> These systems look like  
12 traditional DREs, but they record votes on paper ballots instead of internal memory. This kind of  
13 machine can match all of a DRE’s accessibility features (audio interface, sip/puff input, multiple  
14 languages, etc.), and every vote can be verified before submission. Avante has a federally qualified  
15 ballot mark system.<sup>27</sup> ES&S, the world’s largest election equipment manufacturer, is also in the  
16 process of certifying a ballot mark system. It should be available in the fourth quarter of this year.<sup>28</sup>

17                   2.       Counties Can Use DREs if They Increase Security

18                  Alternatively, counties can continue to use DREs so long as they comply with the  
19 conditions imposed by the Secretary of State. These include (1) specific security suggestions  
20 arising from an independent study commissioned by the State of Maryland, (2) parallel monitoring,

21 <sup>25</sup> James Dickson, *Not-so-Secret Ballot*, 2001, at  
22 [http://www.electionaccess.org/publications/ET2001/02\\_01\\_Dickson.htm](http://www.electionaccess.org/publications/ET2001/02_01_Dickson.htm). Photographs of tactile  
23 ballots are available at [http://www.electionaccess.org/Bp/Ballot\\_templates.htm](http://www.electionaccess.org/Bp/Ballot_templates.htm).

24 <sup>26</sup> More counties and individuals use optical scan systems than any other. *See, e.g.*, Election Data  
25 Services, *New Study Shows 50 Million Voters Will Use Electronic Voting Systems, 32 Million Still  
26 with Punch Cards in 2004* (February 12, 2004), at  
27 [http://www.electiondataservices.com/EDSInc\\_VEstudy2004.pdf](http://www.electiondataservices.com/EDSInc_VEstudy2004.pdf).

28 <sup>27</sup> Avante International Technology, Inc., *First True Pixel-Based Optical Mark-Sense voting  
System Achieved 0% Error Rate In 1.5 Million Votes* (May 17, 2004), at  
<http://www.aitechnology.com/votetrakker2/Optical%20Vote-Trakker%20Press%20Release.pdf>.

<sup>28</sup> *New Ballot Marking Device from ES&S, AutoMARK Makes Optical Scan Voting Accessible to  
Voters with Disabilities*, April 1, 04, at  
[http://www.essvote.com/index.php?section=press\\_item&press\\_id=84](http://www.essvote.com/index.php?section=press_item&press_id=84).

1 a basic “spot-check” technique used elsewhere in computer security, and (3) offering voters the  
2 option to vote on paper at the polls, an alternative similar to absentee voting.

3 3. DREs with Voter-Verified Paper Audit Trails

4 Directly contrary to Plaintiffs’ assertions, several DREs equipped with voter verified paper  
5 audit trails (“VVPAT”) are federally qualified and will likely be available for purchase by  
6 California counties; still others will be available in time for the November election. These include:

- 7 a. *Avante’s*<sup>29</sup> *Vote-Trakker*,<sup>30</sup> which has completed federal testing, is an accessible,  
8 VVPAT-equipped DRE. They are eligible for purchase in several states and have an  
9 application pending in California.<sup>31</sup> This system has been used successfully in five  
10 separate elections, including in Sacramento county.<sup>32</sup> The American Council of the  
11 Blind lists the *Vote-Trakker* as an accessible voting system.<sup>33</sup> In addition, Jim  
12 Dickson of AAPD has called *Avante’s* VVPAT an “elegant way” to provide a paper  
13 audit trail if one is mandated.<sup>34</sup>
- 14 b. *AccuPoll*<sup>35</sup> produces a federally qualified, accessible, VVPAT-equipped DRE  
15 system.<sup>36</sup> The company is certified in Utah and South Dakota and is actively  
16 pursuing state contracts and expects to have equipment in the field for the  
17 November, 2004, election. American Council of the Blind lists *AccuPoll* as an  
18 accessible voting system manufacturer.<sup>37</sup>
- 19 c. *Sequoia Voting Systems*,<sup>38</sup> which provides the system used by Riverside County and  
20 which is the country’s third-largest election equipment manufacturer, will have a  
21 VVPAT-equipped AVC Edge<sup>39</sup> on the market by the summer of 2004. The unit will  
22 be deployed in every Nevada election jurisdiction in time for the 2004 presidential  
23 election.<sup>40</sup>

24 <sup>29</sup> *Avante International Technology, Inc.*, at <http://www.aitechnology.com/avantetech/home.html>.

25 <sup>30</sup> *Avante VOTE-TRAKKER Overview*, at  
26 <http://www.aitechnology.com/votetrakker2/overview.html>.

27 <sup>31</sup> *The Tally*, April/May 2003, at  
28 [http://www.aitechnology.com/votetrakker2/News%20Releases/April%20May%202003%20Tally.p](http://www.aitechnology.com/votetrakker2/News%20Releases/April%20May%202003%20Tally.pdf)  
29 [df](http://www.aitechnology.com/votetrakker2/News%20Releases/April%20May%202003%20Tally.pdf).

30 <sup>32</sup> *Sacramento County Tests Voting Machines*, KCRA-TV, October 16, 2002, at  
31 <http://www.theacrachannel.com/news/1723286/detail.html>.

32 <sup>33</sup> See *supra*, Note 12.

33 <sup>34</sup> See letter from Wiley Labs on file with the author. Dr. Kevin Chung, Testimony Before CA  
34 Voting Systems and Procedures Panel, April 22-24, 2004, at <http://tinyurl.com/yrmj8>.

35 <sup>35</sup> *AccuPoll, Inc.*, at <http://www.accupoll.com/>.

36 <sup>36</sup> *AccuPoll Receives Federal Qualification for Electronic Voting System*, March 26, 2004, at  
37 <http://www.accupoll.com/News/PressReleases/2004-03-26.html>.

38 <sup>37</sup> *American Council of the blind Accessible Voting Fact Sheet*, at  
39 <http://web.archive.org/web/20020816072511/http://acb.org/washington/accessible-fact02.html>.

40 <sup>38</sup> *Sequoia Voting Systems, Inc.*, at <http://www.sequoiavote.com/index.php>.

41 <sup>39</sup> Marketing materials for *Sequoia’s* AVC Edge, at  
42 <http://www.sequoiavote.com/productguide.php>.

43 <sup>40</sup> *Sequoia Voting Systems Selected to Provide Uniform Statewide Electronic Voting System for*

1 d. *TruVote* is in the process of qualifying a VVPAT-equipped DRE. The system also  
2 allows voters to verify that their vote was part of the final vote tally via a post-  
3 election web interface. The TruVote system should be qualified and available for  
4 purchase in the summer of 2004.

5 These voting technologies, plus no doubt others that amici are as yet unaware of, provide a  
6 current, feasible and acceptable mix of accessible and secure voting. In short, neither this court –  
7 nor the people of California – need be forced to choose between secure voting and accessible  
8 voting.

9 **D. Current DREs Have a Mixed Accessibility Record in Practice**

10 Finally, the March, 2004, election confirmed earlier concerns that the promise of fully  
11 accessible voting has not yet been achieved by the current generation of DREs. To the contrary, it  
12 seems that a significant percentage of disabled voters still require assistance in voting even when  
13 using current DREs and so cannot vote in private. This should weigh into this court’s consideration  
14 of whether the possibility of some reduced access to DREs for certain disabled voters in the  
15 upcoming election should outweigh the concerns about malfunctions and security that underlie  
16 Secretary of State’s order.

17 For instance, the president of the Silicon Valley Coalition for the Blind<sup>41</sup> introduced a  
18 survey of the experience of its members using Sequoia DREs<sup>42</sup> during the March election with this  
19 summary: “very few of our members were able to vote privately/independently despite Santa Clara  
20 County’s supposed ‘accessible’ touch screen machines. I feel this is an unacceptable state of  
21 affairs.” Exhibit B. Other blind voters were more blunt, calling the DREs “farcical” ‘accessible  
22 voting machines.’” *Id.*, ¶6. In total, of the fifty individuals surveyed, only two reported no  
23 problems using the machine and many reported that they were *not* able to vote in private using the  
24 DREs. *Id.*, ¶¶1,2,3,6,10,11,13.

25 Another survey by the Center for the Independence of the Disabled in New York confirms

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26 *Nevada*, at <http://www.sequoiavote.com/article.php?id=55>

27 <sup>41</sup> Portions of the Survey by Silicon Valley Council for the Blind after March, 2004, election,  
28 attached as Exhibit B; *see also* Elise Ackerman, *Blind Voters Rip E-Machines: They Say Defects  
Thwart Goal of Enfranchising Sight-Impaired*, SAN JOSE MERCURY NEWS, May 15, 2004, at  
[http://www.mercurynews.com/mld/mercurynews/news/breaking\\_news/8673336.htm](http://www.mercurynews.com/mld/mercurynews/news/breaking_news/8673336.htm), A copy of the  
*Mercury News* article is attached to Exhibit B for the convenience of the court.

<sup>42</sup> Sequoia DREs are also used by Plaintiff Riverside County.

1 these problems with the current DRE models in use in California, including reports of difficulty  
2 navigating the machine and poor audio quality.<sup>43</sup> Both Sequoia and Diebold systems were  
3 criticized on these grounds. *Id.* at 10, 21 and 23. Additionally, the report noted the wide range of  
4 disabled individuals who were not served by DREs. For instance, the report stated that  
5 quadriplegics, people with neurological disabilities and others with limited dexterity or arm motion  
6 were unable to use the touch screen technology. *Id.* at 21, 35.

7 In sum, while in theory DREs hold much promise for improving accessibility for some  
8 categories of disabled voters, currently existing DREs are far from that goal. Congress appears to  
9 have recognized the need for accessible voting technologies to mature by setting the deadline for  
10 implementation at 2006 in the Help America Vote Act. Pushing that deadline forward to  
11 November, 2004, which is the impact of Plaintiffs' claims, may force California counties to  
12 implement technologies that are not only insecure, but that also are not sufficiently mature in  
13 meeting the Plaintiffs' primary goal of private voting for those with visual and manual disabilities.

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26 <sup>43</sup> Virginia C. Fields and The Center for the Independence of the Disabled in New York, Inc.,  
27 *Voting Technology For People with Disabilities*, March 2003, at  
28 [http://www.cvfieldsmbp.org/Voting%20Technology%20for%20People%20With%20Disabilities.p  
df.](http://www.cvfieldsmbp.org/Voting%20Technology%20for%20People%20With%20Disabilities.pdf)

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**II. CONCLUSION**

The California Secretary of State is charged with ensuring that Californians have elections that are above reproach. Faced with an overwhelming body of evidence from both California elections and elections nationwide, he exercised his discretion to increase security and voter confidence in the upcoming November election. He did so in a climate where accessible, secure technologies are available and where the currently used DREs do not yet fully ensure access to private voting for those with visual and manual disabilities. And he did so by giving both voters and county election officials options that embrace both accessibility and security. There is no need for this court to second-guess the Secretary of State’s decision. Amici urge that the Plaintiffs motion be denied.

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