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5 In propria persona
6

7 UNITED STATES DISTRICT COURT
8 FOR THE CENTRAL DISTRICT OF CALIFORNIA
9

10 SUSAN MARIE WEBER)	Case No. CV 01-11159 SVW(RZx)
11 Plaintiff,)	
12)	
13 vs)	
14)	DECLARATION OF
15)	KIM ALEXANDER
16)	
17 BILL JONES, in his official)	
18 capacity as California)	Date: May 6, 2002
19 Secretary of State,)	Time: 1:30 p.m.
20)	Courtroom 6
21 MISHELLE TOWNSEND, in her)	
22 Official capacity as Riverside)	Before the Hon. Stephen V. Wilson
23 Country Registrar of Voters)	
24)	
25 Defendants.)	
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27		

28
29 **I, KIM ALEXANDER, DECLARE AND STATE AS FOLLOWS:**
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31 1. I am president of the California Voter Foundation, a nonprofit, nonpartisan
32 organization I re-founded in 1994 to advance new technologies to improve democracy. This
33 Declaration is submitted in support of Plaintiff's Opposition to the Motion for Summary
34 Judgment filed by the Defendants in this action. I have personal knowledge of the following facts
35 and, if called as a witness, I would and could competently testify thereto.

1 2. I have been involved with California elections since 1988 and have been studying
2 voting technology since 1999, when I was appointed to serve on the California Secretary of
3 State's Internet Voting Task Force. For the past three years I have been an active participant in
4 the voting technology debate in California and nationwide. I received my B.A. from the
5 University of California, Santa Barbara in 1988, with degrees in political science and philosophy.
6 Further details on my background and experience, are set forth in my biography, which is
7 attached hereto as Attachment A to my Declaration.

8 3. It is my understanding that one of the cornerstone issues of this action is the use of
9 touchscreen voting technology, of which I am very familiar. The use of touchscreen voting,
10 though convenient and relatively easy to use, does, in its current format, raise serious concerns
11 and questions. My greatest concern regarding the use of touchscreen voting is the loss of
12 transparency that comes with the shift from paper-based voting systems to the currently
13 certified and deployed touchscreen voting systems.

14 4. It is my opinion that elections need to be trustworthy in fact as well as in perception.
15 I have no doubt that computerized ballots can be tallied faster and more accurately than paper
16 ballots. I am also aware that election administration would be far easier and most likely less
17 expensive if there was no need to print, count and store paper ballots. While these machines may
18 in fact be accurate, the voting public's perception that they can in fact be manipulated explains
19 my serious reservations about their current use.

20 5. It is my belief, based upon my experience with state and local elections, as well as
21 from the feedback received from the voting public, that the public will not view elections as fair
22 and trustworthy unless changes are made to the way touchscreen systems are deployed. Such
23 changes need to alleviate voters' legitimate concerns about the potential for machines to be
24 misprogrammed or their results compromised. Thus, I believe the paper-based voting system,
25 though less efficient than a touchscreen system, has many strengths that the touchscreen systems

1 do not have. The paper-based systems (which include optical scan, pre-scored punch card and
2 the Datavote system) allow voters to make their choices on a piece of paper that is then inserted
3 into a locked box and exists as physical proof of how they actually voted. This kind of security I
4 believe is transparent and understandable to even the most unsophisticated of voters.

5 6. To better understand paper-based election security, I spent the evening of March 5th,
6 2002, observing the counting of Sacramento County ballots cast in the California primary
7 election. Sacramento currently uses the Pollstar punch card system, (which will need to be
8 replaced by 2004).

9 7. What I learned is that Sacramento has a very elaborate vote counting process which is
10 all about protecting the paper ballots themselves. I noticed that there were always at least two
11 people involved in the handling of ballots. There were hundreds of people present at the
12 elections office on election night, and I found the processing of these paper ballots to be very
13 transparent. The vote count involved a large number of individuals working at the same time, in
14 an open environment that was subject to monitoring, and where their actions could be scrutinized
15 by all others present. Further, the ballots themselves were under tight security in a separate
16 ballot storage room. At the end of the night all the ballots were placed inside a special room with
17 a video monitor, double locks on the door, with a county sheriff guarding the locked ballot storage
18 room overnight. I feel more confident about the integrity of Sacramento's voting system now that
19 I have seen what my local elections department does to count ballots and keep them secure.

20 8. From this experience I learned something important: we know how to protect paper
21 ballots, and we usually do it quite well. Secondly, I learned that the creation, distribution, control
22 and accounting of printed ballots are an integral part of election security. Similarly, I also saw the
23 process my county established to protect paper ballots against fraud or negligence. Thus, I
24 believe a number of "trust points" have been built into the paper-based voting process that
25 facilitates voter confidence and the perception that elections are fair. It does not appear to me

1 that similar trust points have been replicated or established in the touchscreen voting
2 environment.

3 9. As touchscreen voting is currently deployed there are no more paper ballots and
4 consequently, in my view, a central component of election security has been eliminated. In an
5 election where there are no paper ballots, there is no longer a need for hundreds of people to be
6 involved in the counting of ballots. The technology that secures the election is not in plain sight
7 as is the case with a locked ballot box, but instead is hidden from voters inside voting machines
8 the workings of which I believe to be beyond the comprehension of most people. Further, the
9 software that runs voting systems certified in California is proprietary to the vendor providing it,
10 and is not available for either public inspection or testing by other computer programming
11 professionals.

12 10. The vendors and election officials who deploy touchscreen machines seem to be
13 asking the voters to "trust us" and accept the technology, without first permitting the voting
14 public to "check under the hood" and "kick the tires" of the underlying technology. I believe
15 many people will not trust something they cannot see or understand, or that has not been
16 thoroughly investigated by a non-governmental trusted third party. One should expect citizens
17 to exercise healthy skepticism about government on a routine basis; this is especially true when it
18 comes to elections, which we know from past experience are subject to fraud and attack.

19 11. Frankly, I am astonished that we are conducting paperless elections right now in the
20 United States based upon the technology and methodology that currently exists. When I raise
21 some of the concerns set forth above, I am often met with a response that analogizes the use of
22 touchscreen voting machines to the current use of ATM machines. The question to ask then is
23 whether anyone would use an ATM machine if the content of the transaction was secret from the
24 responsible bank and there was no paper trail verifying the transaction? I suspect that if ATM
25 machines had been deployed in such a manner, their usage would decrease dramatically.

1 Nevertheless, proponents of touchscreen voting find it acceptable to transact the voting process
2 on a machine whose underlying technology is not subject to public scrutiny and that does not
3 itself generate a paper trail. It seems odd that we are willing to experiment with paperless
4 transactions for the one set of transactions that are most integral to not only running a democratic
5 society, but also eliciting trust and faith in those democratically elected.

6 12. It is my belief that the only way to effectively deploy touchscreen voting is to
7 provide for transparency in touchscreen voting systems. Otherwise, not only are more lawsuits
8 regarding the underlying technology probable, but also further erosion of trust and confidence in
9 our election processes can be anticipated.

10 13. There are steps that can be taken to modify the use of touchscreen voting systems
11 that I believe would bring greater transparency and voter trust. One step is to require a voter-
12 verified paper trail. Another step is to require that the source code that runs voting systems be
13 open to public inspection. A final step is to require that the voter-verified paper ballots be
14 counted alongside the digital ballots to protect against deliberate or unintentional computer
15 malfunctions. If the voter-verified paper ballots generated by a touchscreen machine count as the
16 ultimate vote of record, this measure would, in my opinion, provide an effective deterrent against
17 attempts to either rig or distort elections through software programming.

18 14. One of the reasons why I believe the existence of a voter verified paper trail in the
19 voting process is necessary, is that people do not always see things on a computer screen the
20 same way they see things on paper. I am aware that touchscreen systems typically have a step
21 in the process where the voter can preview his or her selection to confirm on the computer screen
22 that their choices have been captured by the machine. Most of the voting manufacturers and
23 election officials feel that this "preview" function is sufficient to provide voters' verification of
24 how they voted. However, I do not believe this function is sufficient to protect voters against
25 unintentional under-voting.

1 15. Specifically, I am already aware of two examples of elections that underscore the
2 voters' need to confirm their ballots on paper to protect against under-voting. The first election I
3 learned about through Frank Wiebe, a representative of Web Tools International who I met at a
4 voting technology vendor fair in Sacramento earlier this year. According to Mr. Wiebe, Web
5 Tools International conducted a private election for the National Federation of Republican
6 Women at their bi-annual 2001 conference. NFRW utilized the new "AccuPoll" voting machine,
7 which was developed by Web Tools International and combines touchscreen and paper in the
8 voting process. Using the AccuPoll system, 847 NFRW members cast ballots for a new slate of
9 leaders on Sept. 23rd, 2001. Only one race on the ballot was contested -- the office of President
10 of NFRW. The NFRW voters made their selections on a computer screen, previewed their
11 selections on the "ballot review" screen, then as a last step their ballots were printed on paper so
12 the voters could confirm the machines accurately recorded their votes. It was at this final stage,
13 according to Mr. Wiebe, that three percent of the NFRW voters discovered they had
14 inadvertently under-voted in the contest for NFRW president despite the preview function on
15 the touchscreen screen. Consequently, these voters were allowed to "spoil" their printed ballots
16 and re-vote so that their vote for NFRW president counted.

17 16. The second example I learned about through a news article published in the April 9,
18 2002 edition of the Palm Beach Post. A copy of this article is attached to my Declaration as
19 Attachment B: "Wellington candidate sues, seeks new vote". According to the Palm Beach Post,
20 a candidate for public office in Florida is suing over his city's recent election results and is seeking
21 a revote. Apparently, Al Paglia was an incumbent candidate in a runoff contest for a seat on the
22 Wellington city council in Palm Beach county, Florida. The election was held on March 26,
23 2002, and 2,600 Wellington voters participated. The council seat run-off was the only contest on
24 the ballot. The results showed Mr. Paglia losing by just four votes, and also showed a total of 78
25 "under-votes". It is unknown whether these under-votes were intentional or unintentional, but

1 the fact that they comprise three percent of all votes cast in an election with just one contest on
2 the ballot seems at least suspicious. (It is also noteworthy that the rate of the under-vote in
3 Wellington -- three percent -- is the same rate of the unintentional under-vote in the NFRW
4 election.) To support his lawsuit and call for a re-vote, Mr. Paglia collected signed statements
5 from 11 Wellington voters attesting to the difficulty they had using the touchscreen machines.
6 The article cites the absence of a paper trail as one of the core problems contributing to voter
7 uncertainty on whether the counted ballots accurately captured their intended votes.

8 17. In some respects I believe it does not matter how valid these voters' lawsuits are or
9 whether there is sufficient cause to support the perception that there is fraud. Elections, in my
10 opinion, have to be fair in both reality and perception, and a lack of transparency currently
11 inherent in touchscreen voting gives good reason for people to perceive that elections are not fair.
12 It is my view that a voting system is only truly trustworthy and effective if the public itself
13 believes it and perceives it to be trustworthy and accepts the results without reservation.

14 18. Many technologists who study voting systems have reviewed touchscreen systems
15 and found them to be reliable and secure. These technologists are by no means representative of
16 the average person who will be using the touchscreen machines. Further, I believe it is
17 unreasonable to expect the average person to sufficiently understand computerized technology
18 well enough to have confidence that touchscreen voting machines are reliable; rather, we should
19 anticipate the average person will question its reliability and believe instead in its fallibility.

20 19. Moreover, it seems that members of the California Legislature share my concern about
21 the need for a paper trail. Accordingly, a paper trail provision was included in Proposition 41,
22 the Voting Modernization Bond Act of 2002. This bond act was placed on the ballot by a 2/3
23 vote of both houses of the Legislature and was passed by California voters on March 5, 2002.
24 The language added to the Elections Code addressing the need for a paper trail reads as follows:

25 "19234. (e) Any voting system purchased using bond funds that does not require

1 a voter to directly mark on the ballot must produce, at the time the voter votes his
2 or her ballot or at the time the polls are closed, a paper version or representation
3 of the voted ballot or of all the ballots cast on a unit of the voting system. The
4 paper version shall not be provided to the voter but shall be retained by elections
5 officials for use during the 1 percent manual recount or other recount or contest."

6 Proposition 41 was supported by Secretary of State Bill Jones, who also signed the official ballot
7 pamphlet arguments in support of the measure. Though Proposition 41 does not outright require
8 a voter-verified paper trail of all touchscreen systems, it does state that a voter-verified paper
9 trail is one of the methods counties can use to meet the Act's stronger paper trail provisions. A
10 true and correct copy of the text of Proposition 41 is attached as Attachment C.

11 20. While it appears that California's elected leaders share the view that a paper trail is
12 needed in touchscreen voting systems, it is not clear at what point in the process does the trail
13 need to be created? The legislation is silent on this specific issue. It seems clear, however, that
14 the paper trail should be created at the time the voter casts the vote, so the voters can verify their
15 votes on paper, if they choose to. Otherwise, if the paper trail is created once the machines are
16 taken back to the elections department, and there is a technical problem with the machines or the
17 software, then the machines will mostly likely produce ballot images that reflect what the
18 machine captured, without any way to verify the voters' actual intent.

19 21. Accordingly, there is a current need for further clarification from the California
20 Legislature or the courts themselves that will address the need for touchscreen voting systems to
21 create a voter verified paper trail, as well as increased public scrutiny of the software that drives
22 these machines and the vote-counting process. While there is some debate about how open
23 voting software code should be, it is clear that at a minimum it should be made available for
24 consistent review by those experts, unaffiliated with the providing vendor, who understand
25 software and can look for bugs and problems.

1 22. Even the most sophisticated companies create commercial and customized software
2 that contains bugs, contains holes, or is compromised by third parties. Often, it is the
3 technology community itself that finds the bugs and holes in applications and contacts the
4 vendor, who then provides a patch or fix to resolve the problem. We cannot presume that the
5 people in our government agencies have enough knowledge or sophistication to detect all the
6 things that could go wrong with voting technology software. Instead, third parties from a variety
7 of fields, such as academics, the private sector, and think tanks should be involved in verifying
8 that the software supporting our voting system (including software that counts paper ballots)
9 actually works as designed. If such occurs, the voting public can have confidence in both the
10 underlying software and the results it generates.

11 23. Already, there have been several computer-related "glitches" and "snafus" in recent
12 elections, and I would like to share two such examples. According to news coverage in the Los
13 Angeles Times November 14, 2001 print edition, the San Bernardino County's elections
14 department failed to test their software prior to tabulating the election results. While the
15 employee charged with this duty claimed the software had been tested, the county did not
16 confirm this claim prior to utilizing the software to tabulate the ballots. A true and correct copy
17 of this article is attached as Attachment D to my Declaration. According to Times, after the
18 ballots had been counted and a slate of winners announced, the elections department discovered
19 the software malfunctioned. The program was fixed and the paper ballots were re-counted. As a
20 result the elections department had to notify thirteen candidates who had previously been told
21 they won that they in fact lost. I believe if there had not been a paper trail in San Bernardino
22 providing physical, voter-verified evidence of the vote there would likely be several lawsuits
23 underway in San Bernardino today.

24 24. Similarly, according to an April 3, 2002 article in the Miami-Herald, there were
25 software problems in a recent election held in Medley, a town located Miami-Dade County,

1 Florida. A true and correct copy of this article is attached as Attachment E to my Declaration.
2 The Miami-Herald reported that the software used by the elections department to report the
3 election results mixed up the candidates' names and the department wound up reporting
4 erroneous results on election night. The newspaper reported that the software caused the
5 candidates' names and vote results to misalign, throwing off the entire election results.
6 Consequently, the elections department had to announce that the people who they originally
7 reported had won had actually lost. Unlike San Bernardino, there was no voter-verified evidence
8 to support the revised election results. Accordingly, the losing candidates, both challengers to
9 incumbents, have threatened legal action and are asking for a revote. I believe if Medley utilized a
10 voter verified paper trail with its new touchscreen voting system the election results would likely
11 be less in doubt today.

12 25. It is my view that touchscreen voting is a 21st century solution trying to fit into a
13 19th century system. I believe it is a mistake to assume we can simply insert this new
14 technology into our current voting system and expect that everything will work fine. Instead, we
15 need to consider the entire voting system from top to bottom. For example, what kind of poll
16 workers are needed to operate this new technology and give voters' confidence? What kind of
17 polling places do we need to insure that a reliable source of electricity is available and lighting is
18 sufficient to read a computer screen? Fifty-seven (57) of California's fifty-eight (58) counties
19 currently use polling place voting equipment that does not require electricity. Consequently, we
20 have polling places located in garages, barns, and other places lacking access to an electric hook-
21 up, often staffed by retirees not always familiar with new technological advances. In adopting
22 new technologies, we need to design a voting system for the 21st century that combines the best
23 of both paper and computer processes, and ensure our voting stations are adequately equipped
24 and staffed by professionally-trained people who can operate the equipment and produce the
25 paper trail needed to give voters' confidence.

1 26. Finally, I believe some of the statements included in defendant Bill Jones’
2 Memorandum in Support of Motion for Summary Judgment are either conclusions, or contain
3 “facts” that are currently in dispute.

4 27. For example, the Statement: "Throughout the historical evolution of new voting
5 systems, skeptics who have been resistant to change have made allegations to cast doubt on new
6 equipment, despite the improvements in accuracy, efficiency, and security provided by the new
7 equipment" (page 2, line 21). I do not believe this statement to be true. Voting technology
8 skeptics such as myself are not resistant to change -- in fact, I have been at the forefront of
9 change in California and beyond, leading efforts to advance Internet access to election information
10 and campaign finance data. It seems that those who are skeptical about touchscreen voting and
11 have concerns regarding its technical, legal and public policy implications, are dubbed “resistant
12 to change.” This is a clear mischaracterization of “skeptics” such as myself, who are at the
13 forefront of expanding digital democracy, so long as the cost of the expansion is not the integrity
14 of the elections themselves.

15 28. Further, the statement: "Manual tallying of ballots still occurs in many counties, and
16 quality control studies generally reflect a 3% "error" rate in manual processes." (page 2, line 20)
17 is either misleading or incorrect. This statement does not appear to be true if by “error rate” the
18 defendant is referring to “votes not cast”. The Secretary of State's office compiled and published
19 the official Statement of Vote for the November 2000 election which found that the overall
20 "error" rate (also called "votes not cast") statewide was 1.6 percent of all ballots cast in the
21 presidential election. Only two of California's 58 counties, Colusa and Lake, had an error rate of
22 3 percent or higher (it was 3.2 and 3.0 percent respectively). A copy of the California Voter
23 Foundation's chart of the November 2000 Presidential Election, which outlines the Percentage of
24 Ballots not Registering a Valid Vote for President is attached as Attachment F to my Declaration.

25 29. Additionally, the statement: "Second, voters in Riverside County have

1 overwhelmingly endorsed the ease-of-use that is provided by the Sequoia Voting Systems AVC
2 Edge Touchscreen Voting System. Responses to voter surveys in Riverside County have
3 routinely yielded results showing in excess of 95% of voters who responded declaring that the
4 touchscreen system is easier to use than the previous optical-scan system" (page 5, line 17) is
5 conclusive in nature and does not address issues other than convenience and ease of use. While I
6 agree it is likely that more voters would find the touchscreen system easier to use than other
7 voting systems, I do not believe that ease of use is the only factor to consider. Moreover, the
8 sample outlined appears to be comprised of a self-selected group of respondents, which may not
9 be representative of what the vast majority of voters, or non-voters for that matter, believe.

10 30. Finally, the statement: "Not coincidentally, total county turnout for the November
11 2000 election was 72%, compared with 62% for the previous Presidential General Election"
12 (Page 7, line 1) gives the impression that voter turnout will increase dramatically by using
13 touchscreen voting machines. Given the fact that the November 2000 election was the first
14 election for which touchscreen machines were deployed county-wide in Riverside, I do not
15 believe those election results are a fair indication of how voters feel about touchscreen voting. If
16 one believes the touchscreens have a positive effect on voter turnout, then we could expect
17 turnout to improve in the election following the first election where touchscreens were deployed,
18 which would be the March 2002 election. However, in that election Riverside's turnout didn't
19 increase; it declined compared to the state average. In November 2000, Riverside County's 72
20 percent turnout of registered voters was slightly higher than the overall 71 percent turnout
21 statewide. But in March 2002 Riverside's turnout was 31 percent, several percentage points
22 below the overall statewide turnout of 34.5 percent. A true and correct copy of County Status
23 as of April 11, 2002, for California 2002 Primary Election, Riverside County is attached as
24 Attachment G, and Voter Participation Statistics by County, excerpted from the Secretary of
25 State's November 2000 Statement of Vote is attached as Attachment H.

1 31. In closing, I would like reference my paper, "Ten Things I Want People To Know
2 About Voting Technology", published in March 2001 in the California Journal magazine, a true
3 and correct copy of which is attached as Attachment I, which explains in further detail my
4 concerns about the need for transparency, open source code, and a voter-verified paper trail. An
5 expanded version of this paper can be found on the California Voter Foundation's web site at
6 <http://www.calvoter.org/publications/tenthings.html>.

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14 I declare under penalty of perjury under the laws of the State of California that the
15 foregoing is true and correct.

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17 Executed this April 30, 2002, at Sacramento, California

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19 Kim Alexander
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