

1 U.S. ELECTION ASSISTANCE COMMISSION

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3 PUBLIC HEARING AGENDA

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6 U.S. Environmental

7 Protection Agency HQ

8 1200 Pennsylvania Ave., NW

9 Washington, DC

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11 Wednesday, May 5, 2004

12 9:01 a.m.

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15 Meeting of the U.S. Election Assistance

16 Commission, was held on Wednesday, May 5, 2004, at

17 1200 Pennsylvania Ave., NW, commencing at 1:30 p.m.,

18 Chairman Soaries, presiding.

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1 P R O C E E D I N G S

2 (9:01 a.m.)

3 CHAIRMAN SOARIES: Good morning everybody.

4 (No response.)

5 CHAIRMAN SOARIES: I'm Baptist. Good
6 morning, everybody.

7 AUDIENCE: Good morning.

8 CHAIRMAN SOARIES: Welcome all of you to
9 this public hearing sponsored by the United States
10 Election Assistance Commission. My name is DeForest
11 Soaries, Jr., and I am the Chairman of this new
12 Federal Agency for this year.

13 I would like to thank the Environmental
14 Protection Agency for hosting us and providing for us
15 accommodations and water and all of the hospitality
16 that they've provided. Their staff has been very
17 helpful, and we are grateful to them for this
18 facility.

19 I also would like to thank in advance all
20 of those who have come to serve on panels today. We
21 have great minds and outstanding talent coming to
22 help us understand more about this issue of

1 electronic voting, and people have come from near and
2 far and we are the beneficiaries of having been
3 rejected by no one.

4 We have the unenviable task of telling
5 quite a few people that we just did not have space
6 for all of those who sought to testify orally, but we
7 have received written testimony from scores of people
8 which will be a part of our focus as we issue our
9 report and a part of our consideration as we
10 deliberate this important subject.

11 I would also like to thank the very small
12 EAC staff for the work that they did. Many of them
13 have not slept recently, and we would like to
14 recognize them for their work.

15 Four-and-a-half months ago the four
16 Americans that you see seated before you embarked
17 upon this mission called the Election Assistance
18 Commission.

19 We knew that there were challenges that we
20 faced. There were realities that we inherited due to
21 the timing of our appointment and the nature of our
22 work, but greater than the challenges were the

1 opportunities to pursue this national consensus that

2 every voter matters, and that every vote counts.

3 So for four-and-a-half months we have been
4 working hard on administrative startup activities.

5 We've been working hard to facilitate the
6 distribution of federal funds that were made possible
7 by the Help America Vote Act to the States.

8 We've been busy visiting primary
9 elections. We've worked hard to meet with various
10 groups whose perspective is important as we do our
11 work and shape our own internal organizational
12 structure that we might be effective in maximizing
13 the use of the resources that we have.

14 We started out work by the publishing of
15 the States Plans required under HAVA for the release
16 of \$2.3 billion that has yet to be released in
17 Requirements' Payments. Shortly those funds will be
18 released, which created some sense of urgency as we
19 began hearing from States.

20 It was clear that the use of those funds
21 would be subject to the kind of guidelines that we
22 issued. Much of our work is subject to a process

1 that is rather long-term within the scope of what we
2 know is a challenge for this November. But much of

3 what we do can have an impact on this November's
4 election, and that brings us here today.

5 We know, all of us know that voting in
6 America has evolved since the founding of this
7 Democracy. Not only has the Constitution been
8 amended to expand the persons who have the right to
9 vote, but also the manner in which we have voted has
10 changed over the last 200 years.

11 Early in the founding of our Democracy a
12 few men would gather downtown and would verbalize the
13 candidate of their choice, and that was an election.

14 There were times when each political party
15 printed the ballots, and you knew which party you
16 were voting for by the color of the ballot. And
17 there were other times when people would just write
18 their names on a book.

19 The concept of privacy in voting, the
20 secret ballot, emerged quickly as the standard for
21 this country. And the way we vote is what brings us
22 here today. Our commitment to universal suffrage is

1 juxtaposed to the technology that we now use to case
2 our private ballot.

3 And so the Election Assistance Commission

4 was formed in large measure in response to the issues
5 that really became front and center in November of
6 2000.

7 This Commission has responsibilities that
8 are well articulated in the Help America Vote Act,
9 but what is not in the Help America Vote Act is what
10 I'd like to describe so that you will understand more
11 about who we are.

12 We came together after having been
13 appointed by the President December 13th, and
14 immediately we made commitments that we hope are
15 transparent and self-evident in what we do today and
16 in the follow years.

17 The first commitment we've made is to be a
18 bipartisan commission in function and not just in
19 name. We are two Democrats and two Republicans, but
20 we believe in our hearts that the issue for which we
21 are responsible is so important to the country that
22 it is incumbent upon us to leave our partisan

1 identities and personal philosophies at the door.

2 From day one we have maintained a
3 bipartisan spirit. As one of my colleagues will say,
4 if you look in on our discussions it would be

5 difficult if not impossible to determine who was a
6 Republican and who was a Democrat.

7 There is a time when partisan differences
8 are healthy for the country, but there is also a time
9 when certain issues are urgent to the extent that
10 partisan differences should not stop us from making
11 progress. That is a commitment of this Commission,
12 and we are going to urge not only the panelists but
13 the people with whom we work after today to attempt
14 to rise to level of bipartisan spirit.

15 The second commitment we've made is to
16 move by consensus. We try not to lobby each other
17 and broker deals, but rather form consensus through a
18 deliberative process. In that process we attempt to
19 be civil in our tone. We attempt to be conciliatory
20 in our outcomes. We refrain from any personal
21 attacks. And we try to stay open-minded.

22 I described that hoping that those who are

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1 on panels today will respect the fact that that's the
2 way we operate, and that is the kind of hearing we
3 would like to manage.

4 As Chair, I will try my best today to keep
5 us not only on time but to keep us within the

6 framework of civility.

7 The final commitment is to results. This
8 hearing is not an academic exercise, although we have
9 some great academicians. Rather, this hearing is
10 strategically called today six months prior to the
11 November election aimed at concrete actions that we
12 can take to not only, as I said, fulfill our long-
13 term mandates but also to help America vote in
14 November of 2004.

15 And so we are honored today to have great
16 minds, experienced professionals, and committed
17 advocates. There will be a tension between certain
18 views, but sometimes tension can produce healthy
19 outcomes if that tension is managed and articulated
20 in a positive way.

21 And so we are thrilled that you have come.
22 We have urgent business to do, and we are going to

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1 ask each of you to either participate or observe with
2 a certain set of ground rules.

3 In the first instance I would like to ask
4 that everyone turn off their electronic devices.
5 There should be no computers in the room, but if
6 there are any other electronic devices: beepers,

7 watches, Blackberry, Blueberry--

8 (Laughter.)

9 CHAIRMAN SOARIES: --because it will be
10 easier to proceed without that.

11 We are asking each panelist to make a
12 short opening statement. I will remind them that the
13 panelists will give an opening statement for seven
14 minutes, and then that leaves time for the four
15 Commissioners to ask questions.

16 I will try to keep us on track. Each
17 Commissioner will lead the questioning for a panel,
18 and then after that lead questioning then each
19 Commissioner will have a chance to ask a few
20 questions after that lead Commissioner.

21 I want to ask the audience not to make any
22 demonstrations of support--this is not a pep rally;

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1 or against--this is not a protest. We would like the
2 audience to be careful to conduct itself in a manner
3 that coheres with the civility that we are attempting
4 to portray.

5 I would like to thank the media for taking
6 this issue seriously because our experience is that
7 the country cares about this matter of voting, and I

8 hope that you will find today as interesting as we
9 intend to find it because as a result of what we
10 learn we will craft our work to take actions that
11 will support all Americans as we prepare for a new
12 Presidential Election.

13 I would like now to invite my colleagues
14 to give an opening statement, after which I will
15 introduce our first presenter.

16 Vice Chair Hillman.

17 VICE CHAIR HILLMAN: Good morning. I join
18 my colleagues in thanking you for finding the
19 commitment and time to be with us. We can only
20 benefit by the input of such a diverse group of
21 people.

22 We welcome your input, and your presence

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1 here motivates and energizes us. So on the one hand
2 I apologize to the people who are not able to find
3 seating. It is so hard to know when you hold a
4 hearing like this, especially for the first time, how
5 many people will really be interested enough to be
6 here.

7 On the other hand, it is a terrific
8 showing for us. And as I said, it energizes and

9 motivates us.

10 We, as the Chairman said, are very pleased
11 to have been able to come this far in the short
12 period of time that we've been assembled with the
13 many things that we have had to do, but our
14 commitment is to make certain that we move as quickly
15 as possible to meet the mandates of the law, to
16 fulfill our responsibilities and to move our mission
17 forward.

18 And so I again thank you for being here
19 and look forward to your input not only today but in
20 the months and years to follow.

21 Thank you.

22 CHAIRMAN SOARIES: Commissioner

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1 DeGregorio.

2 COMMISSIONER DeGREGORIO: Thank you, Mr.
3 Chairman. It is indeed an honor to be here and to be
4 a part of this very important hearing.

5 I served for eight years as an election
6 official in St. Louis County, Missouri, and I bring
7 that perspective to this Commission. Back in 1990 I
8 had the closest Congressional race in the country.
9 51 votes separated the winner or loser and it was a

10 punch card system. So I have been through a lot of
11 experiences because of that.

12 For eight years after I served as Director
13 of Elections I worked overseas in 15 countries and
14 advised Russians, and Indonesians, and others on how
15 to conduct their elections.

16 I was asked to serve on this Commission,
17 and as I saw the past few months the discussion
18 evolve in the country about the security of systems,
19 the use of systems, it became very apparent to me
20 that this Commission needed to have a hearing such as
21 this, and I was very pleased when my fellow
22 Commissioners and the Chairman, suggested that we do

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1 something just like this.

2 It is important in any democracy that
3 there be freedom of speech and honest debate and
4 informative debate over issues such as this. I hope
5 that this hearing encourages a civilized debate.

6 When I was first appointed to this
7 Commission, there was a web site someone put out that
8 I had worked for the CIA overseas, which was not
9 true. But then I find in the past few weeks and
10 months that this same person is on CBS News, on CNN,

11 and quoted by The New York Times, and that does
12 concern me because I hope that in the discussion of
13 this very important issue that people stick to the
14 proven facts; that they give us informed opinions;
15 and that we stay away from rancor and personal
16 attacks and partisanship. Because the Nation is not
17 served by division, it is served by an honest
18 discussion.

19 I so hope the debate is civilized for a
20 very important reason, because we want to encourage
21 people to participate in our election process. We
22 want to have the largest turnout in American history

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1 in November, and I hope the discussion of these
2 important issues is at a level that encourages people
3 to participate and doesn't discourage people from
4 participating because our Democracy will not be
5 served if people don't come to the polls.

6 Thank you, Mr. Chairman.

7 CHAIRMAN SOARIES: Commissioner Martinez.

8 COMMISSIONER MARTINEZ: Thank you, Mr.
9 Chairman.

10 Through the passage of the Help America
11 Vote Act of 2002 and our subsequent confirmation and

12 appointment, the U.S. Election Assistance Commission
13 was created to assist in the administration of
14 Federal Elections, and to otherwise provide
15 assistance for certain Federal Election laws and
16 programs.

17 Moreover, the EAC is to establish minimum
18 standards for election equipment, and to act as a
19 national clearinghouse with regard to Federal
20 Election administration.

21 It is this function of national
22 clearinghouse, Mr. Chairman, that I want to focus on

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1 for just one minute this morning.

2 I think the big picture intent of what we
3 are trying to accomplish with this hearing today is
4 worth reiterating. While roughly 29 percent of
5 registered voters will be voting in November 2004
6 with electronic voting machines--and we will hear
7 some very compelling statistics from Mr. Brace, our
8 first panelist--and some 30 percent of registered
9 voters will be using punch card and lever machines,
10 and another 32 percent will be using optical scan
11 machines, one of the primary purposes of this hearing
12 is to begin gathering important information on the

13 use, the security, and the reliability of all voting
14 systems to be used in this coming November's
15 election.

16 There are no doubt unique challenges with
17 regard to each voting system, and unique challenges
18 we will hear today with regard to the use of DREs,
19 but it is important I think for our audience to
20 understand--our audience here today and the broader
21 audience through the media--to understand that this
22 Commission takes its role as a national clearinghouse

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1 very seriously.

2 A significant step in that direction is to
3 produce timely Best Practices' guidance to states and
4 local governments regarding the use, the security,
5 and the reliability of all voting systems, including
6 optical scan, punch card, lever, DREs, and paper
7 ballots.

8 Releasing this Best Practices' guidance
9 before November in a timely fashion will in my view,
10 Mr. Chairman, contribute positively toward the most
11 fundamental task we have as a Commission. That is,
12 to ensure that the American public has full
13 confidence in the administration of our Federal

14 Elections.

15 With that, I look forward to the
16 discussion. Thank you.

17 CHAIRMAN SOARIES: Thank you,
18 Commissioners. Much of what we know about who votes
19 on what kind of voting device in this country we know
20 because of the work of our next speaker. We are
21 pleased to have as our opening presenter who will
22 give us an overview on electronic voting the

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1 President of Election Data Services, our friend Mr.
2 Kim Brace.

3 PRESENTATION OF KIM BRACE, PRESIDENT
4 ELECTION DATA SERVICES

5 MR. BRACE: Thank you, Mr. Chairman.
6 Commissioners, it's a pleasure to be here this
7 morning, and I certainly don't envy your task ahead
8 of you in--

9 AUDIENCE MEMBERS: Can't hear.

10 MR. BRACE: Yes. My name is Kim Brace, B-
11 R-A-C-E. I'm President of Election Data Services.
12 We are a provider of elections' information around
13 the country, and we have compiled information for the
14 past 30 years in terms of what types of voting

15 systems have been used around the Nation.

16 I have a full statement that I would like
17 to have entered into the record, and I will summarize
18 a couple of key points for your benefit and try to
19 keep us on track of the timetable.

20 In terms of the history of voting systems,
21 this country has had a long history, starting off
22 with paper ballots, as the Chairman mentioned. As

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1 the country grew and became more urbanized, the task
2 of counting ballots, paper ballots, took longer.
3 With the industrial revolution, a mechanical way was
4 found to produce almost instantaneous election
5 results, the lever machine.

6 Lever machines were invented in 1890, and
7 their use in the elections grew over the next 70
8 years. It is interesting to note, in light of the
9 current controversy that we have over electronic
10 voting systems, that for those 70 years voters were
11 not receiving nor were election officials counting
12 physical ballots on lever machines.

13 Now precincts tended to be smaller in size
14 at that point in time because of the high cost of
15 lever machines, but by the middle of the 20th Century

16 the main source of polling place judges, housewives,
17 had begun moving into the workforce. As a result,
18 this loss in manpower, or womanpower, election
19 officials looked to cutting the overall number of
20 precincts and increasing the size of the remaining
21 polling places.

22 Punch-card voting systems, first

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1 introduced in 1964, were a popular solution to this
2 problem. These were mainly used in urban and
3 suburban communities around this country, but in the
4 rural parts of this country they looked towards
5 continuing to use paper ballots but find an easier
6 way of tallying those paper ballots.

7 This led to the development of the optical
8 scan systems in the 1970s. With the advent of
9 computers and the need to replace the aging lever
10 machines, the 1970s also found the introduction of
11 the electronic voting systems. Early electronic
12 voting systems looked much like lever machines with
13 pushbuttons replacing levers on a large panel.

14 Newer DREs resembling ATM machines had
15 touch screen panels and key pads for entering write-
16 in votes. Voter preferences went directly into the

17 electronic storage usually without a paper record of
18 the voter's intent.

19 As I indicated, we have kept track of what
20 kind of voting system is used around the country. We
21 started in 1980. In 1980 we found just two
22 electronic voting systems in use at that time, the

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1 Video Voter and Votronics in use in just seven
2 counties of this Nation. They accounted for just one
3 percent of the registered voters nationwide.

4 Our most recent survey that we have done
5 for the 2004 projected election shows that the number
6 of counties using electronic voting systems has grown
7 to 675 counties in this country.

8 These counties, located in more than half
9 of the states, amount for almost 50 million
10 registered voters, or 30 percent of overall
11 registered voters.

12 Our surveys look at a lot of different
13 voting systems, and when one looks at those and
14 analyzes the comparison of the percent of registered
15 voters, or the percent of counties, one finds
16 differences that are significant in terms of the size
17 of jurisdiction.

18 Right now we're looking at slightly more
19 than 48 million registered voters who are expected to
20 cast ballots this fall on an electronic system,
21 compared to 53 million that will use optical scan
22 systems, and 22 million that would still use some

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1 form of punch cards.

2 About the same number of voters, 22
3 million, will use lever machines, while about 1
4 million voters will still use paper ballots. Voters
5 using paper ballots represent only two-thirds of one
6 percent of all registered voters in the country.

7 In 1980, over 1200 counties or 41 percent
8 of the counties used paper ballots. We have produced
9 in the statement, of which we have copies on the back
10 table, maps of both what the country looked like in
11 1980 as well as what the country looks like today in
12 2004.

13 Our information and our research indicates
14 that for 2004, while there have been a lot of changes
15 going on in the last four years, upwards of 74
16 percent of the voters in this country will use the
17 same type of voting system that was used in November
18 of 2000.

19 Now besides being the sole repository of
20 historical information on voting systems around the
21 country, we provide information for many of the
22 academic surveys and studies that you heard about

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1 over the last three years. We also compile and
2 collect voting statistics which are allowed to be
3 pared to the voting information and allow people to
4 come up with what people have referred to as "error
5 rates" in different types of voting systems.

6 I believe the use of the term "error
7 rates" is a misnomer. Because many people have
8 assumed that when people go to the polls they will
9 vote for all offices on the ballot, or at least the
10 offices at the top of the ballot.

11 Empirical evidence, however, shows that
12 neither of these assumptions are correct.

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1 Academic studies have shown that people
2 experience ballot fatigue as they move down the
3 ballot and don't vote for everyone. This phenomenon
4 is called many things, but I refer to it as "drop
5 off". Drop off is roughly equivalent to what others
6 say is the residual vote measures that you may have
7 heard about in recent studies.

8 As I indicated, we've looked at and
9 compiled and we did a study for the Congressional
10 Research Service going back to 1948 that looks at
11 drop off across the country in every county of the
12 Nation. And there is a summary table in the back of
13 my statement for you, but overall what one finds in
14 looking at election statistics is that drop off tends
15 to account for 1.5 to 2.5 percent in Presidential
16 Elections when the data is available, and ranges up
17 to 4.5 percent in non-presidential elections.

18 The problem is that not all states report
19 the actual number of persons that went to the polls
20 on election day. While the availability of this data

21 has improved over time, just 17 states reported that
22 number in 1948. There are still ten states that do

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1 not compile this information and did not for the 2002
2 election. Those states are Alabama, Arkansas, Maine,
3 Mississippi, Missouri, Oklahoma, Pennsylvania,
4 Tennessee, Texas and Wisconsin.

5 CHAIRMAN SOARIES: Anybody from those
6 states see us after okay.

7 (Laughter.)

8 MR. BRACE: Yes. Now, drop off is a
9 combination of both what is called "over votes" and
10 "under votes". Over votes occur when electors cast
11 more votes than they're allowed for a particular
12 office. For example, they may have voted for two
13 candidates as opposed to one being allowed.

14 Our experience has shown that voters are
15 more likely to cast over vote situations when you
16 have a multiple vote for office; a vote for four, or
17 a vote for five. People don't keep track of how many
18 candidates they vote for and so they over vote.

19 Commissioners DeGregorio and I were just
20 out in Illinois earlier this year and observed a
21 large number of over votes in the Office for

1 seven. In most instances we find that over votes
2 result from improper ballot design which is an
3 important point for election administrators.

4 On the other hand, under votes is more
5 likely to be intentional than over voting. Often if
6 voters don't have enough information about the
7 candidates, they may skip the contest and not vote in
8 that contest.

9 Offices where candidates are unopposed or
10 where candidates have just minor opposition, find a
11 large amount of under voting.

12 What we find and if the data is available
13 a normal election will produce a drop off rate that
14 is generally composed of about 90 percent under votes
15 and just 10 percent over votes. That's in a normal
16 election. Unfortunately elections tend to not be
17 normal in many instances.

18 Unfortunately, in many instances and in
19 many election jurisdictions around the country, over
20 votes and under votes are not reported. In fact,
21 I've been in offices on election day and overheard
22 vendors specifically discourage officials from

1 producing reports on over votes and under votes.
2 It's a shame for both the American public as well as
3 the election official.

4 If an election official does not study the
5 results of the election, that official is no better
6 than an ostrich with its head in the sand. Looking
7 for abnormal voting patterns or unusual over vote or
8 under vote relationships are important steps to
9 everyone's research effort, including the use of
10 potentially mapping that information out.
11 Therefore, members of the Commission, as a result of
12 our experience, I would recommend that the Commission
13 undertake the following steps. One of the greatest
14 problems with evaluating different types of voting
15 systems is the lack of data. Therefore, my
16 recommendations would be certainly that the
17 Commission collect more data specifically, more
18 detailed information on voting equipment in use
19 around the nation.

20 Secondly, actual number of persons that
21 voted in each election, the voter turnout and
22 certainly encourage those ten states to finally come

1 into the fray and collect those.

2 You should collect precinct by precinct
3 election analysis and election results including over
4 votes and under votes to enable a detailed analysis
5 of the returns for all precincts of the country.

6 You should also collect sample ballots so
7 that one can look at how those ballots appear to the
8 voters and how they might allude to why you see
9 abnormal data in the data that you're collecting.

10 Also I would encourage that the election
11 vendors that are producing software for doing
12 tallying of ballots facilitate this process by
13 putting out data files, not just print files. So
14 that the analysis of this kind of information can be
15 done by both the election administration in that
16 jurisdiction as well as other people.

17 I congratulate the Commission for
18 undertaking this important hearing on voting systems
19 and I would be happy to answer any questions you
20 have.

21 CHAIRMAN SOARIES: Mr. Brace, we want to
22 thank you not only for your presentation today, but

1 for the assistance you have given us since we started
2 our work and for the work that you do around the
3 country with election administrators.

4 MR. BRACE: Thank you.

5 CHAIRMAN SOARIES: Is there a question
6 that any Commissioner has for Mr. Brace?

7 VICE CHAIRMAN HILLMAN: I do have just one
8 point for clarification. When you were addressing
9 the issue of over votes and under votes and talking
10 about under votes not being reported, do you mean
11 that they're not counted in some instances?

12 MR. BRACE: In a number of voting systems
13 and tallying systems they do have capabilities of
14 reporting the number of under votes and the number of
15 over votes for each office.

16 What we find is that those kind of reports
17 tend to not be produced election day or post-election
18 day. In fact, if you go and look for and try to
19 compile that information, one finds that election
20 administrators have to go back and rerun the
21 information to generate those kind of reports.

22 It's information that is there. Certainly

1 the ballots as they are counted and cast will show
2 you whether or not there's an under vote for that
3 office or an over vote, and so it's something that
4 should be reported.

5 VICE CHAIRMAN HILLMAN: Let me see if I
6 can ask it a little differently because I'm still not

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8 MR. BRACE: Okay.

9 VICE CHAIRMAN HILLMAN: If you can choose
10 four candidates out of seven

11 MR. BRACE: Okay.

12 VICE CHAIRMAN HILLMAN: -- and you only
13 choose two, and I vote for Soaries and DeGregorio,
14 does my vote in those instances that you just
15 described, do they count for those two candidates or
16 not? If I have chosen not to go to the maximum four,
17 is my vote counting for these two candidates or not?

18 MR. BRACE: Yes. In almost all instances
19 they are counted. Different election laws may be
20 different, but generally, yes, those two votes would
21 be counted. The two additional votes that you did
22 not partake in would be what I would categorize as

1 the under votes.

2 And, as I said, they may or may not be
3 counted from the system.

4 CHAIRMAN SOARIES: Commission Martinez has
5 a question that he says is a quick question.

6 MR. BRACE: Okay.

7 CHAIRMAN SOARIES: He's an attorney and so
8 we have to understand the

9 COMMISSIONER MARTINEZ: The question is
10 quick, I don't know what the answer will be.

11 CHAIRMAN SOARIES: And we are really out
12 of time.

13 COMMISSIONER MARTINEZ: We are out of
14 time.

15 CHAIRMAN SOARIES: And I want to make a
16 comment.

17 COMMISSIONER MARTINEZ: Right. Mr. Brace,
18 the idea of not reporting this information, I know
19 you've worked with and for many state and local
20 jurisdictions around the country. We'll have
21 obviously election administrators to talk to as the
22 day progresses. What's the general response as to

1 why these ten states are not reporting? They're

2 obviously it sounds like they're collecting it, why
3 are they not reporting it?

4 MR. BRACE: What you end up finding in a
5 number of those jurisdictions and those states is
6 that the data tends to be there. It's down at the
7 county level. The state itself is not collecting it
8 up to present data that can be readily available.

9 CHAIRMAN SOARIES: I want to say, Mr.
10 Brace, that since you gave us introductory
11 information early on this year and we began talking
12 about the error rate and the perceptions about what
13 the does and does not mean, what I've discovered is
14 that there is also confusion between what "error
15 rate" means in terms of over vote and under vote and
16 what "failure rate" means in terms of the malfunction
17 of equipment. And I think as we move forward, we
18 have to dissect that issue because if we talk to
19 people outside of the elections industry, error rate
20 is often synonymous with failure rate and not all
21 errors are due to failure.

22 MR. BRACE: You're quite correct,

1 Commissioner, yes.

2 CHAIRMAN SOARIES: Thank you so much for

3 your presentation.

4 MR. BRACE: Indeed.

5 CHAIRMAN SOARIES: We look forward to

6 hearing from the next panel.

7 Our next panel consists of some of the

8 academic luminaries of our time and scientific

9 experts of our country. We are honored to have them.

10 I would like them to come forward now so that I can

11 introduce them individually.

12 I think you can create a little more space

13 for yourself because there's an empty chair.

14 On behalf of this Commission let me thank

15 you gentlemen for being here. We were if my sons

16 were in the presence of MBA stars they would probably

17 have the feeling that is analogous to the feeling we

18 have being in your presence. You are the superstars

19 of your field and you have made contributions

20 already. And our desire is to take your expertise,

21 both the summaries you offer today and the written

22 testimony you've given us and to use this information

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1 to guide us as we form a national consensus on the

2 issues of electronic voting.

3 We've asked you to help us consider the

4 four critical areas, the accessibility, the
5 usability, the reliability, and security issues that
6 relate to electronic voting. Each of you in your own
7 right as an expert could give a day-long
8 presentation. However, we've asked you to summarize
9 your thoughts if possible in seven minutes. We will
10 then ask you questions and then certainly reserve the
11 right to contact you in the future so that you can be
12 you can be heard through our work.

13 We have from the state of Georgia, Kennesaw
14 University, Dr. Brit Williams.

15 From Johns Hopkins University, Dr. Avi
16 Rubin.

17 From the Institute of Electrical and
18 Electronics Engineers, my neighbor, Stephen Berger.

19 And from the Massachusetts Institute of
20 Technology, Dr. Ted Selker. Welcome gentlemen and if
21 you would speak in the order that you appear on the
22 program, I would appreciate your cooperation.

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1 Dr. Rubin.

2 PRESENTATION OF DR. AVI RUBIN, JOHNS HOPKINS
3 UNIVERSITY, INFORMATION SECURITY INSTITUTE

4 DR. RUBIN: Thank you, Mr. Chairman. Good

5 morning.

6 My name is Avi Rubin and I'm a professor
7 of computer science at Johns Hopkins University. My
8 area of specialization is computer security and
9 applied cryptography.

10 I've been studying electronic voting since
11 1997 and recently last year served on the
12 security peer review group for the SERV project for
13 overseas Internet voting.

14 Last year I also participated in the
15 analysis of the Diebold acuvote TSX and we since
16 published a paper about the security issues with that
17 machine and the top peer reviewed security conference
18 which is the IEEE security and privacy symposium.

19 By further way of introduction, I this
20 past March served as an election judge in the primary
21 in Baltimore County. I think we'll all agree that
22 security is very important in elections. There are

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1 many other important things in elections as well;
2 accessibility for blind people; for people whose
3 primary language is not English, and ease of use of
4 the machines are all very, very important. But my
5 expertise is in security. And there are other people

6 that will speak to those issues and I will speak

7 about security.

8 Today's DREs increase accessibility which

9 is great. I like that, but they are insecure, which

10 I don't like.

11 I don't think that security and

12 accessibility are competing goals and I don't think

13 they inherently need to be. But I think with today's

14 deployed DREs, we're in a position that they are.

15 We must demand both accessibility and

16 security from our election machinery and I think that

17 that can be achieved. Let me outline my primary

18 concerns with today's DREs for you from a security

19 perspective.

20 The first and foremost is that there is no

21 way for a voter to verify that their vote was

22 recorded correctly. Machines have the votes inside

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1 their internal processor inside the memory and even a

2 sophisticated computer security expert cannot look at

3 a machine and tell you what's going on inside of that

4 machine. Only the people who wrote the software know

5 what's going on inside the machine and even they

6 don't really know because it's impossible to develop

7 large software packages without introducing bugs and
8 flaws into them.

9 Another problem that I see with the DREs
10 is that there is no way to publicly count the votes.
11 There's no way for the votes to be counted in a way
12 that's publicly observable because, again the
13 counting is going on inside of a computer.

14 In the case of a controversial election
15 and many elections are controversial. We always have
16 losers in our elections and there are always
17 extenuating circumstances. And when an election is
18 controversial, there are laws in some states that
19 require the ability to do a recount. A meaningful
20 recount means that you are going to believe you have
21 more confidence in the recount than you had in the
22 original vote. And with fully-automated,

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1 computerized voting equipment, there is no way to do
2 any kind of a meaningful recount. You can just
3 reprint the results and get exactly the same result
4 again.

5 We must trust these machines for several
6 things. We must trust them not to fail. We must
7 trust that they haven't been programmed maliciously

8 and we must trust that they have not been tampered
9 with. And that's a tall order.

10 One of the fundamental concepts in
11 computer security that I teach in my courses and
12 uncovered in all the text books is the concept of a
13 trusted computing base.

14 In a system we try to keep the trusted
15 computing base as small as possible so it has the
16 least amount of code and the least chance that
17 something can go wrong.

18 In today's DREs the trusted computing base
19 is approximately 50,000 lines of computer code
20 sitting on top tens of millions of lines of Windows
21 CE which is more computer code. Not all of the
22 vendors use Windows CE, but the Diebold machines that

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1 we looked at do. And it is impossible to secure such
2 a large trusted computing base.

3 Future systems should involve the security
4 community that have a lot of experience, there's a
5 lot in the government and a lot in academia, a lot of
6 experience built up on how to design a security
7 system to have as small as possible a trusted
8 computing base.

9 We have techniques for building secure
10 systems, but they are currently not being utilized.
11 When we looked at the Diebold machines, we found
12 gross, gross security and programming errors. We
13 pointed these out in our papers and presented them to
14 our peer community which has widely agreed with this
15 opinion.

16 The worst thing that I see is that when
17 I'm constantly asked, well how bad are the other
18 vendors, or how good are the other vendors, how do
19 they compare to Diebold, and I to say, I don't know,
20 because I can't get access to their code.

21 If people who have security expertise want
22 to analyze and tell the public how secure these

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1 systems are prohibited from getting access to them,
2 then the public is left wondering what is being
3 hidden inside of there. I'm a strong proponent of
4 opening up these systems for scrutiny.

5 I don't think that we can achieve perfect
6 security. I know better. I know that we cannot
7 achieve perfect security in any useful system. But I
8 believe that there's a spectrum of really, really
9 terrible to very, very good. And my opinion after

10 looking at DREs and looking at the Acuvote TSX from
11 Diebold is that right now we're sitting very, very
12 close to terrible. And I think we can do a lot
13 better.

14 I am not against electronics in voting. I
15 think that we can have computers help us with the
16 voting process, but they need to be designed with
17 input from security experts, and I feel that security
18 experts in general have been shut out from a lot of
19 the decisions about the designs of these machines
20 when approached at all.

21 I do not speak in a vacuum. There have
22 been three other studies, one by SAIC, Robbin

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1 Technologies, former NSA members and the State of
2 Ohio.

3 Every single study has cited serious
4 security concerns with the DREs. And many election
5 officials I hear and many vendors come out and say,
6 "our systems are secure" and they just repeat that,
7 but they don't show any evidence to back it up. I
8 haven't seen any studies showing what the security
9 measures are.

10 And I think that what we need is to

11 involve the security community the same way we're
12 involving the accessibility community and all the
13 others, it's all part of the puzzle that needs to go
14 together.

15 I will wrap up in a minute. I just want
16 to say that I think you will hear a lot of rhetoric
17 today from my experience. You are going to hear that
18 the procedures in place make the process secure. But
19 I don't think that there are any procedures that can
20 prevent say a malicious program inside of the 50,000
21 lines of code on top of the tens of millions of lines
22 of code that changes votes from one candidate to the

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1 other.

2 The other problem I have with the claims
3 of the procedures solving all the security problems
4 with the machines is that it is very difficult to
5 design contingency plans. What happens if at the end
6 of the day the machines say, you know, 144,000 people
7 voted and we catch that with our procedure, but there
8 are only 19,000 voters registered. And that actually
9 happened in Fairfax County in the last election.

10 What do we do? Do we throw our hands up
11 if this happens on a national scale and say, well,

12 you know, we messed up? I think that if we built the
13 systems a little more carefully, we could avoid
14 having to rely on procedures that are our contingency
15 plans.

16 I've run out of time so I will be happy
17 during the question and answer to talk about the
18 problems that I see with the logic and accuracy
19 testing versus security testing which are completely
20 different things. And I also don't buy the argument
21 that these machines have worked right in the past so
22 we need so we believe they're perfectly secure.

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1 If we know that the machines have worked
2 well in the past, then we know they've worked well in
3 the past. But we don't know that they're going to
4 work well in the future and I don't think we should
5 sit on our hands and not enhance them with security
6 to prevent a problem from happening in the future.

7 In conclusion, accessibility and security
8 are not mutually exclusive. We need to develop
9 systems that do not require completely trusting a
10 vendor with the outcome of the election.

11 We need to develop systems that are
12 auditable, including the ability to perform

13 meaningful recounts. And we need to develop systems
14 where voters know that their completed ballot is
15 recorded correctly. We also need transparency in the
16 process and no hidden code. Today's DREs have none
17 of that.

18 Thank you.

19 CHAIRMAN SOARIES: Thank you, Dr. Rubin.

20 We are going to hear from all of the
21 panelist before we do questions and answers.

22 So, Mr. Berger.

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1 STATEMENT OF STEPHEN BERGER, INSTITUTE OF
2 ELECTRICAL AND ELECTRONICS ENGINEERS

3 MR. BERGER: Thank you very much, Mr.
4 Chairman. I appreciate this opportunity to address
5 the Commission.

6 I got involved in this process in 2001. I
7 have a professional background in telecommunications
8 development of standards particularly for regulatory
9 purposes and then qualification of products to ensure
10 that they meet the requirements.

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1 From that background I've been involved
2 for some time in the IEEE Standards Association. The
3 IEEE is the largest standards' body in the U.S., I
4 believe, if not the largest one of them. We operate
5 under American National Standard processes to develop
6 consensus documents that represent the center of
7 technical thinking on any given subject.

8 After the 2000 election, some of our
9 members approached the Standards Association
10 essentially saying they felt the engineering
11 community needed to contribute what it could to the
12 improvement of the system.

13 We certainly agreed and started a
14 standards project at that point which continues to

15 this day. There are four things I would like to
16 primarily say to the Commission this morning.

17 The first is, as I've been involved in the
18 system, one of the very pleasant experiences is to
19 realize the tremendous contribution that's been made
20 to the system that we've inherited.

21 A number of people, deeply committed to
22 our Democracy, have worked tirelessly to deliver the

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1 system that we have today. There is a lot of value
2 there. To be sure, it can be improved but there's a
3 lot to be appreciated and protected.

4 So I would commend to the Commission to be
5 very careful to retain the value that's been
6 delivered to us by those who have worked in days
7 before.

8 Secondly, and almost as a corollary to
9 that, I would observe that probably all the easy
10 problems have been solved. What remained are complex
11 compromises against often-competing requirements. We
12 certainly, as Dr. Rubin has said, want systems that
13 are secure, but also are accessible to people with
14 disabilities that have reliability but could be
15 actually afforded in budgets of jurisdictions all

16 across this country.

17 We received today compromises in those
18 competing requirements. We look for better
19 improvements. Innovation could allow us to more
20 satisfactorily address competing requirements.

21 I believe the best approach to achieving
22 that, as you have already identified, is consensus

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1 processes where we bring together expertise from
2 various fields and allow all the stakeholders to
3 input to the process.

4 Let me say a few words on where we are in
5 standards in this area. As you well know, in 1990
6 the FEC established the first National Standard for
7 Voting Equipment. It was a tremendous contribution.
8 For the first time there were recognized requirements
9 across the Nation for our voting equipment.

10 Those standards didn't do everything to be
11 sure, but they made an important and large first step
12 in the process of unifying requirements.

13 Standards themselves don't do everything.
14 They have to be addressed into a quality system that
15 implements and monitors their effect and sees that
16 the desired outcome is achieved. And so we have

17 today the ITA system supervised by NASA that
18 implements the standards.
19 Of course in 1998 the FEC staff revised
20 the standards for the 2002 version, which is in force
21 today. We met with the staff shortly after that
22 document was revised and all agreed there was further

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1 work to be done.
2 There were areas that could use yet
3 further development, particularly in the areas of
4 security, useability, disability access, and others.
5 And those are the focus of the IEEE effort today.
6 Two other comments I would make is that,
7 as we consider the voting system and the quality
8 system, if you will, it is important to recognize
9 that there are four levels that need to be addressed.

10 Certainly there are national requirements
11 such as we have today in the 2002 FEC Standard and
12 the ITA testing to that standard.

13 Then in every state there is a second
14 level of inspection as the states individually
15 evaluate the equipment for use in their own
16 particular use and style.

17 Following that, there is a third level of

18 acceptance testing to ensure that the equipment
19 delivered was represented in that that was evaluated
20 at the state and national level.

21 Finally, there is the Logic and Accuracy
22 Testing to ensure that the equipment on election day

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1 is functioning properly and accurately. Standards
2 are needed at all those levels, and I would encourage
3 the Commission to pay careful attention to deal with
4 all four of those levels. Some of them have had a
5 great deal more attention than others.

6 It is also important in this area to
7 encourage innovation, but as in all important areas
8 of technology to have a carefully considered way for
9 introducing innovation.

10 We need very much a way of introducing
11 innovation that puts it through careful evaluation,
12 trial, development of specifications to safeguard
13 against possible vulnerability, and in phased
14 deployment so that we guard the system against
15 unintended consequences.

16 That does not exist in a unified way
17 today, and is very much needed.

18 So I will close with that introduction to

19 my comments. There is more detail in the written
20 version, but I thank the Commission for this
21 opportunity to address you.

22 CHAIRMAN SOARIES: Thank you very much,

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1 Mr. Berger.

2 Dr. Selker.

3 STATEMENT OF DR. TED SELKER

4 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

5 DR. SELKER: I am Ted Selker, and I am a

6 Professor at MIT at the Media Lab. I have been

7 involved with making many products at IBM, including

8 an accessibility package for the OS2 Operating

9 System, which has tens of millions of lines of code.

10 David Baltimore from Cal Tech and Charles

11 Best got together after the election in 2000 and

12 said, you know, maybe the technologists can help.

13 And in creating this forum for political scientists

14 and computer scientists and other technologists to

15 get together, we all learned from each other.

16 The most exciting thing we learned was

17 that in fact the electronic technology that is most

18 useful right now for understanding this stuff is the

19 Internet. We found that lots and lots of the data,

20 the forensics is public data and it is available on
21 the net, and we have done lots of studies to learn
22 such things as that the registration data base

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1 problem is the largest problem in how we lost our
2 votes in 2000.

3 Probably between 1.5 and 3 million votes
4 were lost because registration data bases are in
5 error.

6 We don't have any way of checking how many
7 New Yorkers are registered in Florida. In fact, it
8 is not illegal. We don't know how we are choosing
9 who we are going to check the registration data base
10 and eliminate possible people that are not supposed
11 to be voting.

12 I don't know any changes that have been
13 made systemically, or even best practices, as a
14 result of the well-reported problems of Florida in
15 2000.

16 As we go through and understanding that a
17 lot of what's been going on is we've been starting
18 with assumptions. Many people have been spouting off
19 about technology and problems with technology and
20 other things in elections. That's not new. But we

21 have to replace that with testing.

22 What is exciting about the more data that

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1 we have today is that testing is more feasible. We
2 really want to make these standards performance-
3 based. We want them to be better than they were
4 before, as a criteria.

5 If we look at the goal of protecting,
6 detecting, and correcting problems we have ways of
7 detecting the kinds of fraud that I'll be talking
8 about.

9 Parallel testing is the mechanism by which
10 you run elections, phantom precincts on the day of
11 elections using actual machines and show that the
12 input equals the output.

13 In many case, voting machines don't have
14 clocks in them. I just checked over a machine from
15 Ireland that did not have a clock in the machine.
16 That simplifies various aspects of the testing.

17 It does not mean that somebody couldn't
18 get a foundry, build a chip, put a battery inside
19 with what looks like an E-prong and put that into the
20 ballot module so that it could have a clock and know
21 to expose its Ester DG (?) on the day of election.

1 defrauding elections that might be easier. So that
2 is not the most expected approach for causing that
3 kind of mischief.

4 The real center of my comments probably
5 has to do with how do we vet the qualifications of
6 the people that we need to help us through this
7 process. We have to develop experts, experts that
8 can be trusted, experts that can help the EAC, I
9 hope, figure out what is good and what is wrong, what
10 are the critical things that have to be improved,
11 experts that can help the people that are making
12 decisions about what equipment to buy.

13 These local election officials today have
14 all sorts of problems. If you take a look at the
15 useability problem--and I'm an expert in
16 useability--if you take a look at the 13,000 ballots
17 that were thrown out for over-votes in Palm Beach
18 County in 1996, the Democrats and the Republicans
19 signed off on that butterfly ballot.

20 In 2000, again the Republicans and the
21 Democrats signed off on it. There were only
22 19,000--it was 300 or so ballots that had chad

1 problems. There were 19,000 over-votes because of
2 the design of the ballot.

3 Probably one percent of our electorate was
4 lost because of bad ballot design in this country,
5 and I don't know of anybody that is saying: How do
6 you run a simple test to see if this ballot is good?

7 Polling place practices were equally
8 flawed. I have watched polling place practices where
9 people teach their officials by telling them, or
10 teaching them concepts. Others by procedures. We
11 know that we have simple procedural understanding and
12 simple things to go on. You can make better choices.
13 One million votes were lost that way.

14 But I shouldn't dwell on these non-
15 technical matters. Let me just say that I believe
16 that the elections over the last few decades have
17 reduced the errors and the failures gigantically over
18 what it was before.

19 We don't have enough data to do more than
20 state it. We can show some examples. But in fact we
21 have to figure out how we move forward. As we look
22 at the machines that we are testing today, we are

1 thinking: Well, can we rely on parallel testing?

2 The doomsday scenario that people are
3 terrified of is what if we had to run another
4 election? Well people have had to run other
5 elections when they've had troubles in the past, but
6 if we refuse to take that we can go for verification.

7 Verification is an important idea. The
8 question is: Can people improve the election through
9 verification?

10 Now I know of no study--in fact, the most
11 recent one that I've been involved with, we had 3
12 people out of 1000 making mistakes when there was 1
13 person doing the task, a second person watching over
14 their shoulder and signing each time they did the
15 task that they had done it right, and the third
16 person doing the same thing.

17 Still, there was a .3 percent error. This
18 is an unacceptable level of error for testing for
19 fraud or for testing voting kinds of equipment.

20 The question is: If we had a perceptual
21 task--I'm in favor of having a task such as redundant
22 information. It uses the already available

1 electronics inside of the DREs of today. You can
2 produce an audio. That audio can be heard while
3 you're making the decision--a perceptual task that
4 happens while you're making the decision is one that
5 people universally can do. Cognitive and memory
6 tasks, you act after you vote by looking at another
7 action, another piece of paper, are not so easy.

8 In Wilton, Connecticut, where they tried
9 it, they had terrible problems. Twice as many ballot
10 workers. Twice as long for the voters. People, the
11 exit polls did not show confidence in the system.

12 So I am very excited about using a tape
13 recorder with a separate record and playback head.
14 You play back something that's already been recorded
15 onto it. If somebody tries to erase that, that tape,
16 you have integrity. We'll all remember that 19
17 minutes of erased tape for a long time.

18 In Wilton, Connecticut, there were
19 actually slots at the bottom of the ballot box that
20 the ballots could fall out. We're talking about the
21 first time in a very visible place where voting
22 verified paper trails were tried.

1 So I believe that audio verification is
2 available today. It is available with equipment that
3 we own, and it can do a better job in helping people
4 verify and validate that they have voted the way they
5 want.

6 The best thing about it, as well, is that
7 it can be read by a computer and by a person. This
8 is not true of most of the technologies that people
9 are considering today.

10 We don't know how to count receipts at the
11 100,000 level that we've tried to specify for
12 election equipment. I'm not sure that I should go on
13 very much longer. I just want to thank you all for
14 being here and I would welcome any questions.

15 CHAIRMAN SOARIES: Thank you so much.

16 Dr. Williams.

17 STATEMENT OF DR. BRIT WILLIAMS

18 KENNESAW UNIVERSITY, GEORGIA

19 DR. WILLIAMS: Well I'd like to thank you
20 for that glowing introduction. I wish my president
21 had been here to hear it.

22 (Laughter.)

1 CHAIRMAN SOARIES: You do fine with your
2 president.

3 (Laughter.)

4 DR. WILLIAMS: I think the one thing that
5 we all agree on is that there is ample room to
6 improve our existing voting systems, and that is the
7 goal that all of us have got before us.

8 But we have to keep in mind in doing that
9 that there are a lot of aspects to a voting system
10 other than just accuracy and security. We have got
11 to look at availability. We've got to look at
12 reliability, maintainability, useability, and even
13 affordability.

14 We could build the quintessential voting
15 system, but if nobody can afford to buy it it is a
16 futile exercise. So any change to a voting system
17 has to be evaluated on the basis of its impact on the
18 entire system, and I think that is the whole purpose
19 of the formation of this Commission.

20 What we need to guard against I think is
21 the tendency to go out and do something quick and
22 dirty that is a rapid, poorly formulated addition,

1 such as a paper receipt for instance, to an existing

2 voting system could have an adverse effect that far
3 offset any of its advantages.

4 And furthermore, actions like this are
5 unnecessary because we're not in any eminent danger.
6 To do the kinds of things we're talking about here is
7 not going to be fast. We're not going to implement
8 Dr. Rubin's recommendations in the short term.

9 In the short term--and by "short term,"
10 I'm really talking probably four to six years--we're
11 going to have to dance with them what brought us.
12 And so we really need to look at what we can do with
13 our existing voting systems to compensate for these
14 vulnerabilities that we know are there.

15 I agree with Dr. Rubin that you can't
16 compensate for them 100 percent, but nobody
17 guaranteed me that that airplane I'm flying home on
18 is 100 percent safe, either.

19 So in that spirit, one of the hardest
20 things I have had to do--I submitted this long
21 discourse to you--and one of the hardest things I've
22 had to do is to say, now what am I going to use this

1 little precious seven minutes to talk about?

2 So what I've decided is to look at some

3 recommendations, some things that I think we can do
4 based on our experiences in Georgia that maybe we can
5 carry nationwide that would shore up some of the
6 immediate problems that we've got to deal with in
7 order to run elections in 2004 and 2006.

8 The number one recommendation I have is to
9 implement a nationwide secure voting system software
10 library. NIST currently has a secure law enforcement
11 software library. They use that, or the way that
12 library works is that if you have law enforcement
13 software, you submit it to NIST. NIST puts it in the
14 secure library. They compute a hash signature on
15 that, and then that signature can be used in a court
16 case or in a challenge to verify that software that's
17 in use in the field is in fact unaltered from the
18 software that's in that software library.

19 I think we could very quickly extend this,
20 since that technology is already in place, we could
21 very quickly extend this to voting system software.
22 The way it work would be that when the ITA completes

1 their qualification of a voting system, they submit
2 the software, not the vendor, but the ITA submits to
3 NIST for the secure software library the exact system

4 that they've just finished qualifying.

5 Then from there on, NIST handles it the
6 way they handle the law enforcement software. If
7 there's a challenge to that software, or if any
8 jurisdiction has any concerns about the validity of
9 their software, they could get that signature from
10 NIST, run the same signature against their own
11 software, and verify that there's been no
12 modification to the software they have.

13 We do that in Georgia. When we bring a
14 system into Georgia, we give it a software from the
15 ITA, not from the vendor, and we compute a hash
16 signature that I believe is the same identical
17 signature that NIST uses. It's in the paper I
18 submitted to you.

19 Then on a period and on a random basis
20 when we have people out in the field, we run
21 signatures against the installed software to verify
22 that it has not been altered from the software it is

1 served by. So this is something that the mechanics
2 and the mechanisms are in place.

3 Now there's a lot of software out there,
4 so I'm not suggesting that we go try to round it all

5 up. What I'm suggesting is that we start with the
6 new systems coming out. And then as jurisdictions
7 request to add new systems to the systems, to that
8 library, so that if a jurisdiction is running say a
9 version of ES NIST software and they want to include
10 it in the library, then they give NIST--they identify
11 it uniquely to NIST using either the qualification
12 number or the vendor version specific numbers.

13 NIST obtains that from the ITA's archives
14 and implements it into the secure library. The
15 second recommendation I have is probably as equally
16 important, but a little part of it is not going to be
17 as easy to do.

18 If you go and look at anomalies that have
19 occurred in recent elections, you will find almost
20 without exception that those could have been maybe
21 avoided, and at least minimized, by well trained poll
22 workers or well trained election officials.

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1 Poor ballot design leads to all kinds of
2 problems. Poorly trained poll workers, where things
3 that could have been a simple problem escalate
4 because the poll worker didn't know how to handle it
5 quickly on the spot.

6 So to that end, again in Georgia--and
7 Kathy Rogers in her presentation is going to go into
8 some more detail on this program--we've developed a
9 64-hour program of training, and we have a State law
10 now that says by I believe it's 2005 that every
11 county office has to have a State-certified person in
12 that county office. That is, someone who has
13 successfully completed our 64-hour training program.

14 Now all states probably can't do that, but
15 all states have universities that have departments of
16 continuing education, and all states have technical
17 institutes. Maybe this Commission could give block
18 grants to those institutions to develop specific
19 programs for those local jurisdictions--not
20 generalized, here's generally how you run an
21 election, but here's how you run an election in this
22 county under these State laws with this equipment,

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1 similar to the program we have in Georgia.

2 Now that's going to require some
3 additional documentation. Already the Office of
4 Election Administration out of your office has done a
5 lot of work in developing generalized election
6 management type documents.

7 What we need now is some way to take the
8 vendor documents and customize those into specific
9 documents that can be used by localities. Mostly
10 it's a cut-and-paste kind of thing, because the
11 vendor document has got every feature of the system
12 in there and nobody implements every feature of the
13 system.

14 So what you need is to pare those things
15 down, and then turn them into specific documents.
16 Here's the document for the person who is going to
17 build the ballots. Here's the document for the
18 person who's going to train poll workers. Here's the
19 document for the precinct manager.

20 I will stop at that. I very much
21 appreciate the opportunity to talk to you today, and
22 I look forward to working with you.

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1 CHAIRMAN SOARIES: Thank you, so much.
2 Let me just share how much I appreciate your
3 discipline. We know that you have so much to say and
4 to offer, but you have given us time to ask you
5 questions and you have left room for the other panel
6 and I really appreciate that. But you have said so
7 much that I hope you know that we will be calling

8 you.

9 Our questions will be led by Commissioner
10 Martinez.

11 COMMISSIONER MARTINEZ: Thank you, Mr.
12 Chairman.

13 Let me add my thanks to all of you. I
14 appreciate your time and your commitment to be here.
15 Your verbal and written testimonies I think are very
16 much on the mark of what we were looking for in this
17 first public hearing.

18 Let me--what I will do is I will just ask
19 questions in the order that you all spoke. To the
20 extent that you can keep your answers to a relatively
21 short response so that I can leave time for my fellow
22 Commissioners to also ask you questions, but I do

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1 have specific questions as I've had a chance to take
2 a look at your submitted testimony, et cetera.

3 So I will start, Dr. Rubin, if I could
4 with you. Thanks again for being here.

5 Ever since I was approached about serving
6 on this Commission, and perhaps even before then, but
7 certainly since around March of last year, I have
8 followed very intensely the debate that mostly rages

9 in the media between computer scientists and election
10 administrators.

11 It seems that even up to this very day
12 that computer scientists are talking at and over
13 election administrators and the same is coming back
14 at you.

15 I am interested, Dr. Rubin, my first
16 question is just to get--you served as a poll worker
17 and wrote I think a very interesting and compelling
18 account. It sounds like you did it at 5:00 o'clock
19 in the morning, so I applaud you for doing that, but
20 I think I read it actually at 5:00 o'clock in the
21 morning. But give me just your general impressions.

22 I know what your conclusion was, and I

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1 read through your essay about that particular
2 experience. I mean you have entered--you know, what
3 you did is you took off the hat of computer scientist
4 and entered the world of essentially election
5 administration for a full day. I think you served
6 the entire day as a poll worker.

7 Talk a little bit about your general
8 impressions. What did that experience impart to you?
9 What has changed in your view in terms of the

10 vulnerabilities of DREs, and what has reinforced your
11 view of those vulnerabilities?

12 DR. RUBIN: Okay, one of the big
13 criticisms that I received from a lot of people after
14 our report came out was that I didn't know that much
15 about elections, that I was a computer scientist and
16 I needed to learn about elections, and I thought that
17 that would be a very good way to do it. So I
18 volunteered and served as an election judge.

19 It was interesting to me that the machines
20 in the site where I was were the very machines that I
21 had analyzed the code for. It was a very unusual day
22 for me because I saw voters coming in and universally

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1 liking the machines. They really liked them, which
2 told me that there is something good about the design
3 here, something good about the human factors here and
4 that we need to preserve that, and I think these
5 comments were made earlier about preserving what is
6 good.

7 At the same time, I felt a little nervous
8 and almost hypocritical supervising machines that I
9 knew were not secure and that I was concerned would
10 not operate properly.

11 In the statement that I wrote up that you
12 referred to, I did mention that the experience
13 focused my opinion both on things that I had thought
14 were problems before that I thought were less of a
15 problem in practice, and things that had not occurred
16 to me that I viewed as being more serious problems in
17 the experience.

18 So what it did was, it was an excellent
19 thing for me to do because it focused me on what was
20 a realistic evaluation. I think ever since that
21 experience I've been able to speak with a lot more
22 authority about the security issues in these

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1 machines.

2 One of the issues that we brought up in
3 our report was the fact that, when looking at the
4 code in the computers--and those of you who are
5 familiar with these computers know that you take a
6 smart card which has a ballot on it, and you put it
7 in the machine and it's designed to prevent you from
8 voting more than once.

9 Given that a smart card has a chip on it
10 and some protected storage, there are ways--and we
11 know in my community how to do that--and they didn't

12 do it right. It was actually as bad as you could
13 possibly imagine. No cryptology. No authentication
14 whatsoever. They could have been using matched
15 stripes for all they did with that. So we wrote
16 about that.

17 When I served as a poll worker, I was in a
18 precinct that had nine election judges and five
19 machines. In the entire day, 16 hours, we received
20 199 votes.

21 So when somebody went up to a machine and
22 voted, the card was knocked out and there was a loud

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1 clicking sound, and we were already heading towards
2 them to take it away and thank them for voting and
3 give them a sticker, et cetera.

4 The attack we designed in our paper was
5 one where you could manufacture your own smart cards,
6 walk up to a machine and vote 20 times. Now in my
7 precinct that would not have worked, and so I pointed
8 that out in my statement that I wrote up.

9 However, one of the things I also noticed
10 was: At the end of the day the memory cards in each
11 computer were collected that had the tallies on them,
12 were taken out of all the machines after the totals

13 were printed up, and then put into one machine and
14 they were accumulated there together.

15 As a computer security person, I always
16 look for the point of highest vulnerability, and I
17 thought that was it because that was the point where
18 we had all the votes on one machine, and then they
19 were supposed to get modemed back to the back end
20 servers at the Board of Elections, or wherever they
21 go.

22 Now that was another part of the code that

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1 we had analyzed, and they did the cryptography on
2 protecting that communication incorrectly. They used
3 a broken site in a mode that's insecure, so even had
4 it not been broken it would have been bad, and they
5 used one key that was hard-wired into all of the
6 machines, which is a no-no in computer security.

7 And so I became concerned thinking that,
8 you know, here we have something completely
9 ephemeral, these bits that are representing all of
10 the votes and, as a security person, that made me
11 very nervous.

12 I actually at the symposium that NIST put
13 on, it was when one of the secretaries of state that

14 was there came up and told me that I really should
15 serve as an election judge, I'm very, very grateful
16 for that advice. So I think, you know, that that
17 summarizes the experience. It's really helped me
18 focus a lot.

19 COMMISSIONER MARTINEZ: So is it possible
20 for election administrators to be a computer
21 scientist for a day?

22 DR. RUBIN: That would be harder.

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1 (Laughter.)

2 COMMISSIONER MARTINEZ: That's harder to
3 do.

4 DR. WILLIAMS: Could I speak to that just
5 a minute?

6 COMMISSIONER MARTINEZ: Yes.

7 DR. WILLIAMS: That perception is not
8 quite accurate. Those votes that are accumulated on
9 that accumulator are for press release purposes only.
10 The official tally is done from the individual cards,
11 from the individual machines. They're taken back to
12 the central location, not transmitted by modem. That
13 accumulation in that modem transmission on election
14 night is purely for the benefit of the press and so

15 forth. The official tally is conducted from the
16 individual voter cards in the county office the next
17 day.

18 COMMISSIONER MARTINEZ: Thank you, Dr.
19 Williams. And I am going to ask you to follow up,
20 Dr. Rubin, so if you want to respond to that you can
21 do so.

22 DR. RUBIN: I appreciate that opportunity.

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1 It is very interesting. You asked what were my
2 impressions and my feelings.

3 COMMISSIONER MARTINEZ: Yes.

4 DR. RUBIN: I've dealt with PCMA memory
5 cards, the ones we're talking about, very often and
6 the thought that from when the voters came in until
7 those cards were removed from those machines, there
8 was no physical record of those votes is what made me
9 very uncomfortable that day.

10 COMMISSIONER MARTINEZ: I see. Dr. Rubin,
11 generally speaking what are the types of--and I don't
12 know if you can do this without speaking the computer
13 scientist language which would go over my head,
14 unfortunately, but what are some of the general types
15 of security threats, the risks that you've identified

16 in the machines that you've looked at?

17 And if you can, what's the likelihood of

18 such a risk occurring?

19 DR. RUBIN: Okay, there are two different

20 levels to answer this on. One is specifics of the

21 Diebold Acuvote TSX, which I think are less

22 interesting because that's one machine that's

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1 received a lot of scrutiny and I think there is the

2 issue of security of DREs in general.

3 COMMISSIONER MARTINEZ: Sure.

4 DR. RUBIN: And I'd rather address the

5 second one. If you want me to address the first one,

6 I--

7 COMMISSIONER MARTINEZ: The second is much

8 more appropriate.

9 DR. RUBIN: My biggest concern is that in

10 a very large trusted computing base the threat that

11 somebody with access to the development environment

12 of the code base--typically the vendor--basically is

13 in a position to make the outcome of the election

14 come out however they like. And they can be

15 infinitely clever about how they do this, and it's

16 virtually undetectable.

17 So let me give you an example that comes
18 to my mind. Say that I am malicious and I am hired
19 by a vendor to build a voting machine and I'm one of
20 the programmers on it. I embed malicious code in
21 there that actually does nothing until something
22 happens. The thing that has to happen is a voter has

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1 to walk in and touch the touch screen in a very
2 unusual fashion, say put four fingers on the screen
3 three times in a row. Call it the knock. And when
4 that happens, the machine changes its behavior and
5 takes the internal votes and shifts five percent of
6 them from one candidate to another. In addition to
7 doing that, then removes itself, removes the
8 malicious code from the machine.

9 To try to figure out how realistic and
10 difficult that was, I teach a graduate course in
11 computer security at Johns Hopkins and this past
12 semester I had 40 mostly Ph.D. graduate students
13 build mock voting systems and embed back doors in
14 them with a secret knock.

15 They did that for half of the semester,
16 and the other half they received each other's--they
17 received several machines from other classmates not

18 knowing if we had given them one that had a back door

19 on it or not.

20 I was astounded to see the cleverness and

21 the ease with which the malicious code was hidden,

22 and how difficult it was to find.

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1 The last part of your question is: What

2 is the probability that something like this would

3 happen? I believe that we have to look at the

4 incentives out there to tamper with the election.

5 You've got billion dollar contracts

6 dependent on the outcome of elections, and so I think

7 we've got very well funded and bad intentioned

8 adversaries to worry about.

9 DR. SELKER: Could I respond to that?

10 COMMISSIONER MARTINEZ: Dr. Selker, sure.

11 DR. SELKER: That particular idea of

12 having a funny user interface that somebody could

13 walk into is an extremely labor-intensive way to

14 change votes. That means that somebody will have to

15 go into a balloting booth in many, many places to

16 make a change. Unless, you know, maybe for a water

17 district it might be worthwhile, but for other things

18 it isn't.

19 So the leverage of the attack is really
20 one of the things that Avi and many of us have
21 focused on. So the thrust that I'm most concerned
22 about are ones that are systematic that will be part

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1 of the whole system and will affect large elections.
2 And those ones can be tested for by parallel testing
3 and even before elections, and as well for the code
4 that persists after elections. And some of the
5 threats can be detected with other means as well.

6 COMMISSIONER MARTINEZ: Very quickly, Dr.
7 Rubin, back to you, and again as I ask you one more
8 question and then you can respond if you want to to
9 what Dr. Selker said.

10 And I do have other questions, and I am
11 running out of time unfortunately, but Dr. Rubin in
12 the continuum that you've described from one being
13 terrible to ten being very, very good, if in the
14 interest of our Democracy you and Diebold decided to
15 go into business together, what could we do to move
16 up that spectrum?

17 If you were advising Diebold, and I guess
18 you have suggested some things already, but just for
19 the record what are some things that--and I don't

20 mean Diebold specifically, I mean to stick with the
21 general DREs--what are some things that can happen?
22 I guess I'm trying to get to: From your perspective,

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1 and I know there are some who believe this, but from
2 your perspective is a voter-verifiable paper ballot
3 the only way to fully secure--again understanding
4 that we could never have a 100 percent fully secure
5 system--but is that the only answer, is what I'm
6 trying to get to, from your perspective.

7 DR. RUBIN: I believe there's a short-term
8 answer to that and a long-term answer.

9 I think in the short term, meaning
10 November 2004, that a voter verifiable paper ballot
11 is necessary because it's the only way to get around,
12 it's sort of an end-run around all of the security
13 problems in the machines.

14 If the voters see their paper, and if it
15 is implemented correctly, and that is the ballot the
16 way they meant to vote it, and that is kept, then we
17 can have recounts. We get around the problem of not
18 being able to audit with recounts.

19 Then the voters have some confidence that
20 they're leaving the poll place with something behind,

21 which is their vote exactly the way they voted it. I

22 do believe that in the long, long term we should

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1 explore other cryptographic options and combinations

2 of techniques.

3 I happen to think that the most bang for

4 the buck you can get is by adding paper, voter

5 verifiable paper, into the process because it avoids

6 so many pitfalls. Then the challenges are to design

7 the system so that it works so that, you know, you're

8 not dealing with paper jams.

9 I think I am much more worried about a

10 poll worker dealing with a very bad software bug on

11 election day than a jamming printer.

12 CHAIRMAN SOARIES: Commissioner Martinez,

13 if the other Commissioners are going to ask this

14 panel questions they've got to start now.

15 COMMISSIONER MARTINEZ: Okay. Thank you.

16 CHAIRMAN SOARIES: Commissioner

17 DeGregorio.

18 COMMISSIONER DeGREGORIO: Thank you, Mr.

19 Chairman. I know that because of limitations in time

20 I won't be able to ask each panelist a question, but

21 let me ask Mr. Berger who has been involved in the

22 Standards' process for many years, as he described,

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1 and is a representative of IEEE and will be on the
2 Technical Guidelines Development Committee that will
3 be set up very soon to look at the standards that
4 this Commission will adopt eventually.

5 I am concerned because it is my
6 understanding that the 2002 Standards that were
7 developed by the FEC that you had a hand in--they
8 were updated--that there are very few systems out
9 there that meet those 2002 Standards right now.

10 What can you tell me that would encourage
11 me that these vendors of this equipment will be
12 tested and will meet these 2002 Standards for the
13 2004 election?

14 MR. BERGER: Well as you very well point
15 out, there is a process. You have to have
16 specifications. The vendor has to have time to
17 respond to them. And then their offerings have to be
18 evaluated, be certified, and then acquired and
19 deployed.

20 That takes time. It is something that
21 every field has. In this particular case, I think
22 one of the best features to put in the system is

1 fully engaging the vendors in the development of
2 those specifications.

3 We certainly don't want to turn over the
4 system to the vendors but they know what they can
5 implement quickly and what they can't. They have
6 insights as an important stakeholder to the process,
7 but perhaps most importantly if you use a consensus
8 process and the vendors see the handwriting on the
9 wall, if you will, the experience in many areas is as
10 the standard works through its final approval process
11 and implementation the vendors are very busy in their
12 product development having products ready for market.

13 That very often stands in contrast to
14 processes where you somewhat hold the development of
15 specifications behind closed doors, and then you
16 serialize that process.

17 I'd like to add a comment if I may,
18 quickly, to the previous discussion. It would simply
19 be this: We need to look around for other fields
20 that have something to offer in the issues we were
21 just discussing.

22 In an election audit, we are essentially

1 involved in an historical research. We are trying to
2 determine what the voter did at a point in time.
3 Recent history, to be sure.

4 It is well established in historical
5 research that you have the highest confidence that
6 you understand what occurred by multiple independent
7 witnesses and accounts that have been kept separate
8 so that they don't influence one another. That is a
9 principle that I think we need to think carefully
10 about in this field; that as quickly as possible, and
11 as independently as possible, we have independent
12 records of what the voter does so that audits can
13 compare separate accounts. That's a well established
14 principle, and I think it avoids the kind of
15 bottlenecks that Dr. Rubin pointed to.

16 CHAIRMAN SOARIES: Commissioner Hillman--

17 COMMISSIONER DeGREGORIO: One last
18 comment, Mr. Chairman, while I have the floor--I'm
19 going to steal the floor--

20 (Laughter.)

21 COMMISSIONER DeGREGORIO: --but I just
22 want to compliment Dr. Rubin for working at the polls

1 and joining the ranks of the million Americans or so
2 out there who work at the polls.

3 I read your commentary the next day, too,
4 and it wasn't five in the morning, but it may have
5 been eight o'clock in the morning, because I know
6 that when I was an election director we had
7 difficulty recruiting good workers.

8 I encourage everyone in this room to work
9 at the polls, if you can, and the media out there to
10 encourage people to become poll workers.

11 I know Ted Selker and I spent 15 hours at
12 the polls in Los Angeles last October, and so I think
13 it is important for people in the academic,
14 scientific, media, to get it from the inside and work
15 at the polls.

16 I do have one concern, though, when I see
17 emails that go out to encourage people to be poll
18 workers to not be real poll workers but to subvert
19 the system. I'm not suggesting that at all about you
20 or anyone else here, but I have seen some of that go
21 on in the past few weeks and it does concern me that
22 people are out there to pretend to be poll workers

1 but really want to subvert our electoral system and
2 process.

3 Thank you, Mr. Chairman.

4 CHAIRMAN SOARIES: Vice Chair Hillman.

5 VICE CHAIR HILLMAN: Thank you.

6 I have two questions, but one I would like
7 to ask each of the panelists to submit your response
8 in writing. That is, on the issue of a way for the
9 voter to verify that their votes were recorded
10 correctly.

11 I would just like to see from your
12 perspectives the difference between--I obviously know
13 how you can do it with a paper ballot--but with the
14 lever machine, the Opti Scan, and the DREs, the voter
15 verification question. Because I'm not seeing in my
16 mind the difference between the lever voting, which
17 has been used for decades, and the DRE once you hit
18 that lever and push that button it's been gone. So
19 for 90 years the issue wasn't discussed, and now it
20 is. So that will help me.

21 DR. SELKER: Could I speak to that for a
22 moment?

1 VICE CHAIR HILLMAN: Well I do have
2 another question, but if you could just submit your
3 responses to me, just a one-pager would be fine, I
4 would really appreciate that.

5 My other question: Dr. Williams, if you
6 could just briefly share your observation and your
7 thoughts about the role that the independent test
8 agency plays in this whole discussion about the
9 certification of the machines, and that as a useful
10 tool and any suggestions or thoughts that you would
11 have to the Commission about the work of that agency.

12 DR. WILLIAMS: Well of course one thing
13 they do is give us a uniform starting point.

14 CHAIRMAN SOARIES: Hold on, Doc. If you
15 could just pause so that the microphone can go up,
16 that way people can hear the first part of your
17 statement.

18 DR. WILLIAMS: Is it on now?

19 VICE CHAIR HILLMAN: It is.

20 CHAIRMAN SOARIES: There's a little time
21 delay here.I

22 DR. WILLIAMS: It gives us a uniform

1 starting point. I've got on my desk the 1990

2 Standard and the 2002 Standard, and when the ITA
3 tells me that they have evaluated a system with
4 respect to one of those two Standards, then I know
5 what that means. I know what they've done to it. I
6 know what the system had to do to come through that.

7 It tells me, for instance, that the system
8 is reliable; that the system is maintainable, that
9 the components in its are quality components; that
10 the engineering that went into it is quality
11 engineering; and that the functionality of it is a
12 voting system.

13 It also tells me that it has been at least
14 looked at from a cursory basis from the point of view
15 of security and fraudulent code and those kinds of
16 things.

17 Now, you know, every time you say that
18 everybody goes (fluttering hands) ohhhhhhh, you know,
19 you can't do that. Well, no, you can't. There's no
20 such thing as a 100 percent secure system of any
21 kind. But the more it is looked at by the ITAs and
22 so forth, it raise your confidence level.

1 So their evaluation brings your confidence
2 level in the system up to a point.

3 Then the next step in the Standards, and
4 we think, when we talk about the standards we tend to
5 talk about them as if they were federal-level
6 standards; they're actually standards at three
7 levels. That second level, then, is state
8 certification.

9 The next thing a state should do is bring
10 that qualified system into the state and do a review
11 on it at the state level, number one, to see if there
12 are any peculiarities in the state law, the state
13 code, the state regulations that need to be examined
14 that the ITA didn't examine.

15 Pennsylvania, for instance, has a very
16 unique way of voting, changing your vote in a multi-
17 member straight-party election called "The
18 Pennsylvania Method." No other state does it that
19 way.

20

21

22

1 DR. WILLIAMS: And then you should always
2 look at the system from the point of view of
3 usability and affordability at the state level

4 because the ITA's do not consider these two hardly at
5 all.

6 And certainly not affordability. They
7 don't even know what that costs. That's strictly a
8 local concern.

9 VICE CHAIR HILLMAN: Is that a transparent
10 process? I mean, would most people who would want to
11 know how the ITA is doing this process, is it
12 transparent to us or to elections administrators?

13 DR. WILLIAMS: Yes, I think it is. I
14 mean, certainly this is not any kind of secret
15 proprietary process. The standards are yours. They
16 are EAC standards. And the ITA's are intermediaries
17 for an asset.

18 Now, the problem you run into is how do
19 you fund this thing? See, we have no money.

20 So the way it's funded is the -- contracts
21 with the ITA for the evaluation. So up to the point
22 where that evaluation report is released, that's a

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1 propriety relationship.

2 Now, once that report is through, it
3 becomes pretty much a public document although
4 officially it belongs to the vendor to pay for it. A

5 vendor would have to be out of their mind to refuse
6 to give it to you.

7 I mean, so those are very available. And
8 you can. Yes, it's a very open process.

9 VICE CHAIR HILLMAN: Thank you.

10 CHAIRMAN SOARIES: Thank you. I've got
11 two quick questions.

12 We did inherit FEC standards. And we are
13 working hard to position ourselves to enhance the
14 standards pursuant to many of the principles that you
15 made clear today.

16 I think we have to acknowledge as often as
17 we need to today that all of this costs money. And
18 I've been pressed by the media particularly to find
19 out what happens next. And just to give you just a
20 preview of what we'll say after this over, we've got
21 to raise money.

22 All of this costs money. And I know if

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1 there's one thing we'll all agree on from every
2 perspective today -- that we need money to invest in
3 this process. So we do value the work that's been
4 done because much of it has been done by volunteers.

5 I don't know how many of you were involved

6 in the development of the '90 standards and then the
7 update to '02. But I'm just curious to know -- maybe
8 you, Mr. Berger, would know -- in the '90s there was
9 reference to a standard for paper verification. And
10 the '02 standard there's no such thing.

11 I'm just wondering if it was an oversight.
12 Was there a conscious decision made to make no
13 reference to paper verification in '02? What --

14 DR. WILLIAMS: I don't recall that as a
15 conscious decision. That's something we could talk
16 with Penelope about. You know, Penelope was the
17 editor-in-chief of that.

18 But I don't remember any discussions in
19 any of the meetings I was in where a conscious
20 decision was made to leave that out. It sounds like
21 an oversight. CHAIRMAN SOARES: Okay.

22 MR. BERGER: I'll just say that I got

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1 involved late in the process as the -- became
2 engaged. There was a mature draft at that point. We
3 took it and brought as much reflection and
4 recommendation to it as we could from the membership.

5

6 I don't recall any discussion of this

7 point either from the FEC or from any of our
8 reviewers. It didn't seem to be an issue at that
9 time.

10 CHAIRMAN SOARES: In many ways we are
11 faced with a task kind of catching up to the horses
12 and then building a coral around them. Technology
13 has outpaced the science, the research, the data.

14 And I'm wondering -- I'm wondering if any
15 of you from your other interactions with other
16 industries see any analogous challenge, where the
17 technology was in fact in use prior to the testing
18 for usability and security being on a par with what
19 we might call public expectations.

20 And then people such as ourselves had to
21 play catch-up to existing technology. I think about
22 the microwave ovens. You know, when the microwave

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1 came out, my grandmother wouldn't use it because she
2 thought there was something sinful about things
3 getting warm that fast.

4 (Laughter.)

5 CHAIRMAN SOARES: And she didn't know
6 anything about the science. But I think most of us
7 assumed that that was preceded by science so that by

8 the time the consumer had access to it -- and I'm
9 wondering. Are there analogies? I just don't -- I'm
10 a preacher so I have been looking at this.

11 MR. SELKER: The microwave's a perfect
12 example. She was right. There were leaking
13 microwaves at the beginning.

14 CHAIRMAN SOARES: I knew my grandmother
15 was smart.

16 (Laughter.)

17 MR. SELKER: I mean there are people that
18 got in trouble by using, you know, microwave antennas
19 to heat themselves too. There are lots of examples
20 of people putting dangerous equipment out and
21 learning later how to coral it. I think it's very
22 typical for engineers to make things and sell them

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1 before they test them.

2 CHAIRMAN SOARES: But then how does the
3 experience in those areas inform us as we devise
4 process? Much of what we do, by the way, when we're
5 in our office -- we just got offices. But much of
6 what we do on the phone is to think about process.

7 We're not really as focused on products as
8 people may want us to be. We are focused on process,

9 because we believe that our job was to put in place
10 guidance around process because if the process has
11 integrity, then the product will have more integrity.

12 MR. SELKER: Just to finish that, I just
13 finished studying some voting equipment from another
14 country. And I started off very skeptical and I
15 ended up with a report saying exactly how process
16 could make it absolutely secure. When it's released,
17 I'll share it with you.

18 CHAIRMAN SOARES: No, we can't wait that
19 long. Give us a --

20 (Laughter.)

21 MR. SELKER: -- testing is very powerful.

22 MR. BERGER: If I may, there's a number of

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1 parallels that I think the Commission would benefit
2 from observing and drawing advice from people who
3 were involved.

4 For example, at the Federal Communications
5 Commission if you go back to about 1980, when they
6 first required a missions testing of computing
7 devices, computers were all over the place.

8 And for the first time new requirements
9 that deeply affected that technology were put in

10 place. That's been a fascinating process to watch
11 over the last 25 years. And a lot of good lessons
12 have been learned.

13 By the way, all those test reports are
14 available publicly on the FCC Web site. Every FCC
15 equipment grant is publicly available.

16 Their processes, for instance, developing
17 the nation's intelligent highway system, upgrading
18 our entire highway system, is currently under way.
19 The Department of Commerce is very involved in that.

20 And five standards development
21 organizations are actively involved. The upgrade of
22 our light rail system and our subways is another area

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1 where there is very active work. They produce 14
2 standards to date and are obviously dealing with an
3 infrastructure in place.

4 You pointed to one. The concern about
5 cell phones and safety health issues is one that's
6 been very active in recent years both nationally and
7 internationally, again, under the guidance of the FCC
8 and FDA. And there's a lot of parallels that I think
9 this Commission may benefit from.

10 And I am certain the staff involved there

11 would be happy to talk to you about their experiences
12 and their process in guiding the cell phone industry
13 to address the public's concern about safety there.

14 DR. RUBIN: I think I can give you an
15 enlightening analogy too. If you look at the
16 software industry and in particular the advent of e-
17 mail, Microsoft software came out and was very useful
18 and people loved it. So they kept adding features.
19 And they added mail programs.

20 And suddenly we started getting hit with
21 viruses and spam. And this has been a problem that
22 now we don't know how to do -- what to do about it.

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1 So Microsoft has started -- Bill Gates came out with
2 a statement that they were going to devote security
3 as the top priority. They started hiring security
4 experts like crazy, redesigning their systems.

5 And now Bill Gates has gone on record
6 saying that by 2006 they will solve the spam problem.

7 So I think, you know, if we look at the
8 voting industry and say, well, if we have all these
9 security problems and I'm not looking for a job, but
10 we need to get security experts in there and have
11 them help with the design of the systems to make them

12 more secure.

13 CHAIRMAN SOARES: Our time is up. I'm
14 going to ask Commissioner Martinez to have the
15 closing comment question.

16 But if you could send us information about
17 any research that you know that has measured the
18 likelihood of voters looking at the paper, I'd
19 appreciate that.

20 When we buy gas, we have option to get a
21 receipt or not get a receipt. I don't know how many
22 people choose yes over no. And if any data exists

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1 that could inform us about just the like -- when we
2 talk about paper, we assume that everyone will look
3 at the paper.

4 If there's any data that can help us know
5 more about the likelihood of it happening, I would
6 appreciate it.

7 CHAIRMAN SOARES: Mr. Martinez.

8 COMMISSIONER MARTINEZ: Thank you, Mr.
9 Chairman. My thanks to all of you. And I only
10 regret, I think -- I probably speak for the entire
11 Commission in saying that we wish we had more time to
12 continue this dialogue.

13 I do have one closing question, Dr.
14 Selker. And I'm still focused, Dr. Rubin, on your
15 continuum, which I think is very helpful, very
16 terrible to very good. And how do we move up that
17 continuum?

18 From your perspective what you said is in
19 the short term. We get there. We can go to verified
20 paper ballots is what I heard you say. Is that
21 accurate?

22 DR. RUBIN: Right.

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1 COMMISSIONER MARTINEZ: Dr. Selker, are
2 there ways to get there?

3 What about the possibility of encrypting?
4 Is that something that could work today? Is that
5 technology available to somehow, you know, provide
6 some added security to the DRE's that are in
7 existence today. We don't have much time. Can you
8 just comment quickly on that.

9 MR. SELKER: Yeah. My position on paper
10 came from watching people look at paper receipts in a
11 Chicago election. I watched -- I went to 60
12 balloting places and people, when they were told with
13 the paper and with somebody telling them that they

14 had spoiled the ballot, 1 in 10 were willing to take

15 a new ballot.

16 So that's my concern. That's why I'm

17 promoting audio verification trails. For one thing,

18 they are cheaper, more reliable equipment, easier to

19 implement.

20 But encryption, I think not for 2004. For

21 2004 we have the equipment and we really need to have

22 oversight over the equipment that improves it. My

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1 big concern is what if we add things that create

2 errors. And I'm very concerned about the paper

3 trails and errors.

4 CHAIRMAN SOARES: Thank you. I am, again,

5 appreciative of the fact that you thought it worth

6 your time to travel here and to offer this important

7 testimony. And we are grateful and the country is

8 better served because you've helped us with our

9 mission. Thank you.

10 We will now without delay call our vendor

11 panel. And when they are seated, we will introduce

12 our vendors.

13 (Pause.)

14 CHAIRMAN SOARIES: -- to cooperate.

15 Excuse me, audience. I'll try this one more time.

16 Will the audience please be seated or leave. Thank

17 you.

18 I want to first -- I want to thank the

19 panel for being here and let me apologize for some of

20 the shorthand descriptions of the names of your

21 corporations. Don't -- take it as affection and not

22 as disrespect. We feel like family.

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1 I'd like to also thank you for taking the

2 time to come and share with us. I know that all of

3 you are being called upon more and more to share your

4 perspective, your experience.

5 But frankly without your presence here

6 today, this hearing would have been much less

7 credible. And our moving forward would have been

8 much more difficult.

9 So we really appreciate it. And we hope

10 to have a good working relationship with you as we

11 try to understand the issues.

12 We live in a free market economy. And all

13 of you involved in the private sector, which means

14 that someone had to take risk to do this business.

15 And that's always a challenge, but it's also a

16 welcome development because that's what makes our
17 country what it is.

18 Let me introduce the panel. And if you'd
19 speak in this order, I'd appreciate it.

20 We have Mr. Neil McClure from Hart
21 Intercivic. We have Mr. Mark Radke from Diebold
22 Elections Systems. We have Mr. Kevin Chung from

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1 Avante International, Mr. William Welsh from Election
2 Systems and Software. We have Mr. Alfie Charles from
3 Sequoia Voting Systems.

4 And I will be the lead questioner for the
5 commissioners after your segmented presentations.

6 Mr. McClure.

7 MR. McCLURE: Thank you. I'd like to
8 thank you for having the opportunity to provide
9 testimony for the Commission today.

10 Hart Intercivic entered the DRE market in
11 the 2000 presidential election with the certified
12 system after over three and a half years of
13 development and testing.

14 We have identified as part of our
15 development process key attributes that we felt were
16 important to direct recording electronic systems and

17 embodied those in our system design and architecture.

18 Those attributes were product liability,
19 product quality, accessibility, usability, security,
20 and above all accuracy and integrity of election
21 data.

22 As most of us are aware, product

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1 development processes are trade-offs that are driven
2 by market demands and customer requirements.

3 Since the introduction of the e-slate
4 system -- or DRE, we have released five major
5 functional upgrades to the system in that time
6 period.

7 It wasn't until 2003 where we saw an
8 emerging requirements for new securities. And this
9 did not come from a customer base. It came from a
10 market space.

11 We had architected the capability in our
12 system to provide security, higher level security,
13 into the system. But it had not been a requirement,
14 so we had focused our resources on more near-term
15 needs from our customers and market.

16 We're a software development company. And
17 our success is measured by our continuing product

18 enhancement and improvement for our customers and our
19 market.

20 However, the problem we are facing is the
21 market is not establishing requirements. They are
22 prescribing a solution. That solution is a voter-

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1 verified paper ballot. And it's only meant to
2 address a single risk of a DRE while there are more.

3 And that risk is associated with the
4 device recording the voter's vote as they cast it and
5 accurately representing that in its memory.

6 So if this is a solution, then there must
7 be a problem. Well, the problem is -- the perception
8 is the DRE cannot be trusted. There are methods
9 available to provide for a measurable level of trust
10 in electronic devices.

11 And if a device is not able to meet these
12 levels of trust, then you provide other mitigating
13 remedies such as a voter-verifiable paper ballot.

14 The trust needs to be established in
15 relationship to the threats to a system. Security
16 analysis will identify threats for former risk
17 assessment and then evaluation and implementation
18 processes to implement the mitigation strategies.

19 With the voter-verifiable paper ballot
20 we're going from identification of threats to the
21 implementation stage. This type of reaction often
22 causes more harm than good.

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1 There's been no real discussion, debate,
2 reference, publications that talk about a risk
3 assessment -- and all the risks associated with the
4 DRE. Yes, they do exist.

5 But an assessment will assign
6 probabilities and likelihoods, which will drive the
7 product development companies and the people involved
8 to put appropriate mitigation steps in place --
9 security mitigation strategies to be based on the
10 risk assessment and just not on the existence of a
11 threat.

12 Because if we look at this problem, this
13 Trojan horse problem, we've heard some earlier
14 testimony about some classroom experiments. But in
15 reality in the presidential upcoming election in
16 Orange County, California, for example, there's 2,200
17 precincts, 1,723 polling places, 91 cities in special
18 districts, 5 languages, and ballot rotation on top of
19 that.

20 When you put all that together, you have
21 over thousands of ballot styles, a hugely complex
22 problem just to get it right.

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1 And to think an attacker can come in on
2 some short-term notice and implement some sort of
3 Trojan horse -- and we talked about the length for
4 certification and other processes. There's a long-
5 term commitment and a well motivated attacker would
6 have to spend considerable effort on this problem.

7 But does a voter-verifiable paper ballot
8 address the risk that it's attempting to? We've
9 certainly heard a lot about different threats that
10 are out there for DRE's. Let me pose one to you.

11 A voter comes in and votes on a system
12 with a voter-verifiable ballot. It prints out the
13 paper. They review the paper and look at it and they
14 reject their ballot. This is under the proposed
15 implementation that we've seen out in the press and
16 from other papers.

17 Well, under that scenario the hacker
18 would, after a little social engineering, understand
19 that a lot of voters surprisingly don't pay attention
20 and that if somebody rejects their ballot, they're

21 paying attention.

22 So they print out the next one that's

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1 correct. And so this way this defeats the purpose of
2 the paper ballot. The only way around that is to --
3 if there is an instance where the paper does not
4 match the electronics, the system should be shut
5 down.

6 Don't give them three tries. Shut the
7 system down. Shut down the election. Something's
8 wrong. Why would we continue to collect votes if
9 there's a problem with the system?

10 So these are definitely challenges that we
11 would face in any implementation of this. But really
12 I think it comes back to a matter of trust. We need
13 to look towards -- if the requirement is that the DRE
14 is not perceived as trustworthy, we need to look
15 towards how do we develop a trustworthy device.

16 Well, society -- we do have trusted
17 computing devices. There are ways to achieve this.
18 And I believe that we have an opportunity to put
19 DRE's on the path of becoming a trusted computing
20 device.

21 As an example it would be a reasonable

22 first step to establish a requirement that by January

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1 1, 2006, all DRE's meet level II of the Phipp's 140-2
2 cryptographic module standard. This is a federal
3 standard.

4 It will not bring the device up to a fully
5 trusted level as regarded in some circles. But it
6 would be a great first step to take to put it on the
7 path of becoming a trusted device.

8 In addition, there are some other
9 recommendations that would go to support this effort.

10 There are many reports in the media about
11 irregularities with DRE's. I don't see people
12 attributing these to attacks or security breaches
13 although they are used as support of the paper
14 ballot.

15 But there are quality issues. There are
16 product quality issues. These irregulars could be
17 traced back to product issues.

18 I think we ought to look at raising the
19 quality requirements, implementing national and
20 international quality management systems, and testing
21 requirements for all voting devices.

22 As part of the quality -- increased

1 quality requirements system testing should be
2 reviewed and how it is applied to DRE's. DRE's are
3 more appropriately used simulation in order to do
4 volume testing. This should be an ingrained part of
5 a DRE system.

6 And today we find that a lot of paper
7 practices have been applied to DRE's. Logic and
8 accuracy tests is a fine example. If you take a
9 logic and accuracy test prescription for a paper
10 ballot system, which is very appropriate, apply it to
11 a DRE, you end up with a cumbersome, complex process
12 that is inappropriate for an electronics system.

13 This also goes towards recount. And a
14 recount is really a term of art for a paper system.
15 Recount -- the intent of it for a paper system is to
16 verify and validate the outcome of an election.

17 If you apply validation and verification
18 to a DRE system, you get a different process.
19 There's a lot of discussion about nothing meaningful
20 to recount. Well, of course there's not if you're
21 applying a paper's process to an electronic system.

22 So there are other ways to provide

1 verification and validation that would include and
2 encompass the intent of a recount.

3 CHAIRMAN SOARES: Mr. McClure, you are
4 moving very close to the other panelists' time.

5 MR. McCLURE: Okay, I'll wrap it up right
6 now. Two last items.

7 Record retention can be improved for
8 electronic systems and also the Commission to support
9 a standardized electronic format for interchange of
10 data.

11 I'd like to thank you again for providing
12 the testimony. I think that we have an opportunity
13 to adopt an evolutionary approach to security in
14 addressing necessary processes supporting DRE
15 elections that will provide reliable, trustworthy
16 elections to be conducted using electronic systems.

17 We should move forward with electronic
18 voting in a deliberate and reasonable manner,
19 celebrate the efficiencies and enfranchisement of all
20 voters, and appropriately manage the risks.

21 Thank you.

22 CHAIRMAN SOARES: Thank you so much.

1 Mr. Radke.

2 MR. RADKE: Thank you, sir. Mr. Chairman,
3 Commissioners, my name is Mark Radke. And I'm
4 director of marketing for Diebold Electric Systems, a
5 subsidiary of Diebold, Incorporated.

6 We appreciate the opportunity to be with
7 you today to discuss the benefits associated with
8 Diebold's touchscreen voting solution.

9 To highlight the various advantages of our
10 touchscreen solution, we must first review the Help
11 America Vote Act -- was introduced to replace punch
12 cards, lever systems, and other election systems
13 technology.

14 The 2000 presidential election uncovered a
15 number of major issues that existed within the voting
16 process resulting in inaccuracies and
17 disenfranchisement.

18 And these include, and have been discussed
19 already today, the inability to determine voter
20 intent -- we all remember the person pulling the
21 punch card ballot up to the light -- overvoting,
22 undervoting -- again, in this case voting for not

1 enough people within a race or not voting in a race
2 at all -- and a lack of voter accessibility for the
3 blind, visually impaired, and non-English-speaking
4 voters.

5 How does Diebold's touchscreen voting
6 system assist in solving these major issues?

7 Selections made by each voter are clearly
8 indicated with an X, surrounded by a red box. And
9 there is no doubt concerning which candidate was
10 chosen. Voter intent is clear and concise.

11 Our touchscreen voting solution completely
12 eliminates overvoting. So this severe problem that
13 was experienced throughout the 2000 election is
14 immediately resolved.

15 The system does not allow a voter to vote
16 for more than the specified number of candidates
17 within a specific race.

18 Undervoting is significantly reduced as
19 selections are clearly indicated. Once the voter has
20 viewed the entire ballot, a summary screen displayed
21 what choices have and have not been made within each
22 race.

1 Simply touching an unvoted race on the
2 summary screen immediately returns the voter to the
3 unvoted race, enabling them to make a selection.

4 The ability to significantly reduce
5 undervoting was clearly experienced in the California
6 counties using the Diebold touchscreen system during
7 the October recall election.

8 During this election the overall undervote
9 percentage for the state of California on the recall
10 question was 4.63 percent. Counties using punch card
11 technology experienced a 6.32 percent undervote.
12 Counties using optical scan technology experienced a
13 2.68 percent undervote. This percentage almost
14 equals the 2.9 percent undervote in Florida during
15 the 2000 election.

16 Counties using Diebold's touchscreen
17 solution experienced a 0.73 percent undervote -- by
18 far the lowest of all technology used. It was also
19 175 percent better than its nearest touchscreen
20 competitor.

21 The state of Georgia has already conducted
22 over 450 successful elections using the Diebold

1 touchscreen voting system and experience the same

2 type of reduction in undervoting. And I suspect
3 Kathy Rogers from the state of Georgia will discuss
4 these details and statistics to you in just a little
5 bit.

6 Based on input from blind, visually
7 impaired, and physically challenged individuals,
8 Diebold has the most successful voting stations in
9 the industry. Our voting stations meet or exceed all
10 -- section 508 standards associated with the
11 Rehabilitation Act of 1998. This includes
12 requirements for reach, height, voice guidance, and
13 other important capabilities.

14 Our voice guidance capability enables
15 blind people to navigate through the entire
16 touchscreen ballot unassisted, voting in complete
17 privacy for the first time in their lives.

18 Every Diebold voting station offers voice
19 guidance capability so a voter can vote on any
20 touchscreen unit within a precinct -- no
21 disenfranchisement.

22 Voters with limited vision can magnify the

1 text and target areas on the touchscreen, enabling
2 them to vote without assistance. Enlarged target

3 areas are especially important for voters with
4 Parkinson's disease or other conditions that affect
5 dexterity.

6 The Accu-Vote TSX offers the capability to
7 quickly adjust the contrast of the ballot on the
8 touchscreen, enabling people with color blindness or
9 limited vision to more clearly view the screen.

10 The simple touch of the high contrast icon
11 on the screen changes the standard ballot to a very
12 sharp ballot presentation with black letters featured
13 on a white background. This capability is a Federal
14 Election Commission 2002 certification requirement.

15 Voter's in wheelchairs can vote
16 approaching the unit from the side or from the front.
17 The Accu-Vote TSX 10-pound voting tablet can be
18 removed from the voting station and manually
19 transported to a physically challenged voter driven
20 to the voting location in an automobile -- curbside
21 voting.

22 The voting tablet can also be placed on

1 the tray of a wheelchair, enabling a voter with
2 limited dexterity to vote more comfortably on the
3 touchscreen voting station.

4 A voter can make selections on the large
5 15-inch touchscreen using virtually any type of
6 object such as a finger, a head pointer, or even a
7 tongue depressor.

8 For several years Los Angeles County,
9 California, has successfully used the Diebold
10 Touchscreen Solution for early voting. The ability
11 to present over 5,000 ballot styles in 7 different
12 languages, including character languages, on each
13 voting station is a capability that is unmatched in
14 the industry.

15 Illiterate voters can also vote without
16 assistance, as Diebold's voice guidance system
17 enables voters to make ballot selections using a
18 numbered keypad.

19 The numbers from the March super Tuesday
20 election tell a compelling story. Zero -- I repeat
21 zero security-related at the more than 55,600 Diebold
22 touchscreen voting stations deployed across the

1 country by election officials.

2 Over 9 million voters had the opportunity
3 to use electronic voting solutions, including the
4 entire state of Georgia and virtually the entire

5 state of Maryland.

6 Almost 130,000 visually impaired men and
7 women had an opportunity to vote unassisted. 310,000
8 disabled people could vote more conveniently because
9 the voting booth could accommodate them. 61,000 new
10 Americans citizens had the opportunity to vote on a
11 ballot in their native language.

12 And also very importantly, 562,000 older
13 Americans were able to vote easily and intuitively.
14 That's a proof of performance that is strong and
15 irrefutable.

16 During a recent March primary election the
17 California secretary of state conducted parallel
18 monitoring, testing of touchscreen voting stations
19 used throughout the state.

20 The parallel monitoring process included
21 the secretary of state's staff pulling voting
22 stations from selected jurisdictions before the

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1 elections began and testing each unit for the
2 duration of the primary election to verify its
3 accuracy.

4 The candidate selection process of the
5 staff was even videotaped to provide an irrefutable

6 audit of all activities. The completion of the
7 parallel monitoring-testing process concluded that
8 each and every Diebold touchscreen voting station
9 provided 100 percent accuracy.

10 While there have been questions and doubts
11 raised that generally are theoretical in nature, it
12 is clear that electronic voting systems are a
13 significant advancement over previous voting
14 technologies.

15 We've heard and read a lot of headline
16 references to such things as red teams, Internet
17 voting, security hacking, and numerous other items.
18 What's been missing from these laboratory originated
19 critiques has been the real world experience at the
20 voting booths, including the people, the procedures
21 that are in place to conduct the election safely and
22 securely.

1 One fact that must be clearly stated is
2 that Diebold touchscreen units are stand-alone voting
3 stations that are never connected to the Internet,
4 therefore eliminating the risk of Internet hacking.
5 They are also never networked within the precinct.

6 CHAIRMAN SOARES: Mr. --

7 MR. RADKE: Do I have --

8 CHAIRMAN SOARES: Yeah. We will read, and
9 most of us have read, your written testimony. If you
10 can wrap up your oral because we'd like to have the
11 chance to ask you questions.

12 MR. RADKE: I just have like two more
13 minutes, please -- or less.

14 CHAIRMAN SOARES: Thank you.

15 We have addressed many of the security
16 issues raised by the independent reviews through the
17 implementation of the changes that were discussed
18 earlier.

19 We have removed all hard-coated encryption
20 keys, passwords, and pens. All the elements are now
21 selected by each local board of elections and changed
22 by them as often as they choose.

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1 We have enhanced the security of the
2 election result uploads. Again, Diebold Election
3 Systems has responded to the many various security
4 enhancements and has submitted those changes for
5 review by the independent agencies.

6 Another major topic that has been
7 discussed here today is the ability of individual

8 voters to verify their choices for candidates and
9 also issues. I want to stress that this is a matter
10 of public policy, not of technological capability.

11 Diebold Election Systems can and would be
12 glad to meet with standards that are established when
13 this public policy debate is resolved. We will have
14 the capability to retrofit the solution to both the
15 Accu-Vote TSX and the Accu-Vote TS voting stations.

16 And I want to speak this very clearly:
17 Today each vote cast within an entire jurisdiction
18 can be anonymously printed out and utilized for
19 manual recounts.

20 I would be remiss if I did not mention
21 that we did experience issues within selected
22 jurisdictions in California during the primary

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1 elections. Primarily these issues involved the
2 operation of a separate peripheral device used for
3 voter -- coding. We sincerely regret that this issue
4 inconvenienced voters and affected precincts.

5 However, the touchscreen voting stations
6 deployed within these jurisdictions clearly,
7 accurately, and securely tabulated each ballot cast.
8 Voters surveyed in Salano County, California, gave

9 the Accu-Vote TSX a 97 percent approval rating.
10 Current county officials have stated their Accu-Vote
11 TSX-based election was very successful.

12 We are committed to supporting our 19
13 California customer counties in an effort to run
14 efficient elections in November and are confident in
15 our technology and its benefits.

16 In conclusion, we do believe Diebold
17 Election Systems can provide voters throughout the
18 country with an election solution that, when combined
19 with the experience, dedication, and oversight of the
20 state and local election officials, will provide a
21 safe, secure, and reliable election.

22 CHAIRMAN SOARES: Thank you so much.

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1 Thank you.

2 Dr. Chung.

3 DR. CHUNG: Good morning, Chairman Soares
4 and Honorable Commissioners.

5 Avante's pioneered the voter-verifiable
6 paper voting system. Not in light of security.

7 Actually at the time we didn't consider security.

8 CHAIRMAN SOARES: Excuse me one second,
9 Dr. Chung. Could we just wait. I don't think your

10 microphone is working yet. Are we ready?

11 DR. CHUNG: Thank you.

12 CHAIRMAN SOARES: Could you start again so

13 that --

14 DR. CHUNG: Good morning, Chairman Soares

15 and Honorable Commissioners.

16 Avante's pioneered the voter-verifiable

17 paper election system not because of a security

18 concern. Primarily we were trying to confirm to the

19 voters how their vote is counted and counted

20 correctly, how the -- because of the debate I'm going

21 to raise with 5 points together to mention our

22 experience on using such a system.

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1 The first point is that we echo Professor

2 Rubins that if the DRE voting system is to be used, a

3 voter-verifiable paper audit trail is the only

4 reasonable means to assure voting security.

5 One of reasons among many benefits -- it

6 helped some voters to look at their choices on paper.

7 This is particularly important for those that are not

8 so familiar with the use of computers or summary

9 screens at the end.

10 Their recent election mishap in Brower

11 County, Florida -- 134 votes was making no selections
12 on a single contest election. And the difference
13 between the candidates -- only 12 votes.

14 Imagine that if we actually print out the
15 paper record and the voter has a chance to review it,
16 I'm sure most of them would have caught such a big
17 error in the system.

18 On the security side the VPAC helps to
19 expose all errors, all tamperings during and after
20 the ballot has been stored in the electronic memory.
21 The auditable paper record -- of course, we also
22 eliminate all legal challenges on the validity of the

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1 voting results even for the closest of races.

2 Yes, we still will need good procedures
3 and practices so that a tamper-proof election can be
4 held even with the auditable paper records.

5 The second point I want to make is
6 accessibility. It is straightforward for any DRE
7 system with VPAC to provide -- of the paper record to
8 the blind voters. That's making VPAC accessible.
9 Avante did it.

10 American consultive line -- national
11 federations of lines of California, California

12 consultive line, many groups in Ohio, Connecticut,
13 New Hampshire, and so on have tested such features in
14 our system and found them to be accessible.

15 Like most of the site voters, line voters
16 also appreciate to know that their ballots are cast
17 and counted correctly as they cast them.

18 The third point I want to make is that
19 VPAC helps voters catch errors if they make them.
20 DRE has one undisputed advantage over all other
21 voting systems in that they guarantee zero percent
22 overvotes.

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1 Avante votes record has proven in the last
2 five elections that we held with such a system that
3 with proper interface design DRE can also achieve
4 zero residual votes.

5 However, if not properly engineered, DRE
6 has been documented to yield very, very high
7 undervotes as well. In the year 2000 election in Los
8 Angeles 12.3 percent of the voters voting on a DRE
9 system never voted for a U.S. senator, while in the
10 same race only 5 percent of -- never voted for a
11 senator.

12 Imagine if the paper record is printed.

13 The voter has a chance to look at them. Maybe they
14 will discover such errors as well. The four points
15 is the cost of the system -- of using such a system.

16 Proper use of VPAC will -- the lowest cost
17 of ownership for the jurisdictions in an actuary's
18 price list for the good of the society.

19 However, it requires that every DRE ballot
20 cast must print a paper record for recount. The cost
21 associated with printing it afterwards should be much
22 higher than printing by the voters there and looking

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1 at it.

2 Many people worry about paper jams during
3 the elections. We all know people have been printing
4 paper receipts for ATM's for at least 10 or more
5 years. Certainly printers for VPAC should be
6 engineered so that paper jams rarely happen.

7 The VPAC printers can be made modular so
8 that the poll workers can fix it, change the paper
9 jam if you ever need to.

10 There are a lot of erroneous quotes,
11 including this morning, made by very smart people
12 about VPAC. Being the only vendor that ever used the
13 system for elections we like to quote some of the

14 comments for the same election the register makes on
15 the Avante vote -- we're using.

16 Quote: "At the post the machines and
17 printer perform flawlessly. Openly and closing the
18 post went very smoothly even though we had three
19 times the normal amount of machines. We had a
20 recount and it was not necessary to do anything with
21 the electronic machine as the printer results were
22 acceptable."

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1 And here's what the Connecticut SOS
2 reports on the summary of that -- elections: "The
3 demonstration project of the electronic voting
4 systems went extremely well. 92 percent of the
5 voters rated the electronic voted system as either
6 excellent or good."

7 And they continue to say in a separate
8 letter issued to my office by the state's election
9 and -- commission, the commission stated a preference
10 for electronic voting systems as long as they have
11 some kind of voter-verifiable paper record.

12 We hold elections in four counties of the
13 eight in Connecticut and we are the only one that has
14 the voter-verifiable paper record in the systems.

15 In our elections in Sacramento County,
16 California, we have to do a survey. 96.5 percent of
17 the voters feel highly confident that their vote is
18 counted and recorded correctly.

19 In the same year the same election in
20 Georgia, a similar survey was done. 70 percent of
21 the voters feel confident that their vote was counted
22 correctly.

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1 Now I want to -- the social benefits of
2 VPAC. Ever since paperless DRE voting systems have
3 been used, there has been many contentious recounts.
4 Many are still ongoing.

5 The monetary cost to both the
6 jurisdictions and the contesting can be both
7 documented and calculated. More important, if most
8 of us, definitely the historians, should be concerned
9 with the costs to our nations and our democracies,
10 with the endless contention in such a fundamental
11 issue of voting and counting the votes --

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1 One fact becomes very clear very quickly.
2 There are no recounts in DRE voting without Voter
3 Verifiable paper audit trail. Florida again made
4 election history by being the first state to admit
5 there's just no need to recount in DRE voting because
6 there's no meaningful recount possible.

7 One is left with the uncomfortable
8 position, like Congress's eloquence in the Act, are
9 we ready to accept that there will be no more
10 recounts in any elections?

11 CHAIRMAN SOARIES: Thank you, Dr. Chung.

12 Let me say this to the two final
13 panelists. Each of the previous panelists have taken
14 a little more time, and so I have got to give you
15 more time to be fair, if you need it. I will give
16 you an extra minute each, and we are going to extend

17 this panel to 12:00 o'clock to ensure that we have
18 adequate time for some dialogue with the
19 Commissioners.

20 I need to apologize to you, Mr. Welch. I
21 need a three-minute break personally, but let's
22 proceed. I have ready your testimony. Commissioner

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1 Hillman will take the chair and I'll be right back.

2 STATEMENT OF WILLIAM F. WELSH II

3 BOARD MEMBER, ELECTION SYSTEMS & SOFTWARE

4 MR. WELSH: Thank you very much, Chairman

5 Soaries, and thank you for having this hearing today
6 and giving us the opportunity to have this forum and
7 have some meaningful debate on the issue, rather than
8 having it done in the media--although I'm sure the
9 media will make a lot out of what happens today.

10 ES&S has been in the business of elections
11 since 1969. In fact, that's all we do as a company.
12 We're strictly in the election business. Today we
13 have in the U.S. over 50 percent of the precincts and
14 50 percent of the registered voters are voting on
15 ES&S systems.

16 To date, we have installed or have
17 contracts to install over 50,000 DREs. Now the

18 results and benefits of moving to DRE--and by the
19 way, we make virtually every election system that was
20 ever made. We don't do lever machines and have not
21 ever done lever machines. We did do punch cards many
22 years ago but don't do them today. But we do paper-

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1 based optical scanning systems and DREs.

2 The results and the benefits of moving
3 towards DREs have been, I think, outstanding. From
4 the voter's perspective it has made the election
5 process easier. I believe that it's made it more
6 accessible, and certainly in many cases it's made it
7 more fun.

8 It has also been made much more reliable
9 because we've eliminated the potential over-votes,
10 through the selection verification screen provided
11 the voter the opportunity to confirm the choices
12 before a vote is cast, and when it comes to capturing
13 voter intent electronic voting has no equal.

14 Electronic voting has also provided new
15 opportunities to voters that have been heretofore
16 disenfranchised with the existing technologies. The
17 audio function on our iVotronic DRE machines provides
18 to visually impaired voters the first vote

19 opportunity to vote unimpaired, excuse me,

20 unassisted.

21 The lightweight and portable feature of

22 our iVotronic makes it easy to be transported to

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1 curbside or for wheelchair voting. Because the

2 iVotronic DRE supports ballots in many languages,

3 electronic voting is encouraging participation of

4 voters who might be disenfranchised where language

5 has been a barrier.

6 Where optical scan voting is utilized,

7 ES&S has announced an exciting new product, the ES&S

8 AutoMark, which makes it possible again for the very

9 first time on optical scanning systems for a visually

10 impaired voter to cast an optically scanned paper

11 ballot privately and independently.

12 All of these improvements accomplish one

13 very important and overriding goal that is enhancing

14 the voting experience for all. On the security issue

15 we know that because of the newness of this

16 technology and the natural skepticism that it brings

17 with change, some are questioning the security of

18 today's electronic voting options.

19 On this issue, I am reminded of a paper

20 that Dr. Michael Shamus, who is well known in the
21 election industry, a paper that he wrote on
22 evaluating the threat of electronic voting.

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1 In that paper, Dr. Shamus wrote that the
2 effort expended in meeting the threats to the
3 election process should be rationally related to the
4 probability of the threat and the seriousness of its
5 effects.

6 No one would buy a safe that could be
7 easily opened, but everybody buys a safe that can be
8 cracked. The same is true for voting systems. The
9 issue is not whether they are secure, but whether
10 they present barriers sufficiently formidable enough
11 to give us confidence in the integrity of the
12 process.

13 At ES&S we believe strongly that
14 electronic voting has met that test. We also believe
15 that the security measures on the device itself are
16 important and have to be built into the entire
17 election process before the election, during the
18 election and after the election.

19 This includes all of the important
20 processes and procedures in training, education, and

- 21 other steps to recognize the extremely important
- 22 human aspect of carrying out an election.

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1 This is still a business, even with all
2 the automation we're talking about that relies
3 heavily on human beings to do the jobs efficiently,
4 effectively, and trustworthy.

5 At ES&S we work very hard to ensure this
6 element of the voting process is carried out
7 successfully. I am skipping a lot of my speech to
8 make up some time.

9 CHAIRMAN SOARIES: Thank you.

10 MR. WELSH: At ES&S we also work very
11 closely with election administrators to train and
12 educate those who carry out elections about the
13 voting systems, the processes, and the procedures
14 that we have established to maintain the integrity of
15 the voting process.

16 It is the combination of the security
17 features which were built into our systems and the
18 onsite support services training and documentation
19 that ES&S provides to county and state election
20 administrators that results in a secure, reliable
21 voting solution.

1 electronic voting systems that I have elaborated on
2 in detail in my written statement but I won't today
3 also show that we have a very strong record of
4 carrying out successful elections.

5 The procedures we suggest reduce human
6 error. I can say with confidence the systems that we
7 supply our customers are accurate, secure, and
8 reliable.

9 We understand that there is consideration
10 for a voter verified receipt to add an additional
11 layer of security. We believe this option is not
12 necessary as it will add, clearly, to the cost and
13 the complexity to what is already a secure process.

14 The parallel testing process that was used
15 in California in this last election, as well as
16 mentioned earlier today by Dr. Selker, would be a far
17 more effective and immediate solution to the security
18 issues raised by the previous technical panel than
19 adding a voter verified receipt.

20 Nevertheless, ES&S has developed and has
21 demonstrated several prototypes of potential voter
22 verified receipt technology. All these prototypes

1 provide the opportunity for voters to see on paper
2 the selections before a ballot is cast.

3 What final form those prototypes would
4 take and the technology that would be employed will
5 depend upon the specifications and the requirements
6 that right now do not exist that you may ask be added
7 to the equipment.

8 But should the decision be made to move
9 forward with the voter verified receipt, we stand
10 ready to deliver a technically feasible solution as
11 soon as possible.

12 However, in deference to Dr. Rubin's
13 comment, having something available and in widespread
14 distribution by November of 2004 is impossible.
15 Given the current certification process that we all
16 go through, the time to develop and the time to get
17 certified, we're talking a minimum of a year once the
18 relevant specifications are known.

19 So November I think is out of the
20 question. Parallel testing is something that can be
21 implemented today.

22 So again in conclusion let me thank you

1 for giving us the opportunity. You have an important
2 role. We want to be a participant in helping you
3 decide what is right for the voters of America.

4 We are firmly committed to maintaining
5 integrity in the voting process and enhancing the
6 voting experience for all. Thank you.

7 CHAIRMAN SOARIES: Thank you, so much.

8 Mr. Charles.

9 STATEMENT OF ALFIE CHARLES, VICE PRESIDENT OF
10 BUSINESS DEVELOPMENT, SEQUOIA VOTING SYSTEMS

11 MR. CHARLES: Mr. Chairman and members,
12 thank you for the opportunity to discuss these issues
13 with you today, and I commend the Commission and
14 their staff for putting this event together on what I
15 know was limited time and limited staff and limited
16 budget. So I commend you for that, and thank you for
17 inviting us to participate.

18 Sequoia Voting Systems has been providing
19 election equipment supplies and services for more
20 than 100 years. We have provided election officials
21 with lever machines, punch card technology, optical
22 scan voting equipment, and for the last 25 years

1 we've helped election officials conduct extremely
2 successful elections with two different types of
3 direct recording electronic voting systems.

4 There are currently more than 50,000
5 Sequoia DRE units installed across the country which
6 will be used to securely and accurately record more
7 than 105 million individual votes for candidates and
8 issues this November.

9 The voters that use these systems can be
10 confident that the votes they record will be cast in
11 the most thoroughly tested, accurate, reliable, user-
12 friendly, accessible, and secure voting technology
13 that has been deployed in this country today.

14 With more than 500 pages of Federal
15 Loading System Standards, reviews by two Federally
16 approved independent testing authorities, additional
17 state testing, the escrow of software source code,
18 the pre-election testing of each DRE machine, and the
19 increased level of security that DRE systems provide
20 over and above paper-based systems, voters can take
21 great confidence that the results of the November
22 2004 election will be based on the most complete and

1 accurate recording of voter intent in the history of
2 U.S. elections.

3 As we learned in the aftermath of the 2000
4 Presidential Election, the complexity of older voter
5 interfaces has unfortunately caused a large number of
6 voters to make errors and have placed election
7 officials in the precarious position of discerning
8 voter intent on ambiguously marked ballots.

9 Not only were older punch card and lever
10 systems more susceptible to error and abuse, but they
11 also prevented full access for a large number of
12 voters with disabilities, and voters who require
13 assistance in languages other than English.

14 There is little doubt that the current
15 generation of DRE systems provides considerable
16 advantages over the way in which previous elections
17 were conducted. We are greatly concerned that the
18 majority of the recent public debate about voting
19 technology issues focuses only on the small portion
20 of the topic.

21 Much of the discussion seems to focus on
22 somewhat sensationalist concerns while ignoring a

1 proper characterization of the benefits of the newer
2 technology and of the potential for error and abuse
3 that existed with the older systems that HAVA seeks
4 to replace.

5 The superiority of electronic voting
6 equipment at capturing and tallying voter intent was
7 clearly demonstrated during the recent state-wide
8 California recall election.

9 According to post-election studies
10 conducted by the University of California, the
11 percentage of votes not cast in the recount was
12 directly proportional to the complexity of the voter
13 interface.

14 During the recall, the official number of
15 votes not cast in the question at the top of the
16 ballot resulted in the following statistics, and Mr.
17 Radke mentioned some of these:

18 1.3 percent of the voters who used
19 electronic systems at the polls and paper absentee
20 ballots did not record a vote, or did not vote on the
21 recall question.

22 2.4 percent of voters using optical scan

1 systems did not register a vote. And 7.8 percent of

2 the voters using punch cards did not register a vote
3 on the recount.

4 That number equates to more than 273,000
5 voters in the election, compared to just 1.3 percent
6 of the votes cast using electronic systems.

7 The evidence is fairly clear. By
8 recording votes more accurately and reducing the
9 potential for voter confusion or error, electronic
10 systems help prevent the disenfranchisement of a
11 significant quantity of voters nationally.

12 The accuracy and ease of use of DRE
13 systems are clearly compelling, but the increased
14 percentage of votes counted will be of questionable
15 value if the voters do not trust that this is the
16 case. Unfortunately the recent public debate about
17 voting technology has not adequately informed voters
18 about the considerable number of independent reviews
19 and local checks and balances in place to ensure the
20 accuracy and security of the vote.

21 Many of the critics of electronic voting
22 allege the technology can be easily manipulated to

1 perpetrate election fraud. Well let's remember that
2 the commission of vote fraud requires motive,

3 ability, and opportunity.

4 With the advent of computerized voting
5 technology, the universe of individuals with the
6 technological ability and savvy required to interfere
7 with an election is but a fraction of the number of
8 people who are capable of stealing paper ballots,
9 illegally punching holes in punch card ballots,
10 making stray marks on optical scan ballots, or
11 improperly re-aligning the votes recorded on lever
12 equipment.

13 Simply by using DRE technology, we can
14 reduce the universe of people capable of committing
15 fraud dramatically. Once we have limited the number
16 of people capable of committing fraud, it is crucial
17 to develop and implement appropriate procedural steps
18 and physical security requirements to prevent those
19 individuals from having the access and opportunity to
20 successfully commit the fraud.

21 As with paper-based voting systems, DRE
22 hardware and software system design must be combined

1 with physical and procedural security that is strong
2 enough to prevent any individuals from committing
3 undetectable and unrecoverable acts of vote fraud.

4 As election administrators know, strong
5 procedures and safeguards are already in place to
6 ensure the security of elections throughout the
7 country, and are constantly being updated and refined
8 as new threats are identified.

9 We encourage this body to help publicize
10 the level of checks and balances currently employed
11 by election officials, and we encourage you to help
12 state and local officials develop a set of best
13 practices to ensure security.

14 While we discuss the process more fully in
15 our written submission to the Commission, this panel
16 and this audience should not under-estimate or ignore
17 the value of existing safeguards, many of which we
18 have listed earlier but involve all the several local
19 checks and balances, as well as system design.

20 As the Commissioners know, there is a
21 community of activists, election officials, and
22 interested observers watching this ongoing debate

1 very closely. While it appears at times that some of
2 the calls for increased security, accessibility, and
3 ease of use are mutually exclusive, that is not the
4 case.

5 Sequoia has developed two extremely
6 secure, accessible, and user-friendly electronic
7 voting systems that have been deployed with great
8 success for countless elections over the last two
9 decades.

10 Sequoia does not believe that voter
11 verifiable paper records are a mandatory component of
12 a secure and accurate election. However, we
13 recognize that perception is nearly as important as
14 reality when it comes to the confidence and integrity
15 of the vote.

16 As new auditing features such as the
17 contemporaneous paper record are requested or
18 required, we will meet that demand with an upgrade
19 that is as easy for poll workers and election
20 officials as possible, while ensuring the greatest
21 degree of accessibility for voters who need it.

22 Throughout the history of election

1 administration and reform, change has always caused
2 concern. Concern and experience have always led to
3 continuous improvements, and the issues facing this
4 panel are no different.

5 As the Commission considers the state of

6 election reform nationally and looks at the best ways
7 to improve the conduct of elections, please look at
8 all aspects of the administration of elections and
9 remember that for any improvement to work well it
10 must be easy for voters, poll workers, and election
11 officials.

12 We also request that once rules are set
13 they are allowed to remain in effect and work for a
14 substantive period of time. Continued revisions to
15 voting system standards and election laws will only
16 complicate the process further and risk significant
17 problems in the future.

18 In the end, when millions of voters and
19 more than 1 million precinct officials take to the
20 polls, we will all succeed or fail because of the way
21 in which we balance the combination of security,
22 accessibility, accuracy, reliability, and simplicity.

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1 CHAIRMAN SOARIES: Thank you, so much.

2 I am deeply appreciative, again, of your
3 presence. It is heart warming to see competitors sit
4 so amicably at a table--

5 (Laughter.)

6 CHAIRMAN SOARIES: --and we respect your

7 right to proprietary information. If we ask
8 questions that go beyond a border which should not be
9 crossed, we respect your right to say so.

10 We recognize that there may be matters
11 being litigated in various companies and would not
12 expect you to violate any principles of common sense
13 or corporate responsibility.

14 Generally, again we appreciate the fact
15 that this very public proposition is in large measure
16 being managed by private companies. Where I'm from--
17 we're from New Jersey, Dr. Chung, people go into
18 business to make money. Therefore, somehow we accept
19 the responsibility to behave in such a way to balance
20 of the interests that companies have to make money
21 with the need the country has to have a process of
22 voting that has integrity. And our questions will be

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1 within that frame.

2 Mr. McClure, I am going to try to ask a
3 few brief questions and then have the Commissioners
4 take over.

5 You mentioned risk assessment. I wasn't
6 clear from your testimony whose responsibility you
7 think that is. Whose responsibility is it to do risk

8 assessment work in this industry?

9 MR. McCLURE: I don't think anybody can
10 identify to take responsibility for the security
11 requirements outside of that contained in the Voting
12 System Standards. And as those standards increase in
13 their requirement levels of security, some element of
14 risk assessment needs to be included as part of that.

15 So whether that's part of the standards
16 development or with some augmented group of people, I
17 don't have an answer for you on that.

18 CHAIRMAN SOARIES: I see. All of us know
19 that much of what creates the pressure around issues
20 related to integrity is perception. We all know
21 that. As Commissioner Hillman noted, the perception
22 was that lever machines count our votes. And so for

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1 90 years no one raised a question of having a way to
2 verify the fact that that happened.

3 And some of our concerns relate to our
4 responses to people who have perceptions of your
5 industry. One of the perceptions is that your
6 industry is quite incestuous, and that there is a
7 cross-breeding of roles that really create a basis
8 for suspicion.

9 So I would like to understand, having said
10 that, Mr. McClure, you are a vendor whose work will
11 be subject to standards, but you are also Project
12 Manager for the IEEE Project 1583 Voting Systems
13 Standards Project?

14 MR. McCLURE: Correct.

15 CHAIRMAN SOARIES: From the outside,
16 should someone be concerned about the fact that as a
17 vendor you are also managing a process that could
18 recommend standards under which your products could
19 be scrutinized?

20 MR. McCLURE: Actually, if you take a look
21 at the promulgation of any standard that's been
22 developed by IEEE or other bodies, those are put

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1 together by interested parties in the industry,
2 whether it's vendors within the industry, whether
3 it's just technical observers or other people who
4 want to participate, that's generally where standards
5 come from.

6 And so the IEEE embraces a process of
7 consensus standards, and that involves a number of
8 different people from different disciplines. In
9 fact, one of the measures of the validity of a ballot

10 for voting on a standard is: Is it balanced? Does
11 it have representative across the spectrum of
12 potential contributors so it's not biased in any one
13 manner?

14 There are other vendors on that group, and
15 we are providing a lot of information to help educate
16 some of the security people that are involved. So it
17 brings a balance to that group, and it is a necessary
18 part to develop these kinds of public standards.

19 CHAIRMAN SOARIES: Good. Thank you.

20 DR. CHUNG: May I make a comment on that?

21 CHAIRMAN SOARIES: Sure, Dr. Chung.

22 DR. CHUNG: I do have concerns about those

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1 particular issues. Even though I recently joined the
2 committee just because I thought every's in there, I
3 must have a voice as well, for the standard for
4 industry traditionally has been set primarily to meet
5 the compatibility issues. Or, that if there has to
6 be the same material, it be the same, all the same.

7 Voting machine was not supposed to be
8 spec'd like a compatible system. We don't talk to
9 each other in our system. It's just to tabulate the
10 result out and that the result be able to be

11 reported.

12 I have a huge concern that IEEE actually
13 gets involved in specifications of setting something
14 that is merely on performance level. I would prefer
15 to see it to be set by NIST and under your
16 supervision.

17 CHAIRMAN SOARIES: Okay, thank you.

18 Mr. Radke, January 29th of this year your
19 company issued a press release that said: The same
20 Diebold Election System used in Maryland has proved
21 to be more than eight times more accurate than paper
22 balloting in other states.

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1 How do you know that?

2 MR. RADKE: That would be based on such
3 things as under-voting statistics and so on. Again,
4 it's a statistical fact based on the information that
5 we had for those elections.

6 CHAIRMAN SOARIES: So when you use the
7 word "accuracy," you haven't really taken into
8 account the possibility of tampering and issues such
9 that Dr. Rubin raised?

10 MR. RADKE: Actually, no. We feel our
11 system is very secure and so that is not taken into

12 consideration. And quite honestly, no, there were no
13 reports of any tampering or fraud involved with that
14 election.

15 CHAIRMAN SOARIES: Would you help us
16 understand the circumstances surrounding the
17 installation of patches in Georgia in the 2002--
18 before the 2002 primary--

19 MR. RADKE: Yes--

20 CHAIRMAN SOARIES: --where the allegations
21 were that those patches were neither certified by the
22 ITA nor cleared with Georgia election officials?

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1 MR. RADKE: Actually, I believe Bret
2 Williams could talk to you more clearly about that
3 than I could, but I'll say what needed to be done
4 there was a change, a modification to the operating
5 system not to the tabulation software on our touch
6 screen voting systems. It did not affect the
7 tabulation process at all.

8 We had a situation where, quite honestly,
9 we had a few screens that had difficulties on some of
10 the units and it was affected by the operating
11 system. So since it did not affect the tabulation
12 process at all and did not affect that software, the

13 operating system was modified.

14 And after those modifications were done,
15 all the logic and accuracy testing was completed
16 after that was done. So all the machines, every
17 touch screen was tested before it was deployed for
18 that election.

19 CHAIRMAN SOARIES: Thank you. You made a
20 very strong statement about the parallel monitoring
21 system and the results--

22 MR. RADKE: Yes, sir.

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1 CHAIRMAN SOARIES: --in California where
2 in one jurisdiction it was 100 percent.

3 MR. RADKE: Actually, sir, touch screen
4 voting stations, a select number were pulled from
5 each jurisdiction and brought back to an area and
6 tested. So it was not one from just one
7 jurisdiction. It was from multiple--

8 CHAIRMAN SOARIES: A sample.

9 MR. RADKE: Yes. In fact, all four of our
10 Acuvote TSX jurisdictions had equipment pulled from
11 them and were tested.

12 CHAIRMAN SOARIES: And did you say that
13 the secretary of state supervised that parallel

14 monitoring process?

15 MR. RADKE: His staff, yes, conducted part
16 of that; correct.

17 CHAIRMAN SOARIES: I'm trying to
18 understand. If the secretary of state of California
19 knows that parallel monitoring can produce those
20 kinds of results, that's the same secretary of state
21 who de-certified your equipment in four counties.
22 Correct?

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1 MR. RADKE: Yes, sir.

2 CHAIRMAN SOARIES: How does that--can you
3 help us--we're not from California--can you help us
4 understand--

5 MR. RADKE: I cannot speak for the
6 secretary of state.

7 CHAIRMAN SOARIES: Well he will be here.
8 I'll ask him. I was just wondering from a corporate
9 perspective.

10 Has your company learned any lessons as a
11 result of having the CEO express such a strong
12 political preference while being in the vendor
13 business in elections?

14 MR. RADKE: You have no idea how many

15 lessons we have learned from that.

16 (Laughter.)

17 MR. RADKE: Yes. In fact, our CEO, as
18 stated in the media, has pulled back from all fund
19 raising activities. It's a situation where he does
20 regret making that statement, and again has backed
21 away entirely from that situation. And basically
22 that's the story in a nutshell, quite honestly.

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1 He has not been involved with any fund
2 raising activities for about a year now.

3 CHAIRMAN SOARIES: I'm glad to hear that.

4 Dr. Chung, has your company done any
5 research that measures the likelihood of a person
6 looking at the paper if the machine has a paper
7 trail?

8 DR. CHUNG: "Research" I wouldn't call,
9 but I was in all the elections that we hold. In the
10 10 days in the election in California, and in one
11 days I visited all the polling places, from what I
12 saw 80 percent or more of the people looked at the
13 paper record.

14 CHAIRMAN SOARIES: You wouldn't call that
15 "research" would you?

16 DR. CHUNG: I wouldn't call it research

17 because everybody would say I would be biased.

18 CHAIRMAN SOARIES: We don't have

19 sufficient research to come to scientific conclusions

20 from a useability standpoint.

21 DR. CHUNG: No. I would treasure next

22 time somebody do it.

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1 CHAIRMAN SOARIES: Okay, good.

2 Mr. Welsh, I really have the same question

3 for you and for Mr. Radke. I am dealing with public

4 perception now. Much of what we respond to is coming

5 from people who are not inside the industry.

6 I think, if I am not mistaken, the

7 president of one of your companies is related to the

8 vice president of one of your companies. Is it

9 Yurosovich?

10 MR. WELSH: That is correct.

11 CHAIRMAN SOARIES: Is that true?

12 MR. WELSH: Bob Yurosovich.

13 CHAIRMAN SOARIES: Bob Yurosovich is--

14 MR. WELSH: --works for Diebold.

15 CHAIRMAN SOARIES: He is the vice

16 president of Diebold?

17 MR. WELSH: President.

18 CHAIRMAN SOARIES: He's the president of
19 Diebold. And Todd Yurosovich?

20 MR. WELSH: Runs our customer service
21 operations. They both happen to be born and raised
22 in Omaha. Both were in the election business.

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1 CHAIRMAN SOARIES: If you didn't work for
2 your companies, if you were just an average person
3 and you bumped into the fact that two brothers are
4 top executives in the largest providers of electronic
5 voting equipment in the country, just as an average
6 person would you want to know more about that?

7 MR. RADKE: Sir, could I answer that
8 question initially, and then I'll let Mr. Welsh
9 answer.

10 CHAIRMAN SOARIES: Yes.

11 MR. RADKE: Not knowing the testing that
12 goes on with the systems and all the checks and
13 balances involved in that, you might want to ask one
14 more question because of that, yes, but quite
15 honestly when that person would become educated in
16 knowing that there is the ITA testing that is
17 completed, the state testing of the systems and

18 acceptance testing and so on, and then the logic and
19 accuracy testing for every election, I think once
20 people realize that those are in place and there are
21 stringent checks and balances, and you do have
22 Democrats and Republicans running the polls at every

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1 location and so on, I mean that's some very good
2 information they need to know.

3 CHAIRMAN SOARIES: Well the problem is
4 people keep hearing that the certification process is
5 inadequate and we need more funding and we need more
6 time. And so I think as information begins to
7 spread, the average person who is not in on the
8 details has questions, and I think they are putting
9 demands on us in light of this perception.

10 Again, the lever machine was the
11 beneficiary of public perception that assumed
12 integrity in outcomes. I think the electronic
13 machines are being scrutinized by a different kind of
14 perception, and our job really is to protect the
15 interest of the average person who doesn't look at
16 ITAs and certification.

17 And ESS, your web site makes some very
18 strong statements about never having any security

19 problems, and again perception. People don't know
20 the difference between an encoder and an encryption.
21 The Nebraska problem that you have, has
22 your company learned anything about the Adams County,

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1 Nebraska, problem that created some ripple effect
2 around the country?

3 MR. WELSH: Well the Adams--I don't think
4 this microphone is working--

5 CHAIRMAN SOARIES: It will be on in a
6 second.

7 MR. WELSH: The Adams County situation, I
8 am frankly not that familiar with and I'll say this.
9 I retired last year. I am still on the Board of
10 Directors of the Company, but I am not actively
11 involved in the day-to-day business.

12 So I am not in a position to tell you what
13 did or did not happen in Adams County. I'm really
14 not. If you would like a written synopsis of--

15 CHAIRMAN SOARIES: Yes, if you could get
16 somebody who goes to work at your company--

17 MR. WELSH: I will do that.

18 CHAIRMAN SOARIES: --to send me just a
19 little note on the Adams County, Nebraska, situation.

20 MR. WELSH: We'll do that.

21 CHAIRMAN SOARIES: Because it is very
22 difficult for the average person to separate what may

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1 look like an isolated situation in one place from a
2 general level of confidence in voting.

3 I just want to ask Sequoia one question.

4 MR. WELSH: I can make one comment that I
5 would like to say about Adams County. They use
6 precinct--I mean they use optically scanned ballots.
7 So there was a paper record of the entire vote
8 process.

9 CHAIRMAN SOARIES: Yes. Sequoia has
10 developed something called the ABC Edge Touch Screen
11 With Voter Verified Paper Records. What standards
12 did you consider relevant in the development of that
13 technology?

14 MR. CHARLES: The voter verifiable
15 printer, or the product name for it is Verivote
16 Printer, is something that we developed based on
17 discussions that we've seen in the marketplace in
18 questions that were raised in the California Touch
19 Screen Voting Task Force.

20 We used our experience. We used the

21 existing federal standards as a guideline. And we

22 also used the draft California standards as a

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1 template for how to put that together.

2 It is currently in federal testing right

3 now. What they are testing for is all of the

4 environmental requirements, all of the accuracy, the

5 reliability, all of those features. And the

6 functionality pieces of it are modeled along the

7 lines of what the California Secretary of State's

8 office has put together as draft regulations.

9 CHAIRMAN SOARIES: Okay. Commissioner

10 Hillman.

11 VICE CHAIR HILLMAN: As I did with the

12 previous panel, I have two questions but one of which

13 I would ask you all to submit in formation in writing

14 on.

15 That is, I would like to know your

16 experiences with the ITA Certification process--any

17 observations, suggestions, recommendations you would

18 have--and a comparison of that certification process

19 with state certification processes that you all may

20 have gone through.

21 My question revolves around customer

22 service. I spent most of my career in the nonprofit

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1 and government sectors and we were always pointed to
2 the customer service attitudes of corporations as
3 examples of what we should build into our work.

4 I think maybe some of that has changed a
5 little bit over the years, but nonetheless customer
6 service always stands high when people are talking
7 about mission and product.

8 And as I think about who your customers
9 are, I wonder if there ever comes a time when there
10 is a conflict between what the voter wants or
11 expects, what the election administrator believes he
12 or she needs to do to properly administer the
13 election, and what your company is trying to achieve
14 either toward the bottom line or for the marketing of
15 your product.

16 And if each of you could just briefly
17 comment on that, I would appreciate it.

18 MR. CHARLES: If I can start, customer
19 service is essential in the election environment.
20 Not only is it important to make sure that you
21 provide the product and provide it on time or on
22 schedule so that election officials have what they

1 need, you need to anticipate problems that they may
2 have and prepare them for those.

3 We as a company have set a rule that we're
4 not going to bid on business or accept business that
5 we're not able to support. That has cost us some
6 business at times, but in exchange we have had an
7 extremely successful track record of providing
8 operational support to the customers that we have.

9 I think that the service we provide is the
10 foundation that election officials use to tabulate
11 votes and to have confidence. We need to make sure
12 that we provide all of the support that they need,
13 and the public needs to understand that that support
14 is not only essential to the conduct of the election
15 but for the preparation that takes place several
16 months before.

17 We are concerned when rules change at the
18 last minute or new requirements are set too close to
19 an election to allow election administrators to put
20 the processes in place and to test the processes and
21 procedures before an election.

22 I think that is something that if I can

1 stress anything to this panel, it is that we set the
2 rules well enough in advance that we can meet the
3 requirements and election officials can implement
4 them in a timely fashion.

5 MR. WELSH: In our particular case, when I
6 testified in front of Congress several years ago when
7 HAVA was just a brain child and being considered, one
8 of the points that I made in that presentation was
9 that you can spend all the money you want to spend on
10 technology and you're not going to get better
11 elections. Better elections only come through
12 education, training, and that includes the electorate
13 as well as those in an election administration.

14 I was very strong in my statement, and I
15 still feel this today, that jurisdictions probably
16 should be spending almost as much money on the
17 education and training aspects of the electoral
18 process as they do on the equipment and services and
19 systems.

20 CHAIRMAN SOARIES: You don't have to
21 speak, now.

22 (Laughter.)

1 DR. CHUNG: I don't exactly know your
2 questions, more in the sense is there ever a conflict
3 between let's say the jurisdiction asking us as a
4 vendor to do what might violate some possibly some
5 laws that we know of, I've never seen something that
6 we will help the jurisdiction that will not be good
7 for the voters, as your question put it.

8 So if there is ever, and it did happen to
9 us, is that we believe there's a conflict between
10 what the jurisdiction wants us to do and what we
11 believe is not allowed by law, in that case we will
12 ask them to sign an agreement that they take the
13 responsibility. We don't touch it. We will help
14 them to do it. Then if they do it, that's their
15 responsibility.

16 VICE CHAIR HILLMAN: So you said that did
17 happen?

18 DR. CHUNG: It will happen. It happen
19 once.

20 VICE CHAIR HILLMAN: Thank you.

21 MR. RADKE: I would have to say there's
22 actually two points I'd like to discuss here very

1 quickly.

2 Number one is the fact that, as you know,
3 election laws change and we have to react to that.
4 And I think it is imperative that everyone has a
5 clear understanding of what that means as far as the
6 certification process, implementation process, and so
7 on. And quite honestly we just wrestled with this in
8 California. That was one of the issues that we did
9 face, and that is why we had to go with the state
10 certification instead of an FEC certification for the
11 election that did take place in March. And that was
12 a difficult situation.

13 It has taken over nine months for us to
14 get software through for certification for 2002
15 standards, and that affected us with the State of
16 California.

17 The second point I'd like to make, and I
18 would have to agree with the statement that was made
19 before, voter outreach is critical to success. I
20 have to applaud the State of Georgia because we did
21 statewide implementation deployment there for the
22 2002 gubernatorial election, and they spent I believe

1 it was an additional \$4- or \$4.5 million on voter
2 outreach. And because of that, after the election
3 concluded they did a survey and found that
4 approximately 97 to 98 percent of all the voters had
5 absolutely no problems using the system. So it was a
6 phenomenal success from that standpoint. That was
7 159 counties at one time.

8 MR. McCLURE: As I understand your
9 question about customer service and some maybe
10 conflicts between voter needs and county officials,
11 Hart InterCivic has been in the election business for
12 100 years printing ballots, and their entry into the
13 DRE market was really based on a sterling reputation
14 of customer service over the years. You don't stay
15 in any one business and not treat your customers very
16 well.

17 When we developed the eSlatetm Voting
18 System, we actually identified five different
19 customers for an election system: Voters, poll
20 workers, election officials, state officials, and
21 federal level officials. So that has a pretty broad
22 scope of customer needs, and each part of the system

1 needs to be able to address the needs of those

2 customers.

3 As far as voter versus what's best for the
4 voter, county official, elected official, some of the
5 challenges that we have been faced with is knowing
6 some useability issues versus a county who has been
7 accustomed to running a process a certain way, and
8 where we have found ourselves brokering what was in
9 the best interests of a useability type of situation
10 versus adhering to a paper process that they used
11 previously.

12 So there had been some interesting
13 discussions and efforts with county officials and
14 outreach to voter to try and bring those two
15 together.

16 VICE CHAIR HILLMAN: Thank you.

17 CHAIRMAN SOARIES: We have a few moment
18 left. Do you have questions? We have got to ask in
19 such a way to facilitate quick responses because
20 we've got to get back in time after lunch.

21 COMMISSIONER DeGREGORIO: Thank you, Mr.
22 Chairman.

1 Kim Brace mentioned this morning that
2 there are 10 states that do not release data on over

3 and under voting. Do you all have a problem with
4 data from machines that you sell in these states, or
5 any state, releasing the data on over and under
6 voting?

7 MR. McCLURE: No.

8 MR. CHARLES: No.

9 (Panel nods.)

10 CHAIRMAN SOARIES: That was so easy to
11 say. Do you have like an association?

12 (Laughter.)

13 CHAIRMAN SOARIES: Are there certain
14 things that you--

15 COMMISSIONER DeGREGORIO: Is that your
16 next question?

17 VICE CHAIR HILLMAN: Their heads worked in
18 unison.

19 COMMISSIONER DeGREGORIO: The next one may
20 be a little more difficult to reach a consensus on,
21 but there's been a debate about this open-source
22 software and whether it should be released or not.

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1 Do you believe that a widespread review
2 would increase or decrease voting system security,
3 and why?

4 MR. McCLURE: One of the challenges when
5 applying an open-source code environment is what are
6 we comparing to. And probably the most relevant
7 example is Linux.

8 Linux is an operating system, and it's an
9 open-source system, and by its nature if you are a
10 user of Linux and find a bug you are responsible for
11 fixing it.

12 So if we apply that model to the voting
13 system industry, I'm not sure, number one, that it
14 applies; and, number two, there are a number of
15 concerns that if we were to expose our software--I
16 mean I believe personally that nobody sitting here at
17 this table has anything to hide, but what do we do
18 with the workload and the criticism of our software
19 and our code, whether it is unfounded or has some
20 basis?

21 Everybody has an opinion about good
22 software design. We happen to be following a

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1 guideline that is in the federal voting system
2 standard.

3 CHAIRMAN SOARIES: Could I do this? This
4 is a very--this topic deserves a panel all by itself.

5 And if you could just allow me to lead for a second,
6 if you would just send us comments on the open source
7 versus closed source issue.

8 And if you would, include in that this
9 issue of commercial off-the-shelf software which is
10 not subject to certification, but which is subject to
11 modification for adaptation which then should perhaps
12 make it subject to certification. There's some
13 tension there between the commercial off-the-shelf
14 software that kind of slips in under the radar.

15 Again, this is the perception of many
16 people, when it in fact should be subject to
17 certification given the amount of modifications that
18 occur. I'm sorry.

19 COMMISSIONER DeGREGORIO: That's fine, Mr.
20 Chairman.

21 CHAIRMAN SOARIES: We'll never get there
22 if I don't do something.

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1 (Laughter.)

2 COMMISSIONER MARTINEZ: One quick
3 question.

4 Mr. McClure, as a matter of routine
5 practice when you sell your system to a voting

6 jurisdiction, a county government or a municipal
7 government, do you send out your own company's
8 technicians to go and service that equipment during
9 an election? How does that process work?

10 MR. McCLURE: We're involved in the
11 installation process. And as part of an installation
12 contract, we will have election support as part of
13 that. But the system is set up that the day it's
14 sold, a county would not need our support for any
15 reason. They can run and operate the system on their
16 own. It's just as part of the change management we
17 continue to be involved.

18 We've been in Harris County for a couple
19 of years now. I didn't even know they had an
20 election going on there recently. So that our level
21 of involvement has dropped off with some of our first
22 customers. So it is mainly as a support, and it is

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1 on county request.

2 COMMISSIONER MARTINEZ: Mr. Charles, is
3 that the same thing with your company? As a matter
4 of routine practice, do you send out your own
5 technicians?

6 MR. CHARLES: It will vary by

7 jurisdiction. Jurisdictions that are large enough to
8 have the technical expertise on site can do that.
9 Other times they will contract with us to assist in
10 the administrative process.

11 All of the tallying and those functions
12 are done by government officials, but some of the
13 more technical components may be done. We also offer
14 a training and certification process so that
15 technicians in counties that are large enough to do
16 it can come back to our manufacturing facility and
17 become factory-trained technicians to do their own
18 repairs, if necessary.

19 COMMISSIONER MARTINEZ: One of the
20 criticisms that I've heard is the level of discomfort
21 that is out there if the vendor is out there in the
22 field servicing their own product with their own

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1 technicians during an election. So you understand the
2 nervousness that I think the average lay person would
3 have when they find that out, quite frankly.

4 So is there some guidance that you give
5 your technicians? I mean, a machine breaks down;
6 don't reload the software? Or don't do certain
7 things, to make sure that you're not putting

8 something in new, I suppose, that hasn't been through
9 some sort of a checks and balances process?

10 MR. CHARLES: I think that is the earliest
11 step. What technicians do on election day is really
12 trouble shoot and provide poll workers with the
13 guidance they need to work through a glitch.

14 A lot of times what a technician will do
15 is essentially in-field training. If a poll worker
16 doesn't understand how to operate something, that
17 technician will train them how to do that.

18 In an election, if there is a problem with
19 a machine, the machine is shut down. It's not
20 reloaded with new software. There's no field level
21 logic and accuracy testing, or any of those types of
22 things. Those incidents are rare, but never would

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1 anybody do any sort of reprogramming at all of an
2 election. There is simply an operation that takes
3 place on election day.

4 CHAIRMAN SOARIES: Let me thank the
5 Commissioners for their restraint, and thank you for
6 your discipline. I want to say that, again, this
7 Commission understands the impact we could have on
8 your industry and therefore we are committed to

9 behaving in such a way to not provide disincentives
10 for private investment in your line of work.

11 At the same time, we understand the need
12 for public accountability on this very sensitive
13 issue and we hope to balance those two. When you
14 feel that we are behaving such that it is a
15 disincentive or threat to your doing business, we
16 need to know that. Because I think in our lifetime
17 we will need the private sector as a key partner in
18 making both happen.

19 Mr. Welsh, I want to thank you for coming.
20 I am honored to meet you and, no disrespect intended,
21 but the next time we have a meeting I would hope your
22 company would make a decision to send someone who

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1 goes to work every day and can answer questions about
2 current and potential future activities, and we just
3 want that to be part of our record.

4 But you did a fine job. Your written
5 testimony is eloquent, and I am sure your tenure at
6 the company was successful. But every company has
7 chosen to send people who go to work every day. One
8 sent a CEO, and I just will communicate with ES&S our
9 disappointment with that decision, in spite of our

10 satisfaction with your presentation.

11 MR. WELSH: I am still active on the Board
12 of Directors. I'm just not active in day to day.

13 CHAIRMAN SOARIES: I understand.

14 For those who are guests, we are going to
15 break for lunch and I've got to give you some
16 critical information. We are going to start our
17 third panel sharply at 12:45.

18 (Whereupon, at 12:02 p.m., the hearing was
19 recessed for lunch, to reconvene at 12:45 p.m., this
20 same day.)

21

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1 AFTERNOON SESSION

2 (12:45 p.m.)

3 CHAIRMAN SOARIES: We are ready to
4 reconvene. We are ready to begin our third panel. I
5 want to thank the audience. We have not begun yet,
6 but we are preparing to begin.

7 I would like to thank the audience for
8 their cooperation, those who were here this morning,
9 you were a perfect audience. I hope that we will
10 continue this afternoon in the same spirit of

11 civility and order.

12 I would like to remind you to turn off, or
13 at least turn to a silent mode your electronic
14 devices. That will be very helpful to us.

15 We have two of our four distinguished
16 panelists seated. We have number three now, and I
17 know I have seen evidence that number four is close
18 by.

19 We have as our first panel this afternoon
20 the practitioners of the voting process, persons who
21 have high respect among their peers and certainly
22 have the respect of this Commission.

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1 Let me say as I prepare to introduce our
2 panelists that the Election Assistance Commission
3 takes seriously the word "assistance" in our title.
4 We perceive our role as one where we offer assistance
5 to the people on the ground who do the work.

6 And for those who may be new to the
7 process, please be reminded that it is not the
8 responsibility of the EAC or the Federal Government
9 to dictate to voting jurisdictions what kind of
10 voting equipment they use.

11 This hearing is being held today based on

12 an assumption that there will be jurisdictions that
13 use electronic voting. As Commissioner Martinez
14 mentioned in his opening remarks, we will also be
15 working on developing guidance for punch card
16 districts, for optical scan districts, and for lever
17 districts.

18 So the fact that we're focusing on
19 electronic voting should not be used to infer that we
20 recommend any particular type of voting device.
21 Rather, we are here to assist voting jurisdictions
22 and elected administrators and voters once they

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1 decide what kind of voting device to use.

2 Our panel consists today of the Director
3 of Elections for the State of New Mexico, Denise
4 Lamb; the County Clerk and Registrar for Los Angeles
5 County, Connie McCormack; the Assistant Secretary of
6 State and Director of Elections Administration for
7 the State of Georgia, Kathy Rogers; and the Secretary
8 of State of California, Kevin Shelley.

9 Mr. Shelley was scheduled to speak first.
10 We will proceed, and we will switch his order to
11 accommodate whatever time he arrives.

12 Let us begin with Assistant Secretary of

13 State Kathy Rogers.

14 STATEMENT OF THE HONORABLE KATHY ROGERS,
15 DIRECTOR OF ELECTIONS ADMINISTRATION,
16 OFFICE OF THE GEORGIA SECRETARY OF STATE

17 MS. ROGERS: Thank you, Chairman Soaries.

18 CHAIRMAN SOARIES: We will need you to
19 speak as directly into the mikes as you can to
20 facilitate the technology.

21 MS. ROGERS: Thank you, Chairman Soaries,
22 and Commissioners of the EAC.

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1 The 2000 Presidential Election served as a
2 wakeup call to a Nation of voters and to election
3 officials. Alarmed by the high number of under votes
4 recorded by voting equipment in Florida, Secretary of
5 State Kathy Cox compiled data on under votes
6 experienced with Georgia's then-existing equipment,
7 which was a huge mix of lever, punch, and optical
8 scan. Even paper ballots in two counties.

9 The findings were staggering. Not only
10 did Georgia have a higher under vote rate than
11 Florida, at 3.5 percent our under vote rate far
12 exceeded the national average of 1.9 percent, and was
13 reported by the Cal Tech/MIT Study to be the third

14 worst in America.

15 Further analysis documented extremely
16 large variations in the same county using the very
17 same equipment. The findings and the wake-up call
18 report were alarming enough that in 2001 the General
19 Assembly passed Senate Bill 213 which created the
20 21st Century Voting Commission.

21 This multi-partisan group was tasked with
22 studying the accuracy and reliability of all

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1 nationally qualified voting systems and to provide a
2 report to the General Assembly.

3 Altogether, the State of Georgia conducted
4 a full year of study, evaluation, and due diligence
5 before we made our recommendation to adopt a
6 statewide uniform electronic system of voting.

7 Georgia is extremely fortunate to have the
8 Center for Election Systems at Kennesaw State
9 University as our independent technical capable
10 partner responsible for testing and certification of
11 all election equipment.

12 Upon completion of national testing,
13 experts at the Center for Election Systems under the
14 direction of Dr. Brett Williams reviewed the system

15 for compliance with state law and tested the system
16 for the presence of any unauthorized or fraudulent
17 code.

18 After the equipment has been certified,
19 the vendor is then allowed, and only then allowed, to
20 install equipment in the local jurisdictions.

21 Once it has been installed by the vendor
22 in the local jurisdictions, technicians from the

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1 Center for Election Systems travelled to each county
2 to test the equipment independently and to verify the
3 accuracy and to verify that it's the same system
4 which was certified at both national and state level.

5 In the 2002 general election, technicians
6 from the Center for Election Systems tested and
7 touched over 22,000 individual touch-screen units,
8 over 9000 encoders, and 159 election management
9 servers.

10 To date, today our independent testers
11 continue to travel to each of Georgia's 159 counties
12 to independently test and verify that the system is
13 the system that was given to us by the vendor.

14 November 2nd, 2002, was an extremely
15 historic day for Georgia. For the first time, every

16 voter was afforded the opportunity to cast a ballot
17 in the same manner using the very same equipment. A
18 voter in one county did not receive the advantage of
19 better technology while his counterpart in a
20 neighboring county voted on antiquated voting
21 equipment prone to high error rates.
22 Voters who had previously never cast an

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1 independent ballot shared with us their feeling of
2 pride and accomplishment at being able to utilize the
3 features of electronic voting that allowed them to
4 vote independently for the very first time.

5 The Carl Vincent Institute of Georgia at
6 the University of Georgia conducted a public opinion
7 survey following the 2002 general election that found
8 that Georgians overwhelmingly prefer electronic
9 voting to other methods.

10 More than 70 percent of respondents said
11 they felt very confident in the voting system. 97
12 percent of voters said that they experienced no
13 difficulties when using electronic voting.

14 Six years ago, Georgia's antiquated voting
15 platform at the top of the ballot U.S. Senate under
16 vote was 4.8 percent of all ballots cast. In 2002, a

17 direct comparison at the top of the ballot: U.S.
18 Senate race was a mere 0.87 percent. That is a more
19 than five-fold reduction in under voting. It is a
20 decrease of 71,000 ballots that showed no choice in
21 the top-of-the-ballot race. And it is clear and
22 convincing evidence that an electronic voting

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1 platform that prohibits over votes and offers a
2 summary screen to the voter to check and review can
3 dramatically improve the accuracy of the vote count.

4 The paper receipt debate has generated a
5 great deal of inaccurate, false, and misleading
6 information. No system, whether electronic,
7 mechanical, or paper based can be made 100 percent
8 invulnerable to attack. But the facts are that our
9 current uniform system of voting is more secure than
10 any type of voting in the history of Georgia
11 elections.

12 We did not in the State of Georgia simply
13 sign a contract with a vendor and walk away from this
14 process. To the contrary, the Secretary of State's
15 office in Georgia has continued to provide oversight
16 and direction through every step of the process, and
17 we continue to do so today with the assistance of the

18 Kinnesaw Center for Elections.

19 Let us briefly consider the practical

20 realities of paper receipts:

21 How is each receipt collected?

22 How does the voter view it?

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1 What is the official record of the

2 election?

3 If it's the paper, then what happens if so

4 much as one piece of paper is mangled or destroyed by

5 a mechanical printer?

6 Is the entire election then in jeopardy?

7 How do poll workers handle the complex

8 addition of a paper receipt?

9 Not only must poll workers be carefully

10 trained, but equipment must be designed to minimize

11 the technical and operational requirements.

12 Just as important, we should make certain

13 that the addition of a paper receipt, if implemented,

14 does not put us back into the same soup of

15 unacceptably high under vote rates that we have

16 worked so hard in Georgia to overcome.

17 In the vacuum of a computer science lab, a

18 new paper receipt prototype may appear very simple

19 and very foolproof, but in the real world of
20 elections with equipment that must be accessible to
21 voters with widely differing levels of education,
22 literacy, language proficiency, experience, and

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1 physical ability or disability, it is crucial that
2 the user interface be simple, straightforward, and
3 intuitive.

4 Georgia spent enormous time doing its
5 homework before we implemented our system, and that
6 due diligence paid off with plummeting undervote
7 rates across all demographic groupings.

8 It would be tragic if a hurried and
9 inadequately researched requirement for a paper
10 receipt makes that voter interface so complicated
11 that it increases the voter confusion.

12 The Office of the Secretary of State of
13 Georgia is not opposed to any change which
14 contributes further to the umbrella of security. We
15 do, however, oppose any change which will erase all
16 of the giant steps that we have taken forward in the
17 last two years.

18 This Commission has a very difficult task,
19 to separate fact from fiction and assess the

20 strengths and vulnerabilities of voting system
21 alternatives. The claims and ascertations of
22 electronic voting opponents must be scrutinized with

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1 the same ferocity that's been applied to the
2 statements and actions of equipment vendors and
3 election officials.

4 I would respectfully suggest that any new
5 standards adopted not only be carefully vetted in a
6 computer and technical environment, but that they be
7 proven to first do no harm in real-world election
8 settings with American voters and plenty of them.

9 No responsible election official would
10 come before you and claim that any system on the
11 market is the best that can ever be devised. A
12 culture of continuous improvement is one that we have
13 adopted in Georgia elections.

14 I am confident that this Commission will
15 exercise great care in evaluating electronic voting.
16 Thank you for allowing me to share my thoughts.

17 CHAIRMAN SOARIES: Thank you so much,
18 Secretary Rogers, and thank you for your hospitality
19 when we came to Georgia to visit for the primaries.
20 Please extend my heartfelt greetings to Secretary Cox

21 who could not be here.

22 We have been joined by the Secretary of

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1 State of the small State of California. Secretary
2 Shelley, welcome to Washington. Welcome to the
3 hearing. We changed the order to get started, but we
4 would be happy to receive your testimony now.

5 STATEMENT OF THE HONORABLE KEVIN SHELLEY,
6 SECRETARY OF STATE OF THE STATE
7 OF CALIFORNIA

8 MR. SHELLEY: Thank you very much, Mr.
9 Chairman, and members.

10 For all the Monty Python fans that may be
11 here--anyone who remembers the show from the 1970s--I
12 will respectfully introduce my comments by saying:
13 And now for something completely different.

14 I want to thank this Commission for
15 holding these hearings, and for the difficult
16 challenges that lay ahead.

17 As California Secretary of State, I have
18 no greater priority than making sure as many votes as
19 possible are cast and every vote is fairly counted.
20 That is why we are working so hard to make sure that
21 every Californian can cast their vote with

1 Unfortunately, many voters are entirely
2 either discouraged or too disconnected to make their
3 voice heard at the polls. We certainly cannot bring
4 these voters back to the polls if they are also
5 distrustful of the way their ballots are counted.

6 That is why I would like to briefly update
7 you on our efforts to restore voter confidence in the
8 integrity of the voting process. As many of you
9 know, just last week I followed the unanimous
10 recommendation of our panel of advisors and banned
11 the use of the Diebold TSX Touch Screen Voting
12 Systems in four counties.

13 Similarly, I followed that same panel's
14 unanimous recommendation to decertify all touch
15 screen systems in California until security measures
16 are in place to safeguard the November vote.

17 In particular, I am requiring counties to
18 install a voter-verified paper trail before November,
19 or to meet a series of security measures before I
20 recertify those systems.

21 These measures include everything from
22 ensuring the physical security of touch screen

1 machines, to prohibiting connections to telephone
2 modems during voting.

3 Many of these recommendations stem from
4 the Robber Report which previous speakers have
5 referenced.

6 I recognize these steps have been
7 controversial in some quarters. Some local election
8 officials do not agree that touch screens are
9 vulnerable.

10 I want to say here publicly that I greatly
11 respect and admire the work of these county
12 registrars. I am acutely aware of the fact that they
13 are on the front lines; that they are the ones the
14 public relies on to put on an election, and that time
15 and again they have come through for the voters.

16 And respectfully, to my good friend, Kathy
17 Cox in Georgia and Kathy Rogers who runs the election
18 day to day, I am proud to say in California that I
19 believe we have the finest local election officials
20 anywhere in the country.

21 It is with great reluctance that I
22 disagree, however, with the assessment of many as to

1 the security and reliability of touch screen systems.

2 But I want to be clear.

3 I do believe touch screen systems can be
4 reliable and secure, but the evidence to date
5 suggests that they are neither right now. Touch
6 screen systems can and should be more secure and more
7 reliable.

8 I know this panel will play a key role in
9 facilitating the changes needed. We have come a long
10 way since November 2000. California's March 2nd,
11 2004, primary election was the first election in
12 modern times in which no prescored punch card voting
13 machines were used in our State.

14 It was also the first election in which
15 over 40 percent of California voters were eligible to
16 cast their ballots on electronic voting machines.

17 Interestingly, that same 40 percent of our electorate
18 is also 40 percent of all the touch screens currently
19 in use in America.

20 Touch screen voting machines create the
21 possibility of making voting easier, and drawing the
22 disenfranchised to the polls. In particular, touch

1 screens have obvious advantages for the disabled and
2 non-English speaking voters.

3 Unfortunately, touch screens share many of
4 the problems we experience with our home computers.
5 Both are complex, prone to glitches, and vulnerable
6 to security challenges.

7 As much as I welcome the demise of punch
8 cards, we must recognize that the use of computer
9 systems in voting poses profound challenges to
10 election officials and regulators--far more profound
11 than any of us realize when the President signed HAVA
12 18 months ago, and perhaps more profound than we
13 realize even now.

14 I have come to Washington today, proud to
15 join this distinguished panel, to speak before you
16 and to speak about those challenges in the hope that
17 we can work together to address them.

18 I have had a number of opportunities to
19 speak with you, Mr. Chair, and Madam Vice Chair, and
20 I look forward to working with the other
21 Commissioners.

22 I am convinced the EAC can take a number

1 of measures that will greatly enhance the likelihood
2 that touch screens will fulfill their promise of
3 opening the polls to more voters and ensuring that
4 every vote counts.

5 Today I would like to address three
6 important issues.

7 CHAIRMAN SOARIES: Secretary Shelley?

8 MR. SHELLEY: Yes.

9 CHAIRMAN SOARIES: If you have the same
10 document I do, you are about a third of the way
11 through?

12 MR. SHELLEY: No, it's a short version.

13 CHAIRMAN SOARIES: Okay. Good.

14 (Laughter.)

15 MR. SHELLEY: But I got the hint.

16 (Laughter.)

17 MR. SHELLEY: Three important issues:

18 One, the need for an accessible voter

19 verified paper trail.

20 Two, improving Federal and State testing
21 procedures.

22 And three, the need for enhanced poll

1 worker training.

2 One, first I would like to address the
3 need for accessible voter-verified paper trails. I
4 was proud to be the first secretary of state to
5 require an accessible voter-verified paper audit
6 trail. I firmly believe that of all the changes that
7 can improve touch screens, this paper trail is the
8 most important.

9 We know that the possibility exists for
10 data to be corrupted or lost either due to security
11 breaches, human errors, or malfunctions. While the
12 likelihood of malfunctions is small, the likelihood
13 of security breaches and human error in my view is
14 much greater.

15 Is there anyone out there who would
16 attempt to hack an election? I would like to think
17 not. But the history of the Internet suggests
18 otherwise. And the irretrievable loss of election
19 results in even a single county in the Nation could
20 make the problems experienced with punch cards in
21 Florida look like a minor glitch.

22 A paper trail provides an iron-clad way to

1 recount votes, knowing that the paper record will

2 match the ballots actually cast.

3 Moreover, and perhaps even more important,
4 voters understandably feel more confident when they
5 can verify that their votes are being recorded as
6 intended. That increased level of confidence alone
7 justifies moving forward with a verifiable paper
8 trail right away.

9 In November 2003, I announced that I would
10 require an accessible paper trail by 2005. Last
11 week, in light of problems that occurred in the March
12 2nd, 2004, primary election, I modified this order
13 requiring that immediately any purchase of new touch
14 screen voting systems in California must have an
15 accessible voter-verified paper trail.

16 We are in the process of adopting our
17 first set of standards which will be in place by the
18 end of the month of May. I urge the EAC to follow
19 suit and initiate its process for the adoption of
20 federal standards immediately.

21 I know many say that we can't have a
22 voter-verified paper trail in place by November, but

1 I come here today to challenge that notion. I
2 challenge all of us, if we can work aggressively

3 together, to see if we cannot indeed have a paper
4 trail in place by the November 2004 election.

5 Many manufacturers and vendors we have
6 talked to appear poised to roll out this paper trail.
7 They're just waiting for standards if we can push
8 forward to make them happen. This panel must begin
9 that process.

10 Two, improving testing--very quickly, Mr.
11 Chairman. This panel performs an important function
12 at the federal level which is similar in many ways to
13 the functions of my office at the state level.

14 We are called upon to set standards for
15 voting equipment and to oversee testing. At both the
16 federal and state levels, I submit, that presently we
17 are poorly equipped to meet this challenge with
18 respect to touch screen equipment.

19 A brief story from the March 2nd election
20 illustrates the point. In the final weeks before
21 California's March primary election, every touch
22 screen system vendor sought approval of last-minute

1 changes to software, firmware, or hardware.

2 One vendor actually submitted ten requests
3 for last-minute changes. This 11th hour deluge of

4 requests for software, firmware, and hardware changes

5 was alarming. Very alarming.

6 Many of these changes had not received

7 federal qualification, and in some cases had not

8 even been tested for federal qualification.

9 Equally troubling, election equipment

10 vendors had no backup plan if last-minute

11 applications failed testing.

12 The result was a choice between using

13 equipment that had not been fully tested and

14 approved, or using no equipment at all. One of those

15 11th hour requests came from a manufacturer to permit

16 the use of a machine referred to as a precinct

17 control module.

18 CHAIRMAN SOARIES: Mr. Secretary, with all

19 due respect, so far your document matches my document

20 and you are now two-thirds of the way through.

21 MR. SHELLEY: I thought you had the long

22 version.

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1 CHAIRMAN SOARIES: Okay.

2 MR. SHELLEY: Let me race to conclusion.

3 CHAIRMAN SOARIES: And you will have a

4 chance to--

5 MR. SHELLEY: Let me race to conclusion.

6 Let me race to conclusion.

7 CHAIRMAN SOARIES: All right. On the
8 point of testing, we need to have a more aggressive
9 approach that we can set as the new constituted
10 Commission to work with the independent testing
11 authorities, to work with NIST, to work with all the
12 disparate federal entities that are kind of out there
13 in the stratosphere bringing them under your aegis,
14 if possible.

15 Obviously you need money. I know I stand
16 ready, as my colleagues do, to urge the Federal
17 Government to support you in that effort so you can
18 provide a truly regulatory function.

19 Let me say finally in conclusion, the
20 third component was poll worker training. Poll
21 workers have perhaps one of the hardest jobs in
22 America, which is to get in there at the crack of

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1 dawn and work a full shift, you know, 15, 16, 17 hour
2 days. It's a very difficult and very demanding job.

3 I think the level of training hasn't kept
4 up with all this new technology, as we saw on March
5 the 2nd where, when we had failings in certain

6 counties, the poll workers weren't trained to handle
7 this.

8 I want to commend Kathy Rogers and Kathy
9 Cox, who I had the privilege of speaking to Ms. Cox,
10 the Secretary of State of the State of Georgia
11 recently.

12 I think they have a state of the art poll
13 worker program. Their college, their Institute is
14 something that I look forward to hopefully modeling
15 our own approach in California after.

16 But until we have standards practices
17 across the country to deal with these new
18 technologies, I think the human element can't quite
19 keep up with all of that technology that's being
20 imposed.

21 With that, let me conclude. Thank you
22 very much, and I'll be happy to answer questions.

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1 CHAIRMAN SOARIES: Thank you so much not
2 only for coming so far to have restrictions imposed
3 on you, but coming in and sharing with us and
4 ensuring that we know as much as we can know about
5 your experience.

6 Connie McCormack, you have been described

7 by your Secretary of State as one of the finest local
8 election officials in the country. As I introduce
9 you, let me say the two of you being here really
10 helps us far beyond the issue electronic voting.

11 HAVA protects and preserves the
12 distinction between the role of the Federal
13 Government and the role of the State in voting.

14 What HAVA does not do explicitly is really
15 flesh out the role of the state and the local
16 election administrators, and some of the tension that
17 is resulting from HAVA around the country will inform
18 us as we communicate with Congress about the future
19 implications of HAVA.

20 So having said that, welcome to the local
21 election administrator for Los Angeles County.

22 STATEMENT OF CONNY McCORMACK, COUNTY CLERK AND

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1 REGISTRAR, LOS ANGELES COUNTY, CALIFORNIA

2 MS. McCORMACK: Thank you, Mr. Chairman,
3 and members of the distinguished panel. I truly
4 appreciate the privilege of addressing your
5 Commission today.

6 I would like to offer the perspective of
7 someone who has been a registrar of voters and an

8 elections administrator for 22 years in 3 of the
9 largest election jurisdictions in the United States:
10 Dallas County, Texas; San Diego County, California;
11 and for the last 8 years in Los Angeles County,
12 California.

13 Los Angeles County is the most populous
14 county in the United States with 4 million registered
15 voters and 5000 precincts to set up and hire and
16 train poll workers for.

17 Over the past 22 years, I have had the
18 opportunity to oversee elections on four different
19 types of voting equipment. I started out with lever
20 machines in Dallas, Texas, moved to punch cards, have
21 now done optical scan, and have put in a touch screen
22 system.

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1 I have first-hand experience three times
2 of doing that, and I can tell you that there is no
3 greater challenge for an election official in this
4 country than to change voting equipment.

5 In 1982, I converted from lever machines
6 to punch cards in Dallas, Texas. In 2000, I put in
7 electronic voting in Los Angeles County in
8 conjunction with the early voting environment. But

9 every one of those 4 million voters has the
10 opportunity to vote early in the elections starting
11 in 2000.

12 And just last year, November 2003,
13 instituted, replaced our punch card system that we
14 had used for 35 years through the recall election,
15 and a month later introduced in our big election,
16 November '03 election, a new optical scan system.

17 I think what your Commission is certainly
18 facing, and what the Nation is facing, and what
19 election officials both a state and local level are
20 facing--and there are thousands of us at the local
21 level; it doesn't matter if you've got 4 million
22 registered voters or 2000, the challenge is huge--and

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1 the challenge in the next two years is to make a
2 change in almost all of those jurisdictions to become
3 HAVA compliant.

4 It is going to be a huge sea change in the
5 election voting process. And into this very
6 environment of constant change and about-to-happen
7 change is erupting this fire storm of a controversy
8 over this voter verified paper record concept, and
9 whether or not it's necessary or whether or not it's

10 advisable to reconfigure the existing current
11 technology to be able to generate as yet pretty much
12 an unspecified and largely untested contemporaneous
13 at the same time as the voter is voting a paper
14 record.

15 I think it would be instructive to take a
16 few minutes to reflect back on what has happened in
17 this country when we last had the last major paradigm
18 shift in voting equipment in this country.

19 That started in the late 1960s and went up
20 through the early '80s, so there was more time to do
21 it, but it was a huge paradigm shift. Because many
22 jurisdictions changed at that time from paper-based

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1 manual tabulating systems, which we even had in Los
2 Angeles up until 1968, and changed to computerized
3 punch card voting systems.

4 Now this was the first time computers had
5 entered the election world in any major way. And
6 again it's only 35 years ago. I think it is
7 instructive to think about how people felt about that
8 back then.

9 Similar concerns were made--in fact, I
10 brought a copy of the Los Angeles Time, October 8th,

11 1969, story with a headline that screams: "HOW
12 ELECTIONS CAN BE RIGGED VIA COMPUTER".

13 It is a long story, and reading from this
14 article is enlightening.

15 CHAIRMAN SOARIES: Ray wasn't even born
16 then.

17 (Laughter.)

18 MS. McCORMACK: Well I won't say the same
19 for myself, but I wasn't yet a voter.

20 (Laughter.)

21 MS. McCORMACK: The vendor back then in
22 Los Angeles was IBM, so it was a very respected then

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1 and continues to be now vendor of computer
2 technology. In this article, I think you would find
3 you could hear it almost ringing today. It reads:

4 "One IBM official stoutly denied it is
5 technically possible to tamper with the
6 vote counting process. But this view is
7 disputed by scores of experts in the
8 field. Most agree that there is a growing
9 number of computer experts knowledgeable
10 enough to devise ways of modifying the
11 program so as to alter the vote count.

12 There are relatively few people who have
13 sufficient access to the program to do
14 anything about it."
15 That sounds pretty familiar, doesn't it? I think
16 both sides of this raging debate right now are
17 seeking the same over-riding goal, and I think we
18 need to keep that in mind because all of us want the
19 same thing.
20 We want accurate casting, tabulation, and
21 reporting of all votes in accordance with the voter's
22 intention. That is what we all want. And the fact

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1 is--and it is indisputable--the evidence is
2 indisputable, that touch screen DRE voting systems
3 have the proven track record of doing the best job
4 available of all voting systems to do just that.

5 While paper trail proponents are arguing
6 for a verifiable ballot, elections administrators
7 such as myself want to assure a verifiable system.

8 To lower the risk of failure and avoid the
9 triumph of unintended consequences, it is really
10 important in my view that pilot programs be
11 instituted and undertaken to verify whether or not
12 these paper trail systems would actually work as

13 anticipated and not inadvertently cause problems
14 while attempting to solve hypothetical ones.

15 The small-scale experiments to date, the
16 pilot programs we know about to date, deploying
17 prototype paper trail systems do not bode well for a
18 successful large-scale deployment.

19 Starting in November of 2002 in Sacramento
20 County, California--California always likes to feel
21 like we're out front of everything, so the Registrar
22 of Voters there put in a small-scale pilot program in

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1 early voting with a paper trail on a computerized
2 touch screen system.

3 The Registrar wrote a report assessing
4 that experience. He found that voters were confused
5 that they couldn't take the paper replica with them.
6 Additionally, he found there were frequent instances
7 when the attached printers jammed and required the
8 machines to be taken out of service.

9 And I quote, "When the printed record
10 stuck, they had to be extracted with many creative
11 tools that were at hand, including a windshield wiper
12 and a back scratcher."

13 Last year in November 2003 in Wilton,

14 Connecticut, there were also--you heard earlier in
15 the technical panel--a few other examples of trying
16 out this technology. This is what I really adhere to
17 and really am focused on is you try to do more pilot
18 programs.

19 The Deputy Registrar in Wilton,
20 Connecticut, reported that the voter interface issues
21 were, "appalling," and that his created "numerous
22 problems for voters and placed great stress on the

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1 poll workers."

2 Elections administrators really have
3 anticipated the major obstacles of moving this paper
4 trail issue from concept to reality, especially in
5 jurisdictions with long, complex ballots.

6 I brought with me today an actual ballot
7 of the November 2002 election in Alameda County,
8 California. California is known to have long
9 ballots, and I use Alameda as an example because it
10 was their first implementation of a touch screen
11 voting system county-wide.

12 This is the ballot (indicating). You can
13 see it is quite large. We have a lot of issues and
14 propositions on the ballot in California. As a

15 matter of fact, our current Secretary of State was
16 running for Secretary of State for the first time on
17 this ballot about 18 months ago.

18 CHAIRMAN SOARIES: It must have been a
19 good ballot.

20 (Laughter.)

21 MS. McCORMACK: A long ballot. Now the
22 actual experience of the voters in Alameda County

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1 when they introduced the system, on the touch screen
2 they were able to review that ballot with all these
3 races in two different colors, and when they had
4 skipped a race inadvertently--if it was intentional
5 they could just skip it--but if it was inadvertent,
6 touch that color and go back and the review screen
7 really helped them to make sure that the under voting
8 was less, as Kathy has described.

9 However, if we're going to move this type
10 of a ballot into a paper trail and only print the
11 Measure A, not even the title of it, and only put
12 'yes' or 'no' on the ballot, and it's this whole back
13 thing (indicating), about two inches on this, but
14 this whole ballot, just to print out the voter's
15 choice in voter-verified small print, English only,

16 for this ballot is 37 inches long.
17 So now this is what elections
18 administrators are thinking about, is how do we put
19 this under glass? What kind of speed is the
20 scrolling going to be? Is it going to be fast enough
21 for certain voters, slow enough for others? And I
22 did bring this for the record.

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1 CHAIRMAN SOARIES: Ms. McCormack, Ms. Lamb
2 came from New Mexico and it's a long trip.

3 MS. McCORMACK: Yes, okay. I'm on my last
4 sentence.

5 (Laughter.)

6 MS. McCORMACK: I thank you. I would just
7 like to briefly mention that there have been hundreds
8 of thousands of voter satisfaction surveys. Kathy
9 mentioned them earlier as well.

10 I think we need to talk about the survey
11 data, that it's overwhelming that voters are
12 confident in this equipment. These surveys are
13 empirical evidence that there's no crisis of voter
14 confidence, but rather a tiny vocal minority making
15 false claims to the contrary.

16 In conclusion, after 22 years of working

17 in this field, I can tell you I know one thing.
18 Election administration is a difficult endeavor.
19 Adding an unnecessary requirement to turn our
20 electronic systems into dual electronic and paper
21 systems would in my opinion create a number of
22 problems that could shatter the system and

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1 significantly erode public confidence. None of us
2 wants to see that happen.

3 Thank you for your time.

4 CHAIRMAN SOARIES: Thank you so much. May
5 I see that paper ballot. And the large one, too.

6 (Ballot examples handed to the Chairman.)

7 CHAIRMAN SOARIES: Denise Lamb from the
8 Great State of New Mexico.

9 STATEMENT OF DENISE LAMB

10 DIRECTOR OF ELECTIONS

11 STATE OF NEW MEXICO

12 MS. LAMB: Thank you, Chairman, and it is
13 a great State.

14 I would like to thank you, like all the
15 speakers today have, for the opportunity to come
16 here. I really appreciate it. I am going to make my
17 comments brief because I suspect you have questions

18 and I will try to keep my comments to a minimum.

19 I would like to share some concerns with
20 you about the debate that is currently taking place.

21 Our State began its transition to first generation

22 DREs in the 1980s.

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1 We have successfully used them in many
2 elections over the years. We have conducted recounts
3 recognized by the courts in our State, and we found
4 the systems to be reliable and sound.

5 The systems are completely accepted by
6 voters and, until recently, not a single voter ever
7 suggested that they could only be sure their vote was
8 counted by the provision of a paper receipt.

9 CHAIRMAN SOARIES: Denise, would you move
10 your mike a little closer to you so that we can hear.

11 Good. Thank you.

12 MS. LAMB: 22 of our 33 counties currently
13 use DREs, and only the smaller jurisdictions use
14 paper-based systems for precinct voting.

15 Consistently the most troublesome election
16 issues we have had in our State have been with paper
17 ballots in terms of counting the absentee ballots,
18 issues of voter intent, things of that nature.

19 This debate has been fraught with
20 misinformation and misrepresentation. We cannot lose
21 sight of the fact that the impetus for the second-
22 generation DREs, or touch screen systems, was not due

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1 to HAVA. But because other systems are inaccessible
2 to the visually impaired, the disabled, language
3 minorities, and illiterate voters there were a number
4 of lawsuits that began well in advance of HAVA,
5 brought about I think rightfully so by the disabled
6 community for access to the polls.

7 During some of the discussions in my
8 State, I have been appalled at the insensitive
9 comments that I have heard from some individuals when
10 I point out the necessity of all voters having an
11 equal right to secrecy of the ballot and independence
12 in casting that ballot.

13 I think it is a sad comment on our
14 democracy that each extension of voting rights in the
15 United States has been bitterly opposed by groups or
16 individuals who have never faced the same obstacles
17 to voting as encountered by others.

18 In my opinion--and I believe it is one I
19 share with most election officials--too much focus

20 has been placed on technology in this debate.
21 Election administrators need management standards to
22 accompany the voting system standards. This is

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1 something the election community has supported for
2 many years.

3 By "management standards," I mean
4 standards that can be used by every state that
5 include procedures for secure system storage,
6 maintenance, delivery, setups, startup, shutdown, and
7 polling place operations.

8 These standards could also address
9 parallel monitoring, restriction of access to
10 equipment, and ensuring that local election officials
11 maintain control over ballot creation.

12 We also need a centralized entity to
13 accept and distribute reports when equipment does
14 malfunction to ensure that this information is made
15 available to all election administrators across the
16 country.

17 Finally, I believe we need to take an
18 extra step that may be unpopular in the election
19 community. We need to conduct thorough post-election
20 audits as part of every state's canvassing process.

21 New Mexico has used a triple audit of its elections
22 for many years. The returns from each precinct,

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1 including audit tapes, from every machine in the
2 state are examined at the state level with a
3 comparison of machine tapes to rosters of local
4 jurisdictions' canvass.

5 This allows the state to examine the
6 returns for residual voting patterns, programming
7 errors, and other possible malfunctions and polling
8 official errors.

9 After the state completes its review,
10 independent certified public accountants review the
11 materials to discover exceptions or anomalies. This
12 process takes time. It takes nearly three weeks for
13 our state. However, I believe that the confidence
14 that it can engender is worth the effort.

15 Again, I know you are pressed for time and
16 I'm keeping my comments brief, but I do really want
17 to thank you for the opportunity to speak to you
18 today.

19 Thank you.

20 CHAIRMAN SOARIES: Thank you so much.

21 Thank each of you. We have two state-level officials

22 and two local officials, actually three state-level

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1 officials and one local official, and we are just
2 very appreciative of your willingness to come a great
3 distance and share at such a critical time.

4 We have the benefit on this Commission of
5 having a former local elections administrator, and we
6 have asked him to lead the questions for this panel.

7 COMMISSIONER DeGREGORIO: Thank you, Mr.
8 Chairman.

9 Secretary Rogers, I was in Wilmington,
10 Delaware, in February to observe their Presidential
11 Primary Election and they used the DRE system. They
12 have a system where at the end of the night they take
13 the results off the machines by cartridge. They also
14 print out the results.

15 They take those cartridges and they put
16 them in a device that reads the results. They took
17 these cartridges. They compared each one of them.
18 And I asked the question. I says, why would it
19 change? Why would you not get the results of these
20 cartridges, because they indicated to me that they do
21 an audit the next day to compare the printed results
22 to the cartridge results.

1 And I stayed for the next day and found
2 that in 3 of I think about 500 polling places the
3 cartridges did not produce results, but the printout
4 did. And so they just produced another cartridge
5 from the machine which compared to the printout, and
6 the results were the same.

7 In Georgia under your system, how do you
8 do a recount with the DREs? There is a concern that
9 these memory cartridges may not work. Have you had
10 recounts under your system? And are you merely
11 reproducing the results on these cartridges, or how
12 do you actually do the recount there?

13 MS. ROGERS: Our law currently states that
14 recounts are conducted in the same manner in which
15 the votes are tallied. So for all the optical scan
16 ballots, which is what we use for absentee ballots,
17 those are actually scanned back through the
18 tabulator.

19 The memory cards are uploaded again, tapes
20 are printed, reports are printed, and that is how the
21 recount is handled.

22 One little known fact is that our system

1 has the ability to print the images and we can do a
2 hand count. So that ability is there.

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1 Laser jet printers what could be 4 million
2 pieces of paper to hand count. So that ability is
3 there. The problem is that if we went into that type
4 of recount method, under our current election
5 structure we have runoff elections three weeks after
6 the primary. We would never be able to put the
7 candidates on the ballot, have our runoff ballots
8 ready for absentee voting and be able to go into the
9 next election if we actually printed out that piece
10 of paper.

11 But I would respectfully remind the
12 Commission that with lever machines there was never -
13 - and we had 67 -- 72 counties on lever machines.
14 There was no ability to recount. You simply read the
15 numbers off the back of the machine again. So this
16 is very similar to that.

17 With optical scan ballots you also have
18 the ability to upload the card again, but we do scan
19 those ballots. There is where you will get your
20 difference occasionally. I don't know, I'm like
21 Connie, I've worked with a multitude of different
22 voting systems in my career and have you heard the

1 term "marginally marked ballot"? A marginally marked
2 optical scan ballot is one in which a very tiny mark
3 may be made by the voter. It has always been my --
4 the way I've seen it happen and during a recount is
5 that marginally marked ballot is the one that the
6 next time the machine may or may not count that as a
7 vote and that's what changes your vote totals. So
8 it's not that you're getting more accuracy out of
9 that, actually you are getting a reflection that the
10 voter wasn't sure.

11 COMMISSIONER DeGREGORIO: So what you are
12 saying to me is that since you've instituted these
13 machines you've never reproduced the ballots in a
14 recount; that you can do that, but you haven't done
15 so yet?

16 MS. ROGERS: Correct. We can do that. We
17 have reproduced some just for our own benefit just to
18 see how it worked and that it did work as part of the
19 testing of the system. But we have not required that
20 of our jurisdictions.

21 MS. McCORMACK: Paul, could I add to that
22 because I have done a recount on the same touch-

1 screen equipment that we have. For our early voting
2 we had a close race in the Malibu mayor's race was 22
3 votes apart in the year 2000 when we introduced the
4 equipment. And we did print out all of the images
5 and do a manual recount of that race. And one of the
6 other points in the equipment that Cathy and I share
7 is triple redundancy. There's the hard disk, then
8 there's the flashcard, and then there's the paper
9 record that's the accumulated paper record as well as
10 the capacity to print out an image.

11 Well, as Cathy mentioned, I used lever
12 machines for one election. It was my first election
13 as an election administrator. And I said to my
14 bosses, "these go." These are not where we want to
15 be. There are tremendous inaccuracy problems with
16 the levers not working correctly and we had some
17 significant problems with those and no way did we
18 capture those lost votes. They were lost votes. And
19 so we were not making comparisons to all the
20 different kinds of systems here, but you did mention
21 you wanted to. So I wanted to mention that we have
22 done that.

2 Riverside, for four years using this equipment has
3 conducted six different recounts, one including a
4 couple hundred thousand votes, printing out the
5 records.

6 COMMISSIONER DeGREGORIO: Thank you.

7 Secretary Shelly, first of all, we only
8 were able to get your testimony just moments before
9 you came into the room and I was only able to read it
10 through just once. I didn't have the advantage of
11 reading it again, but I know there at the end, which
12 you didn't get to, you make some very good
13 recommendations to us regarding training of poll
14 workers regarding the need for independence, of
15 independent testing authority and such things.

16 However, this weekend, not having your
17 testimony, I downloaded your report because I wanted
18 to be familiar with California and with the problems
19 that you addressed in your report. But in that
20 report I found a very interesting parallel monitoring
21 program that a couple other people this morning have
22 brought to our attention that they suggest may be

1 used in lieu of a paper trail. And the way I am
2 reading from your report, which was recommended to

3 you by a committee that you had, you directed a
4 program where there would -- in eight counties you
5 would randomly select voting machines to be set aside
6 for experts to vote on March 2nd. So similarly
7 actual voting conditions to determine the accuracy of
8 the machines to record, tabulate, and record votes.
9 And it was developed as a supplement to the current
10 accuracy testing program. The goal, as stated in
11 your report, was to determine the presence of a
12 malicious code by testing the accuracy of the
13 machines to record, tabulate and report votes using a
14 sample of DRE equipment in selected counties under
15 actual voting conditions on election day.

16 Now, in looking at the findings, okay, of
17 that parallel monitoring program, according to your
18 own report, it says, "the results of the
19 reconciliation analysis indicate that the DRE
20 equipment tested on March 2nd recorded the votes as
21 cast with 100 percent accuracy."

22 Now, someone suggested that this parallel

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1 monitoring program could be considered as an
2 alternative to the paper trail that's been suggested
3 by you and others. Can you tell me about how you

4 feel about the results of this report and how did it
5 weigh into the decision that you made to ban certain
6 equipment for this election in California?

7 MR. SHELLY: Happily we'll do that, sir.

8 Let me first -- before answering though, I
9 just want to -- I need to briefly address a comment
10 that was made in the presentation by the panelists in
11 referencing some of the advocacy of the voter-
12 verified paper trail as being quote/unquote "the
13 false claims of a tiny minority." I can absolutely
14 assure you as a statewide elected official in a state
15 with 35 million people, I would not base my decisions
16 on the false claims of a tiny minority. And I don't
17 know any elected official who would.

18 But in terms of parallel monitoring, we
19 created that system for the March 2nd election and we
20 are very proud of it. And let me just articulate
21 briefly what I have suggested for the ruling as it
22 applies to this coming November election. I don't

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1 believe the parallel monitoring is an appropriate
2 stand-alone alternative to a voter-verified paper
3 trail, accessible voter-verified paper trail and I'll
4 be happy to expand on that if need be. So what I did

5 in the ruling was I said, apart from the four
6 counties that were decertified because they weren't
7 federally qualified at Diebold TSX machines, the
8 other ten counties -- 11 -- for the other counties, I
9 said essentially, fine, that you can use your
10 equipment, the touchscreen systems if you have a
11 voter verified paper trail, or, if you need a number
12 of security directives, including parallel
13 monitoring.

14 So parallel monitoring is, we believe in
15 it. We believe it should be expanded from what we
16 used in the March 2nd election. We don't believe it's
17 an appropriate stand-alone security measure, but we
18 believe it's an excellent tool. And I'm very pleased
19 that both vendors and county election officials have
20 advocated for its use. There was some reluctance
21 when we first adjusted it for last March 2nd, and I'm
22 pleased, you know, that it's catching on. Because I

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1 think it's a good tool for the future.

2 COMMISSIONER DeGREGORIO: So you're
3 suggesting it as an alternative?

4 MR. SHELLY: What we have done in our
5 directive is the following. I conditionally

6 decertified a number of our counties based upon the
7 following premise, that they can receive
8 recertification should they have a voter verified
9 paper trail. But acknowledging fully, as much as
10 like perhaps many of you, I don't know, hope that we
11 can have a standard at the federal level in place by
12 November. I acknowledge that that may not be the
13 case. So I did not want to be irresponsible and just
14 say, you can't use the machine unless you have a
15 voter verified paper trail because of that perhaps
16 limited possibility.

17 So we said, instead, if you can't achieve
18 that goal because we won't have a standard, you can
19 be recertified if you do a number of things. One of
20 the things is parallel monitoring, a number of others
21 are various security measures, no modems. Many of
22 the counties already do these and do them very, very

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1 well. And I commend them for that.

2 We also, as one of the conditions for
3 recertification are requiring that the counties
4 involved with the touchscreens to provide the option
5 of voting optical scan, not in lieu of. And
6 essentially they already do this now for provisional

7 voters. So it just means you print some extra
8 provisionals or absentee ballots that they already
9 do. And we've indicated that we will, of course,
10 provide the funds for that and we've asked, actually
11 the vendors. But if that doesn't happen, we stand
12 ready through our Help America Vote Act resources to
13 do so as an unfunded mandate.

14 So, sir, we have suggested a series of
15 security measures that we believe will provide the
16 level of confidence in the election process this
17 fall. And essentially the option of voting on paper
18 in many respects is like a voter-verified paper
19 trail, because it addresses that lack of confidence
20 issue that the voter doesn't have the ability to see
21 his or her vote.

22 So for the voter that feel comfortable

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1 voting the touchscreen they can vote on paper. For
2 the voter that does feel comfortable, they can vote
3 on the touchscreen with the security measures in
4 place, including parallel monitoring.

5 CHAIRMAN SOARIES: All right. Now, let me
6 just get this clarification. I don't want to stop
7 you. It sounds as if what you've described as a

8 decertification --

9 MR. SHELLY: Conditional decertification,
10 yes.

11 CHAIRMAN SOARIES: -- of machines --

12 MR. SHELLY: Yes.

13 CHAIRMAN SOARIES: -- but a
14 recertification of counties.

15 MR. SHELLY: Well, no, no, no.

16 CHAIRMAN SOARIES: I'm trying to --

17 MR. SHELLY: I'm sorry. I'm sorry. No,
18 it's recertification of that same equipment.

19 CHAIRMAN SOARIES: Being used by the
20 jurisdiction?

21 MR. SHELLY: I apologize. I'm using the
22 wrong term.

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1 CHAIRMAN SOARIES: No, no, I just want to
2 make sure I understand.

3 MR. SHELLY: I'm using the wrong verbiage.

4 COMMISSIONER DeGREGORIO: You mentioned
5 mandates, in state mandates. And certainly your
6 directives could be considered a mandate to the
7 election officials across California.

8 MR. SHELLY: Sure.

9 COMMISSIONER DeGREGORIO: Is the state of
10 California with its financial problems that exist
11 today prepared to assist local jurisdictions with
12 financial support to institute these mandates?

13 MR. SHELLY: Yes, because it doesn't come
14 from our general fund. To the extent that there is
15 an unfunded mandate, those funds, if they aren't
16 otherwise picked up by vendors comes from the very
17 resources that have been made available by the
18 federal government.

19 Now, a number of counties have done
20 something very wise and I appreciate that. And that
21 is, for example, in San Diego they had within their
22 contract that if there was a decertification any new

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1 system that was certified for use or otherwise
2 determined to be used in that county the cost would
3 be picked by the vendor.

4 For example, in the decertification of San
5 Diego, the vendor in this instance, Diebold, in their
6 very contract with San Diego, has to pick up all
7 those costs. A number of other counties have the
8 same terminology within their contracts.

9 COMMISSIONER DeGREGORIO: Anybody estimate

10 how much this is going to cost?

11 MR. SHELLY: The backup paper ballots,

12 it's a million dollars.

13 COMMISSIONER DeGREGORIO: Statewide?

14 MR. SHELLY: Statewide.

15 COMMISSIONER MARTINEZ: For?

16 MR. SHELLY: The option to vote paper and

17 the backup paper is a million dollars statewide.

18 COMMISSIONER DeGREGORIO: Ms. McCormack,

19 we hear that election officials commonly use patches

20 that have not been certified by independent testing

21 authorities. If this is the case, then why did they

22 do that?

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1 MS. McCORMACK: The entire certification

2 process, I think, I do welcome the fact that it's

3 being reviewed now at a higher level and it's been

4 such a discrepancy between administrations from what

5 we used to have with the certification process in

6 California now under the new Secretary of State.

7 And even in Secretary Shelly's own report

8 he indicated that he needed to beef up the

9 certification process. And I think we all welcome

10 that.

11 So I think in the past when we've had all
12 these changes and laws, and we do get changes in laws
13 all the time; we conducted the last three primary
14 elections in California on three different sets of
15 laws. One time it was closed primary, then it became
16 and open primary and in the last election we called
17 it "the slightly ajar primary" because it wasn't open
18 and it wasn't closed.

19 [Laughter.]

20 MS. McCORMACK: The nonpartisans had a
21 choice to go to one or the other. But then the
22 people who were registered with a party had to vote

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1 with that.

2 It's very confusing for the poll worker,
3 for the election official and changes to software
4 that have to accommodate that. And in LA County we
5 have our own tabulation software we've been using for
6 about 30 years. And, of course, obviously it's been
7 through a lot of patches. And in the recall election
8 we did have a situation because we used the
9 touchscreens for early voting. And because there
10 were 135 candidates on that ballot, not in
11 alphabetical order, our sample ballots, which for the

12 punch cards, the punch number was in numerical order
13 which made it easier. If the voter looked at their
14 sample ballot and said, I want number 82 or 62 or
15 101, to go and find it, it made it more difficult on
16 the touchscreen.

17 We asked the vendor to make a change to
18 the software so that the number could be next to it
19 on the touchscreen and they did that for us.

20 You might remember we were doing that
21 whole election in a pretty rushed environment. Yes,
22 in retrospect we should have done a better job to

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1 submit that and we should have done that. We didn't
2 do it -- not submit is a nefarious thing. We tested
3 it and made sure it worked accurately. We, at E
4 minus seven, seven days before every election, we
5 send up the software to the Secretary of State to go
6 in escrow. We've always done that and all the
7 counties do that. So it wasn't like we were trying
8 to hide something. Those changes to the software
9 were in escrow at E minus seven and we had fully
10 tested it.

11 So, yes, in retrospect I wish we had put a
12 letter together. In the past when we had put letters

13 together we would get an instant letter back that
14 very rarely required any kind of recertification or a
15 retest and to my knowledge never going back to the
16 federal testing lab.

17 So now I think we need to nail down and
18 this commission can help with that, some appropriate
19 process for that to happen, especially given the
20 timelines that we sometimes have to confront with
21 legislative that gets changed very rapidly, sometimes
22 as soon as two to three months before an election.

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1 MR. SHELLY: Could I briefly expand on
2 that from my friend and colleague, Ms. McCormack,
3 because I think she raises a very important point.
4 That during the recertification process, for example,
5 during these last several months in California, a
6 number of county election officials have raised the
7 issues with me that there had not normally been an
8 expectation that for each and every new software
9 recertification that it would need additional state
10 approval. And I have to say, I understand and I'm
11 very empathetic to that point. I mean, the law did
12 require it, but frankly it hadn't been enforced by my
13 very office. It hadn't been enforced in previous

14 years and it hadn't been enforced during some of the
15 initial months of my tenure. So I think all of us
16 collectively, both on the federal level, the state
17 level, and the local level, need, I think, to really
18 figure out this certification process so that we can
19 avoid the mistakes that have been made previously.

20 COMMISSIONER DeGREGORIO: Ms. Lamb, as the
21 Chairman mentioned, New Mexico was on the forefront
22 many years ago of installing DREs. And you've had a

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1 long history of DREs in New Mexico. This commission
2 is embarking on a process that's going to develop new
3 guidelines for voting system standards. And we fully
4 expect those guidelines to be more stringent than the
5 current guideline standards that exist that NASAF
6 came up with. How is your state going to meet these
7 guidelines if your equipment is so old?

8 MS. LAMB: Mr. Chairman and Commissioner,
9 what we will do is we will do what we always have
10 done and that is follow any federal laws or mandates.
11 We are in the process of transitioning out our older
12 first-generation DREs in any respect because they do
13 not meet the accessibility requirements of HAVA. And
14 so several of our counties began that process. Some

15 began even in anticipation before HAVA was passed to

16 make that transition.

17 Electronic voting machines like any other

18 electronic piece of equipment, while it doesn't

19 receive the daily kind of wear and tear that a PC

20 does at home. After a few years' use, you certainly

21 want to begin to upgrade that equipment anyway.

22 COMMISSIONER DeGREGORIO: Are you going to

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1 use some of the \$2.1 billion that we are going to

2 soon release to the states and New Mexico will get

3 it's share, and I assume you have some Title I money,

4 to replace this equipment?

5 MS. LAMB: I don't believe that the Title

6 I money applies for New Mexico. We don't have punch

7 cards or lever machines at this time. But we are

8 going to use the money to replace the equipment, the

9 older generation DREs that are not accessible to

10 visually impaired and blind.

11 And I do want to say that there is another

12 advantage that the newer generation equipment does

13 have for our state, in particular.

14 In New Mexico we have eight non-written

15 native American languages. That poses an additional

16 challenge when it comes to the voter verified receipt
17 issue for us. We haven't quite figured out yet how
18 you would supply a piece of paper in a non-written
19 language.

20 COMMISSIONER MARTINEZ: Mr. Chairman.

21 CHAIRMAN SOARIES: Yes, Commissioner
22 Martinez.

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1 COMMISSIONER MARTINEZ: Thank you, Mr.
2 Chairman. Just a few quick questions.
3 Secretary Shelly, in your remarks just a
4 few minutes ago you talked about an unfunded mandate.
5 And I just want to clarify that. The mandate is
6 yours, I mean, we understand that; right. So you're
7 suggesting the use of federal HAVA funds to
8 compensate your local jurisdictions that have to now
9 do some additional things as a result of your
10 mandate. When you talk about an unfunded mandate,
11 it's not coming from the federal government, yet
12 you're suggesting the use of federal funds to pay for
13 that?

14 I mean, we're not the ones that are saying
15 -- I mean, I'm just trying to clarify --

16 [Simultaneous conversation.]

17 MR. SHELLY: Is that an inappropriate use
18 of the funds?

19 COMMISSIONER MARTINEZ: No, no, that's for
20 lawyers to decide. But I'm wondering if that's -- I
21 mean, that's what you said. I mean, is that -- did I
22 understand that correctly?

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1 MR. SHELLY: What I meant with Ms.
2 McCormack and a number of other elected officials we
3 talked about for any of these unfunded mandates, to
4 the extent that they are interpreted as such, I mean,
5 you know, if we know the legal terminology that are
6 mandated by this state or federal government or by
7 any government entity, and it's an unfunded mandate
8 and it's determined as such that then we would
9 reimburse those jurisdictions with the funds and we
10 would use those funds.

11 We determined in consultation with the
12 federal government that it was perfectly appropriate.
13 If it's not, that's certainly new to me today.

14 COMMISSIONER MARTINEZ: I'm not suggesting
15 that at all. I'm just making sure that's what I
16 heard you say.

17 MR. SHELLY: Yes.

18 COMMISSIONER MARTINEZ: And let me just
19 make the broader point as to why I'm asking the
20 question.

21 MR. SHELLY: Yes, certainly.

22 COMMISSIONER MARTINEZ: I mean, obviously

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1 Title I monies or early-out monies were to replace
2 antiquated voting systems where a jurisdiction
3 decided to use those monies. So that's what she's
4 talking about when money is forced to replace voting
5 equipment.

6 MR. SHELLY: I'm not suggesting using
7 Title I. No, no, no, no. Discretionary funds.

8 COMMISSIONER MARTINEZ: I'm with you, I'm
9 with you. The Title II funds that we are about to
10 begin distributing are for broader purposes and
11 perhaps that's one of the purposes. I'm not opining
12 about whether it's appropriate or not. I was just
13 trying to make sure that I understand that that's
14 what you were saying.

15 From my perspective and it's not our job
16 to get on a soapbox here at this particular hearing,
17 but, you know, the Title II funds are not just for
18 replacing voter equipment. I understand how

19 important it is if a jurisdiction decides to use the
20 money for that purpose, but there's the people aspect
21 of voter -- of election administration that I've been
22 stressing quite a bit during my short tenure as a

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1 Commissioner.

2 MR. SHELLY: Uh-huh.

3 COMMISSIONER MARTINEZ: And you actually
4 did it as well, and I applaud you for doing it, poll
5 worker training, poll worker recruitment, voter
6 education, nonpartisan voter education activities
7 where a jurisdiction switches from one voting system
8 to another. It's important to make sure that
9 nonpartisan voter education -- I'm sure you would
10 agree with that.

11 MR. SHELLY: Yes, of course, sir.

12 COMMISSIONER MARTINEZ: So from my
13 perspective I'm just asking the question, because now
14 we're reprioritizing the use of HAVA dollars to a
15 certain extent. And I'm not saying that's
16 inappropriate, I'm just wanting to find out and to
17 make clear that that is what you are suggesting
18 essentially?

19 MR. SHELLY: Well, I mean, there are Title

20 I, there are Title II, there's the 102, Title II,

21 Title III, I mean --

22 COMMISSIONER MARTINEZ: Let this be clear

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1 --

2 MR. SHELLY: -- and there's the
3 discretionary funds that are within the discretionary
4 use of the secretary of state --

5 COMMISSIONER MARTINEZ: What Congress has
6 funded, and I assume that the funding is not coming
7 in an infinite -- it's finite --

8 MR. SHELLY: Yes.

9 COMMISSIONER MARTINEZ: -- right?

10 MR. SHELLY: Yes.

11 [Laughter.]

12 COMMISSIONER MARTINEZ: I didn't say that
13 very clearly, but we know what we're talking about.

14 The money is not going to keep coming.

15 MR. SHELLY: Yes, of course not.

16 COMMISSIONER MARTINEZ: You know, I think
17 to make our case work, but the point being, the point
18 being that we know where the funding is coming from
19 Congress, we know what pots are available today.

20 MR. SHELLY: Yes. Yes.

21 COMMISSIONER MARTINEZ: So the discretion,
22 for example, the pilot projects, and research and

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1 grant opportunities 271, 281 of HAVA authorized, but
2 unfortunately not funded. So we don't have those
3 monies available to distribute.

4 MR. SHELLY: Yes.

5 COMMISSIONER MARTINEZ: What we have
6 available to distribute are Title I which has been
7 distributed in full.

8 MR. SHELLY: Yes.

9 COMMISSIONER MARTINEZ: And Title II which
10 is about to be distributed to states beginning Monday
11 when the 45-day public comment period ends.

12 MR. SHELLY: Yes.

13 COMMISSIONER MARTINEZ: And so we know
14 which funds we're talking about. And, again, I'm not
15 suggesting inappropriateness because that's for
16 lawyers to decide. I'm not here today as a lawyer.
17 So that's not what I'm suggesting. I just, again,
18 want to be clear that the cost that needs to be borne
19 by the local election officials in your state, it's
20 going to have to come from someplace. You're
21 suggesting it come from the vendors. If they say no,

22 for whatever reason, and they legally can say that,

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1 if they can, I don't know that. Then the next pot of
2 money appears to be the HAVA fund is what I heard you
3 say.

4 MR. SHELLY: Yes. Sir, can I just -- let
5 me just --

6 CHAIRMAN SOARIES: I love to hear lawyers
7 talk.

8 [Laughter.]

9 CHAIRMAN SOARIES: When they're not
10 talking about me.

11 [Laughter.]

12 MR. SHELLY: I think I understand your
13 question, sir. Let me -- if I can just briefly say,
14 you know, I considered, as Connie and others know, I
15 considered decertifying some of those other counties.
16 But I thought it was irresponsible. I thought it was
17 irresponsible for the disabled to prefer and have
18 used the DREs. I thought it was irresponsible for
19 non-English speaking voters. I thought it was
20 irresponsible for county election officials who have
21 to pull of an election in six months. But I thought
22 it was responsible to require the provision of the

1 option of voting on paper, parallel monitoring, a
2 technical security plan from the secretary of state,
3 full federal testing and qualification which hasn't
4 always been followed in the past, full state testing
5 and certification which hasn't always been followed
6 in the past, no last-minute changes which sometimes
7 would happen within 10 days. We put a 46-day
8 timeline on it. No wireless connection. Poll worker
9 training where the emphasis must provide adequate
10 hands-on training for each poll worker for the DRE
11 and any other device that was used.

12 We take it very seriously and not trying
13 to be cavalier in coming up with suggested
14 requirements that either (a) were too onerous or (b)
15 too costly; but rather would protect the integrity of
16 the process. And that's what we came up with.

17 The other alternative was outright
18 decertification and I didn't think that was
19 responsive.

20 COMMISSIONER MARTINEZ: No, I understand
21 that fully and I appreciate that answer. And I am
22 not passing -- despite the lawyerly tone of my

1 questions, I'm not trying to pass judgment on what
2 you've done, I'm just trying to clarify from my --

3 MR. SHELLY: I understand, sir. It's a
4 very legitimate inquiry.

5 COMMISSIONER MARTINEZ: Right. Okay. I
6 appreciate that.

7 CHAIRMAN SOARIES: In the few minutes we
8 have remaining, I will abstain from asking questions,
9 but I will have a comment.

10 Commission Hillman, Vice Chair Hillman and
11 then we will close this session.

12 VICE CHAIRMAN HILLMAN: I have two
13 questions and I think that they both could do with
14 quick answers. For Cathy Rogers, about how many co-
15 workers have to be recruited to conduct a general
16 presidential election in the state of Georgia?

17 MS. ROGERS: We have approximately 3,000
18 precincts. You have a minimum of four poll workers
19 to a precinct and that number could go up potentially
20 as high as 12. So if you multiply that out, you've
21 got at least nine to 14,000 poll workers.

22 VICE CHAIRMAN HILLMAN: Did the

1 introduction of the electronic voting equipment make
2 it any different when it came to recruiting poll
3 workers to do those jobs?

4 MS. ROGERS: No, not at all. We had a lot
5 of election officials who were saying, oh, we're
6 going to lose our poll workers. They're going to be
7 afraid of the technology. But when we did the poll
8 worker training, and let me just say, poll worker
9 training is very, very important. But the secretary
10 of state's office in Georgia has taken on a new
11 endeavor of assisting our counties with that poll
12 worker training. They need extra funds. They need
13 extra training. They need help in training poll
14 workers. And I think that states are going to have
15 to step in and help their counties now. But with
16 that endeavor and we did not see that happen. A
17 very, very small percentage of poll workers did drop
18 off, but the same small percentage that I saw back in
19 1998 when I put in a new optical scan system. Some
20 people are just afraid of change and won't accept it.
21 But for the most part it was embraced.

22 VICE CHAIRMAN HILLMAN: Okay. Thank you.

1 A quick question for you Denise. Over the
2 years that you've been using the electronic voting
3 equipment, and let me just say that when I have the
4 opportunity to visit with you all in Sante For
5 example, I did have a wonderful introduction to the
6 inside/outside, upside down of the older DRE machine
7 with a wonderful explanation. That was provided to
8 me by an employee of the -- I believe of the
9 secretary of state's office. But I'm just wondering
10 over the years how have you all used vendor
11 technicians in the course of the elections?

12 MS. LAMB: Mr. Chairman, Commissioner
13 Hillman, we don't use vendor technicians during the
14 course of elections. We have the state send
15 technicians from each county to be certified and they
16 get certified by the state. I believe when you were
17 there they did certify a few people.

18 We require that the vendors have people
19 available by telephone in order to assist us if
20 there's a problem. With most computerized systems,
21 if you have a problem on election day, you are not
22 going to fix it on election day. You have to pull

1 that system out of service and have a backup system
2 available. And you also have emergency paper
3 ballots. That was the case, I think, even back with
4 lever machines. They had emergency paper ballots in
5 case there was a malfunction. And so we rely on our
6 own counties to have technicians to take care of the
7 machines, not only on election day, but during the
8 course of the year for maintenance as well. They
9 have technicians on contract.

10 VICE CHAIRMAN HILLMAN: Thank you.

11 CHAIRMAN SOARIES: We are out of time.

12 Let me say that there were two objectives that we had
13 in inviting you here and in reading your testimony.

14 One was to help understand the issues that you need
15 us to address, and I want to thank you because this
16 issue of certification and timeliness is something
17 that we accept in terms of a challenge.

18 The issue of national data on equipment
19 malfunctions is an issue that we take very seriously
20 as a clearinghouse as Commissioner Martinez said.
21 And to the extent that you've raised very important
22 issues, we accept that challenge immediately and will

1 respond to your concerns so that you will know which

2 of those issues translate into short-term remedies
3 and which of those issues translate into long-term
4 work.

5 But beyond the issues which instruct us,
6 we are looking for best practices. And the idea of
7 parallel monitoring may be something that people
8 would rather take to based on the success in
9 California.

10 The inclusion of Kennesaw University as a
11 disinterested third party that has both practical and
12 academic expertise is something that Georgia
13 contributes to the process. We won't get into it
14 today, but in Los Angeles, among other things, you've
15 done a great job of recruiting college students to be
16 poll workers which satisfies both the numerical need
17 and technology. It fills a technology gap because
18 the younger people know more about technology.

19 And so know that your contributions to our
20 process are both in the areas of issues and in best
21 practices. Because at the end of the day we can't
22 tell districts what to do. But what we should be

1 doing is positioning ourselves to not only write
2 checks, but to offer information the districts can

3 use based on experiences you've had to get it right
4 in November. Some are trying to push us into a very
5 narrow corner as if we were established to make one
6 decision. And that decision frankly is not even in
7 our domain.

8 We will not decide on what machines people
9 should buy. We will make decisions, as Paul said, on
10 standards and we will work as quick as we can to fit
11 up our capacity to do so.

12 Again, in closing, we consider ourselves a
13 resource to the people on the ground. You and others
14 like you, the National Association of Secretaries of
15 State with Leslie Reynolds have been very helpful to
16 us to date, very helpful to the standards that we
17 have and have pledged their support in the future.

18 The National Association of State Election
19 Directors, likewise, has borne great responsibility
20 and we consider ourselves your partners and we hope
21 that we will behave such that you will consider us
22 your partner.

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1 Thank you so much.

2 Our research and human interaction panel.

3 Thank you so much for being here

4 panelists. If the audience would make a quiet
5 transition that would help us. We need the
6 audience's cooperation. We are prepared to begin.

7 As I've stated to our panelists and
8 audience -- I think next time we'll have our hearing
9 at the Defense Department.

10 [Laughter.]

11 CHAIRMAN SOARIES: Order in the military.

12 Ladies and gentlemen, audience, thank you
13 for your cooperation. We are going to now begin our
14 panel where we consider research and human
15 interaction factors. We are happy to have Dr. Sharon
16 Laskowski, National Institute of Standards and
17 Technology who has a primary role in helping us with
18 the report we recently submitted to Congress on human
19 factors.

20 We have Dana DeBeauvoir from Austin, Texas
21 who was a country clerk and practitioner with
22 expertise in this regard.

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1 And joining us momentarily will be Alice
2 Miller the Executive Director of the D.C. Board of
3 Elections.

4 Welcome Dr. Laskowski, and thank you so

5 much for your help predating this moment and for your
6 presentation that you have come prepared to give.

7 DR. LASKOWSKI: Good afternoon. As you
8 know I'm a computer scientist at the National
9 Institute of Standards and Technology. I wish to
10 thank the Election Assistance Commission for this
11 opportunity to speak about how to improve the
12 usability and accessibility of voting products and
13 systems and the role of NIST in this endeavor.

14 NIST has been asked in the Help America
15 Vote Act to assess that research standards and
16 guidelines in the areas of human factors, usability
17 and accessibility in terms of their applicability to
18 voting products and systems. As a result of this
19 investigation, we have compiled a set of
20 recommendations that, if followed, should measurably
21 improve the usability and accessibility of voting
22 systems.

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1 In the usability field, the definition of
2 a system encompasses the users and all the elements
3 required to accomplish some goal within a specific
4 environment. The human factors and usability for
5 voting systems focus on the process of the voter

6 casting a ballot as intended. And also the
7 interaction of the poll worker with the voting
8 system.

9 This primarily involves the user interface
10 the voter is presented by the product such as a DREE
11 and the environment and related equipment at the
12 polling place.

13 In this context we have not examined
14 issues such as the accuracy of the product, counting
15 the votes, the quality of the hardware, the software,
16 or the underlying security of voting systems as these
17 in general do not involve user interaction.

18 From a usability perspective, the voting
19 system is defined by the voters themselves, the
20 physical environment in which they vote, such as the
21 polls or home for Internet-based voting; the
22 psychological environment associated with voting, for

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1 example, stress induced by long lines at the polls or
2 time pressure associated with personal deadlines; the
3 equipment, both hardware and software used for
4 voting, such as paper ballots, optical scanning and
5 DREs; the ballot itself; the quality of support
6 provided if required by the voter by poll workers;

7 and any documentation and training provided to the
8 voter, poll workers and other election
9 administrators.

10 Usability is a measure of the
11 effectiveness, efficiency of satisfaction achieved by
12 the users. Effectiveness includes accuracy and
13 completeness such as the number of user errors.
14 Efficiency includes resources such as time expended
15 by the voter. And satisfaction includes the
16 subjective comfort and acceptability of the results
17 to the voter.

18 Accessibility is defined as the degree to
19 which a system is available to and users by voters
20 with disabilities. These are standard definitions
21 that have been formulated to provide the means for
22 explicit measurements for usability and they are

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1 certainly applicable to voting systems.

2 This means that we can measure usability
3 voting products such as DREs. Currently we are
4 unsure about the extent to which usability problems
5 exist because for the most part voting products and
6 systems have not been tested for usability.

7 To give a simple example, for touchscreen

8 ballots, if a voter selects a candidate by mistake
9 and wants to deselect that choice, it's certainly
10 possible with a touchscreen we do not know whether
11 any of the current implementations causes voters
12 confusion and errors or not. It is possible to
13 create standards which address usability and
14 accessibility.

15 For an independent testing authority, ITA,
16 to qualify a voting product as conforming to such a
17 standard tests must be designed to measure these
18 levels of usability and accessibility.

19 When a requirement involves human
20 interaction, the way in which it is to be tested
21 depends on the type of requirement. For example, a
22 desired requirement could be tested by inspection.

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1 But a performance benchmark needs to be tested with
2 actual users. This implies that the standards have
3 to be written with the testing in mind. These
4 standards should also be relatively independent of
5 specific implementations.

6 In addition, aspects of the voting system
7 beyond the user interface itself such as the ballot
8 design and documentation also needs to be examined

9 with usability and accessibility in mind.

10 The NIST recommendations are, and there
11 are ten of them:

- 12 1. Develop voting system
13 standards for usability
14 that are performance-based,
15 high level, that is
16 relatively independent of
17 the technology, and
18 specific, that is precise.
- 19 2. Specify the complete set of
20 user related functional
21 requirements for voting
22 products in the voting

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- 1 system standards.
- 2 3. Avoid low-level and general
3 product design
4 specifications for
5 usability. Only those
6 product design requirements
7 that have been validated as
8 necessary to ensure
9 usability should be

10 included as shell
11 statements and standards.
12 4. Build a foundation of
13 applied research for voting
14 systems and products to
15 support the development of
16 usability and accessibility
17 standards.
18 5. To address the removal of
19 barriers to accessibility
20 the requirements developed
21 by the Access Board, the
22 current voting system

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1 standards and the draft
2 IEEE standards should be
3 reviewed, tested, and
4 tailored to voting systems
5 and then considered for
6 adoption as updated VSS
7 standard. The feasibility
8 of expansion to include
9 both self-contained and
10 closed products and open-

11 architecture products
12 should also be considered.

13 6. Develop ballot design
14 guidelines based on the
15 most recent research
16 experience of the visual
17 design communities
18 specifically for use by
19 election officials and in
20 ballot design software.

21 7. Develop a set of guidelines
22 for facility and equipment

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1 layout. Develop a set of
2 design and usability
3 testing guidelines for
4 vendors and state supplied
5 documentation and training
6 materials.

7 8. Encourage vendors to
8 incorporate a user center
9 designed approach into
10 their private design and
11 development cycle including

12 formative or diagnostic
13 usability testing as part
14 of private development.
15 9. Develop a uniform set of
16 procedures for testing the
17 conformance of voting
18 products against applicable
19 accessibility requirements;
20 and
21 10. Develop a valid, reliable,
22 repeatable, reproducible

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1 process for usability
2 conformance testing of
3 voting products against the
4 standards described in the
5 first recommendation with
6 agreed-upon usability
7 pass/fail requirements.
8 In general, the single, most critical need
9 NIST has identified is a set of usability standards
10 for voting systems that are performance-based and
11 support objective measures and associated conformance
12 test procedures that can be used for qualification

13 and certification of voting products.

14 We also recommend that in the short term
15 states perform their own usability testing before
16 procurement as well as after procurement with their
17 own ballots to mitigate any potential usability
18 problems that might occur.

19 We expect that these recommendations will
20 be taken into consideration by the technical
21 guidelines development committee when it becomes
22 operational under the EAC as described in the HAVA.

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1 Thank you.

2 CHAIRMAN SOARIES: Thank you so much.

3 You can tell who the computer scientists
4 are out there. They were on the edge of their
5 chairs.

6 [Laughter.]

7 CHAIRMAN SOARIES: The rest of us were
8 writing down words to look up in our dictionaries.

9 [Laughter.]

10 CHAIRMAN SOARIES: Thank you so much, Dr.
11 Laskowski. I have questions for you after.

12 Ms. DeBeauvoir.

13 Ms. DeBEAUVOIR: Perfect. Thank you so

14 much.

15 Mike on, mike? Thank you.

16 CHAIRMAN SOARIES: Okay. Here it comes.

17 Ms. DeBEAUVOIR: I began my first election

18 in 1987 when I was a baby clerk conducting a punch

19 card election for Austin, Texas which is about --

20 it's now 700,000 voters. When I first conducted that

21 punch card election and saw what it looked like

22 behind the scenes I was pretty disturbed and

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1 immediately started working on my jurisdiction to get

2 us out of it.

3 Three years later I convinced my

4 commissioners first to switch to an optical scan

5 central count which is a huge undertaking for a large

6 county like us, but it was the cheap way to get us

7 out of punch card voting.

8 I will say that we were such a large

9 jurisdiction that I was very close to having to

10 butterfly my ballot in order to get everything on

11 there. And even back then I knew that was going to

12 be a scary proposition.

13 Two and a half years ago I again

14 transitioned our county to a DRE touch-button system.

15 So I may be the only one here to talk about that
16 particular piece of equipment. And I did an
17 extensive voter education campaign in all of those
18 transitions. And I think what I've learned from the
19 previous transitions and now this one, and especially
20 the more current conversation, what I would like to
21 do is add to further the conversation about how
22 voters feel and what we can do about voters while I

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1 also concur with many of the statements that Connie
2 McCormack made.

3 I've also been through the thinking
4 process about how I would put a large ballot into a
5 voter verified paper piece of ballot and it looks
6 very similar in Austin, Texas as in Los Angeles.

7 Now, I think what's important for voters
8 is we've got to educate them because right now
9 there's this sort of free-floating thing happening
10 out there and we've got to find ways to educate
11 voters so that they focus on exactly what the problem
12 is so that then we know exactly what the solution is.

13 The engineers in the audience would refer
14 to that as "risk assessment" and "risk mitigation."
15 Because what I want to talk about is the kinds of

16 things that voters mention to me. They stop me in
17 the supermarket all along and ask me some of these
18 kinds of questions.

19 They ask me, well, you know, can we stuff
20 the ballot box like we used to do with paper ballots?
21 Can ballot stuffing occur? The answer to that
22 particular risk assessment is a mitigation tool that

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1 is procedural. Okay.

2 They ask about post-election tampering.
3 They want to know if there is any way you can tell at
4 the counting station if somebody is doing something
5 behind the scenes or any of that. The mitigation to
6 that risk has to do with real time audit logs, with
7 segregation of duties, with opening up the doors and
8 letting the general public watch what you're doing
9 and having trained personnel who are your own people.

10

11 The other thing that they ask me about is
12 hacking. Hacking has been probably the thing I get
13 asked the most about. You know, we can just hack
14 into the system and change votes. If there is no
15 external communication pathway, then we are wasting
16 our time talking about hacking. And in most systems

17 they are closed. So it's not possible to hack it.
18 Internet voting is very scary. But not a
19 closed system. So we can just bypass hacking and
20 let's go to some of the other forms of tampering that
21 have been mentioned to me. The one that's probably
22 been mentioned the most by voters is the Trojan Horse

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1 or Bomb or something that's been planted in the
2 software and then it's going to react later, either
3 in a time clock or triggered by some particular
4 action. The mitigation to that particular risk is,
5 you know, a lot of different steps that we currently
6 don't have really good tools for. And this is one of
7 the things that I believe that the Commission can be
8 helpful for in the future. And that is, that if --
9 one of the things that was mentioned earlier is, if
10 we were to use hash code testing to prove that the
11 version of the software that I am using on the
12 system, you know, that I'm conducting that election
13 on and it is only that software version, then that
14 helps take care of that problem.

15 Once, again, the risk assessment -- I
16 mean, the mitigation matches the assessment problem.

17 I'm going to move very quickly because I

18 want to give you the opportunity to ask questions.

19 Probably the one risk that I think I take
20 most seriously is some form of an inside job. And
21 I'm still not sure exactly how, you know, this would
22 occur. But, you know, let's just say that I would

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1 consider that a higher probability than some of these
2 other examples of risks. And the way you do that is,
3 I think first of all you have to do very, very
4 serious logic and accuracy testing. I have submitted
5 in my materials to you a procedure that we could
6 teach county clerks and elections administrators --
7 from counties who perhaps don't have as much
8 technical experience as my county does -- how to set
9 this up and do it themselves so that they not only
10 proof their ballot, but they prove that it really
11 does count.

12 There's also, we could use cyclical
13 redundancy testing at the central counting station
14 prior to counting votes and we can demonstrate the
15 use of sum checks. Sum checks are in the equipment
16 right now. You can't see them. So let's demonstrate
17 them. Let's figure out a way to show people that
18 this is what is happening. Then, coupled with

19 criminal background checks on all temporary and
20 permanent employees, now you've got a significant
21 layering of mitigators on top of that so that you've
22 increased your confidence that, you know, inside job

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1 is going to be much, much more difficult to
2 accomplish.

3 And finally switching or doubling votes.

4 I actually had in an optical scan environment an
5 attorney who requested a recount because he was
6 convinced that the vote totals for the two candidates
7 had been switched because the plug was plugged in
8 upside down.

9 Now, it was a three-prong plug.

10 [Laughter.]

11 Ms. DeBEAUVOIR: This is a real story,
12 this is a real story. It really did happen. And we
13 had to go halfway through this thousands and thousand
14 of ballot count -- recount before this guy finally
15 understood that, no, you know, it's not switching
16 votes at all.

17 [Laughter.]

18 Ms. DeBEAUVOIR: I have seen some fun
19 stuff.

20 I think what we really need to ask
21 ourselves is, what risks do we really face? And I
22 think we do need to do further risk assessments. But

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1 just in those few that I've mentioned, the ones that
2 voters talked to me about, in none of those cases is
3 a voter-verifiable paper ballot the answer. In none
4 of those higher risk, the ones, the problems that
5 everybody talks about does voter verifiable ballot
6 prevent it. And what I would say to you is that it
7 is not acceptable to me as somebody who has to deploy
8 equipment into the field that the only protection I
9 have for knowing that I've got a safe and secure
10 system is a voter -- and not even all of them, but a
11 sampling of voters who are going to tell me after the
12 fact that I've got something wrong. No, I want
13 prevention from the fact, not detection after the
14 fact.

15 CHAIRMAN SOARIES: Thank you. Thank you
16 very much. We know that Ms. Miller was detained and
17 if she can get here before 2:30, we would be happy to
18 hear from her. But we do have her written testimony.

19 Dr. Laskowski, you talked about a level of
20 uncertainty that exists around usability and my mind,

21 when you say that, goes to the first time I voted in
22 my district on a touchscreen machine when I was

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1 alarmed, I was pleased, and I was quite experimental.
2 I saw a keyboard at the bottom of the machine and I
3 had never seen a keyboard in a voting machine before
4 so I typed in my name. And I didn't know how to
5 untype it and so I pushed "vote" and I ended up being
6 elected to an office because I was a write-in
7 candidate for whom there was no opposition.

8 [Laughter.] [Applause.]

9 CHAIRMAN SOARIES: So I wish I could have
10 verified that before I pushed "vote."

11 [Laughter.]

12 CHAIRMAN SOARIES: That is a true story.

13 [Laughter.]

14 CHAIRMAN SOARIES: When I hear persons
15 from your field talk about usability studies, I guess
16 what I would have called that before meeting you was
17 market research. But it's different. Could you help
18 us understand the difference between market research
19 for a product and usability studies from a science --
20 from a science aspect?

21 DR. LASKOWSKI: I think the biggest

22 difference is that in usability engineering process,

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1 when you're doing a usability evaluation, you want to
2 work with an appropriate sample of your users with
3 the actual product and observe the interaction with
4 the product because that's how you detect errors.

5 The error you described was one leading to
6 failure to cast your vote as intended. You can also
7 occasionally observe errors that don't cause the
8 failure that the user can correct. But in doing
9 those kinds of observations that tells you a couple
10 of things. It tells you what sorts of errors and
11 just by looking at say, spoiled ballots or residual
12 errors at the end, that doesn't give you that kind of
13 detailed information as to what is the actual sources
14 of the errors. It also tells you ways you can
15 mitigate or improve the user interface to alleviate
16 those errors.

17 CHAIRMAN SOARIES: So the challenge that
18 we have, if accepted, to include in new standards,
19 the requirement for performance-based usability
20 testing?

21 DR. LASKOWSKI: Yes, if we look at best
22 practice in the industry --

1 CHAIRMAN SOARIES: Right.

2 DR. LASKOWSKI: -- the software industry,
3 for example, we see that they do testing. They're
4 all testing with users on critical tasks, et cetera,
5 looking for these kinds of things and so we know that
6 that can ensure a certain level of usability and
7 indeed that is the most reliable way of identifying
8 those kinds of errors.

9 CHAIRMAN SOARIES: Yeah. I guess my
10 question is, there's a consensus of concern at this
11 table as it relates to the ITAs themselves.

12 DR. LASKOWSKI: Ah, yes.

13 CHAIRMAN SOARIES: And you're working on a
14 process that we'll end up partnering on. What are
15 the implications for certifying ITAs, if any --

16 DR. LASKOWSKI: Currently the ITAs do not,
17 as you know, do usability testing.

18 CHAIRMAN SOARIES: Right.

19 DR. LASKOWSKI: It's not part of the
20 mandatory and part of the current BSS, it's the
21 usability --

22 CHAIRMAN SOARIES: But if it were to

1 become a part of it --

2 DR. LASKOWSKI: -- and so they would have
3 to have -- first, a well-defined test methodology
4 would have to be developed to support the testing so
5 that an ITA could be certified as qualified to
6 perform that as having suitable personnel and a set
7 up in laboratory to perform those tests.

8 CHAIRMAN SOARIES: So given the pool of
9 candidates for potential ITA certification to become
10 ITAs, does that narrow the pool? Does it have an
11 impact on the possible number of candidates?

12 DR. LASKOWSKI: Well, they would have to
13 hire probably additional personnel or lab personnel
14 and lab facilities.

15 CHAIRMAN SOARIES: So it shouldn't have a
16 negative impact on --

17 DR. LASKOWSKI: It's in line with their
18 current process.

19 CHAIRMAN SOARIES: Okay.

20 DR. LASKOWSKI: It's no different than the
21 current process except that there's additional skill
22 involved.

1 CHAIRMAN SOARIES: Good.

2 DR. LASKOWSKI: But there are lots of
3 usability professionals around that can advise them
4 on how to do that type of thing.

5 CHAIRMAN SOARIES: Ms. DeBeauvoir, much of
6 what we are talking about, again, is in the gray area
7 of perception, and perception is impacted by
8 communications and some of what we are having to
9 think through is, how do we communicate to the
10 public? On the one hand one can communicate in a way
11 that causes the public to think that we are just
12 naive and defenders of the status quo. On the other
13 hand one can communicate in a way that predicts
14 Armageddon and just scares people to death.

15 Ms. DeBEAUVOIR: Yes.

16 CHAIRMAN SOARIES: How do you balance that
17 in this area?

18 Ms. DeBEAUVOIR: The whole issue of voter
19 education, well, for one thing, it's going to cost
20 money. And we are going to need professionals to
21 help develop those communication tools with voters.

22 There's one thing that I think we could do

1 right off the bat that would so help voters. And
2 that is, in all of the area equipment that's out
3 there right now, they're required to have a summary
4 screen. If we really focused people to teach them
5 how to use the one tool they already possess that's
6 basically the same thing as a voter verified paper
7 ballot, that would be a huge improvement right there.
8 Just focus on getting them to understand and use that
9 summary screen.

10 Now, what that says to them is it puts the
11 power back in their hands to, you know, accept
12 responsibility for their ballot, to make their
13 choices and it's something tangible and easy message.
14 You could get it across in a 60-second commercial.

15 And I think there are other examples of
16 things that we really need to focus on. But that
17 whole concept of voter education is, you know, we
18 need professionals to help us reach out and talk to
19 voters.

20 The other thing too is that I think you
21 have to create a climate where it's okay to ask
22 questions. And that happens in the polling places,

1 early voting on election day, we have to have really
2 warm and nice people in the polling places so that
3 voters feel comfortable saying, you know, I don't get
4 this. That's a hard thing for a lot of people to do
5 and we need to really encourage that climate.

6 CHAIRMAN SOARIES: My last question,
7 Denise Lamb talked about eight native American
8 languages that are unwritten which really is
9 exacerbated in the general population by high levels
10 of illiteracy. And what I'm wondering is if
11 illiteracy or a limited reading proficiency is a
12 usability issue or is it a different issue?

13 DR. LASKOWSKI: I would view it as a
14 usability issue for a specific segment of the
15 population. But when you start thinking about making
16 more accessible user interfaces, things like audio,
17 the blind also work in these examples as well.

18 CHAIRMAN SOARIES: Commissioner.

19 COMMISSIONER DeGREGORIO: Thank you, Mr.
20 Chairman. Ms. Laskowski, first let me compliment you
21 and NIST for your work. Of the four Commissioners I
22 have interacted with NIST the most over the past few

1 months and been very impressed by the leadership that

2 I have seen in NIST and Dr. Susan Zebun is here and
3 Alan Eustis is here who work on the voting program
4 with NIST and Craig Burkhart from the Department of
5 Commerce which NIST is under is also here. And this
6 report that you all have put together is an important
7 document, a very important document. We hope to have
8 it on our web page by the end of the week so people
9 can download it and read it themselves because the
10 recommendations are important, very important.

11 It's amazing to me how much money has been
12 spent on election equipment in the country and just
13 no research has been done, really, according to your
14 report and to what I see in other places into really
15 these human factors. And I found it fascinating
16 several segments, several pages of your report where
17 you describe the differences in DREs and how they
18 treat over votes and under votes.

19 A week from today we are going to go
20 before a committee of the house to plead for funds
21 for next year. And a significant portion of the
22 funds we are going to ask for will help support the

1 putting together guidelines and standards and to do
2 some of the research that you suggest here. What do

3 you think would be a reasonable time if we do get the
4 funding that we could probably -- that you could
5 probably conduct some thorough research by scientists
6 into this area and come up with a study that would be
7 used by vendors in election jurisdictions across the
8 country?

9 DR. LASKOWSKI: I think that within one to
10 two years you could have a fairly good foundation and
11 a structure for which to do testing and some basic
12 investigation on what are the values of the
13 parameters we are talking about in terms of
14 performance with respect to usability and
15 accessibility and that would serve as a springboard
16 for sort on ongoing iterative kind of investigation,
17 ongoing research as the technology changes and as we
18 learn more.

19 COMMISSIONER DeGREGORIO: I mean, I think
20 if there was a human factors report written years ago
21 about punch cards and butterfly ballots, I mean, this
22 issue might have been discussed years ago and people

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1 might have encouraged people not to do that, not to
2 have butterfly ballots because of the confusion that
3 it presents to the voter as they cast a ballot.

4 Ms. DeBeauvoir, Texas is one of those
5 states that Ken Brace mentioned this morning that
6 doesn't report over votes and under votes. How about
7 in your county, do you report the over vote and under
8 vote?

9 Ms. DeBEAUVOIR: I report over votes and
10 under votes and now that I am in a DRE environment I
11 only report under votes because there are no over
12 votes.

13 COMMISSIONER DeGREGORIO: Okay. Why do
14 you think election officials in Texas are reluctant
15 to report some of these results?

16 Ms. DeBEAUVOIR: Oh, the reluctance is
17 purely because voters start asking questions and they
18 get confused and then they get, you know, angry and
19 upset. And it has tended -- more information has
20 tended to produce more confusion. So it was a
21 service to voters to just try to just make it
22 concise, you know, here's who won and here's exactly

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1 how many votes they got. There was nothing else in
2 it but that. I kind of gave up and said, I'm going
3 to report it all.

4 CHAIRMAN SOARIES: Well, thank you so much

5 for sharing with us as the other candidates.

6 VICE CHAIRMAN HILLMAN: We have a couple
7 of minutes, can I ask a question?

8 CHAIRMAN SOARIES: I'm sorry.

9 [Laughter.]

10 VICE CHAIRMAN HILLMAN: That's all right.
11 You're doing such a good job of moving this train
12 down the track, some of us are getting left behind.

13 CHAIRMAN SOARIES: I'm sorry, I apologize.

14 VICE CHAIRMAN HILLMAN: That's quite all
15 right.

16 [Laughter.]

17 VICE CHAIRMAN HILLMAN: Two quick
18 questions. Following up on the NIST report, the
19 human factors report as it's being referred to, other
20 than scientists, who has input into the assessment of
21 all the factors that are considered in the
22 development of the report and how do they --

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1 How do they get that opportunity?

2 DR. LASKOWSKI: I'm not sure I understood
3 your question. In terms of the authors of the
4 report, or--

5 VICE CHAIR HILLMAN: The development of

6 the report. Other than scientists, who has input
7 into the development of the report, and how do
8 they--how is the broader community able to have input
9 into some of the findings and recommendations put
10 forward?

11 DR. LASKOWSKI: Who had input, or who--

12 VICE CHAIR HILLMAN: Had input.

13 DR. LASKOWSKI: Well what we did is we
14 made a point of talking to as many of the different
15 stakeholder communities as we could.

16 So for example we talked to people from
17 the National Federation of the Blind to see what kind
18 of testing they had done, et cetera, and various
19 advocacy groups.

20 We went to the conferences where there
21 were vendors showing their machines, and we talked to
22 the vendors and tried out the machines, et cetera.

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1 We talked to various election officials to
2 get their points of view. So we tried to do as much
3 footwork as we could to talk to others outside the
4 scientific community from their perspective, because
5 when you talk about useability and accessibility, you
6 have to understand all the players involved to make

7 sense of it.

8 VICE CHAIR HILLMAN: Thank you. And a
9 quick question for you. Having heard everything that
10 we have heard today, and what I have heard before and
11 what I have read, I mean we have election officials
12 who know the challenges, who have tried to address
13 the challenges, and the vendors and, you know, the
14 standards that have been set and so on and so forth,
15 I just wanted to ask your opinion as to why you
16 believe the concern about the voter being able to
17 verify what he or she has cast on the ballot has
18 taken on the life, that will be my word, the life it
19 has taken on.

20 Because it does appear that there have
21 been conversations about this maybe even prior to
22 2000, but certainly since 2000, and there have been

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1 considerations, and there have been mistakes, and
2 there have been errors, but in the end, you know,
3 when we are talking about customer satisfaction, the
4 voter satisfaction, just any opinion that you have on
5 that.

6 MS. DeBEAUVOIR: I do think it started
7 small and has snowballed. I think that with the lack

8 of--voters don't really understand all of the
9 procedures that surround an election. They don't
10 know. They just think somehow it magically appears
11 in the polling place, and then at ten o'clock at
12 night they know who won, and they really don't give
13 it that much thought.

14 Until they get involved and start working
15 in a polling place, it does not occur to them that
16 there is so much pre-election and election day
17 procedural work that has to happen, and it has to
18 happen correctly, that I think they don't know.

19 And by not knowing that, they don't know
20 the checks and balances, which means then they are
21 just operating on trust. So I think we have to
22 substitute that.

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1 Now lack of trust with more information.
2 They need to understand all of the ins and outs, and
3 the paper audits, and comparisons that are done as a
4 standard practice, and that goes for every state,
5 every type of system used.

6 VICE CHAIR HILLMAN: Thank you.

7 CHAIRMAN SOARIES: Commissioner?

8 COMMISSIONER MARTINEZ: I'll ask one quick

9 question, Mr. Chairman, of Ms. DeBeauvoir. And in
10 the interest of full disclosure, I just moved from
11 Austin, Texas, and the last time I voted was in the
12 Texas March primary with your system.

13 My question is: Although I guess certain
14 logic is that DREs simplify the voting process, in a
15 certain sense it might be an easier, aesthetically
16 perhaps system for a voter to use, is it more complex
17 when it comes to behind the scenes in your poll
18 worker training? Do you have to redesign training
19 modules and maybe have more poll workers because of
20 the complexity of manipulating the system and
21 ensuring its integrity? Is that true?

22 MS. DeBEAUVOIR: The answer is 'yes' and

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1 'no.' In the initial part when you're first doing
2 implementation, there's a start-up period where you
3 do have to rewrite all of your training materials,
4 and training manuals, and get everything in order.
5 And that includes for the trouble shooters for
6 election day, for early voting, for the people who
7 are working the counting station, for the people who
8 are getting all the supplies ready for the judges to
9 pick up, for each aspect of that you have to

10 completely rewrite and revamp.

11 One that work is done, though, DREs
12 simplify the job for administrators. So after the
13 training has taken place, and after the poll workers
14 have had the opportunity to operate a couple of
15 times, then it is actually an easier environment.

16 CHAIRMAN SOARIES: Thank you so much for
17 your contribution, and we look forward to working
18 with both of you in the days to come.

19 MS. DeBEAUVOIR: My pleasure.

20 DR. LASKOWSKI: Thank you.

21 CHAIRMAN SOARIES: Our final panel will
22 consist of the people who work in organizations that

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1 provide advocacy for voters. I would like to call
2 our Advocacy Organization Panel to come and prepare
3 to make our closing presentations.

4 I would like to thank the audience once
5 again. Some of you have been here all day. Thank
6 you for your cooperation and your presence.

7 (Pause for audience noise.)

8 All right, audience, don't make my take
9 back my thanks. All right, is everyone here? Okay,
10 we are going to begin our panel. If the remaining

11 panelists arrive, we certainly will accept them. I
12 would like to say welcome to our panel. Audience,
13 thank you very much. Let me begin by assuring this
14 panel that the fact that you are last on our agenda
15 does not mean you are last on our minds. Each of us
16 on this Commission have in some way been groomed and
17 impacted and inspired and in some ways trained by
18 either your specific organizations or organizations
19 who do what you do.

20 I will say this now. I didn't say it
21 earlier, but one of the reasons we are able to
22 maintain a spirit of bipartisanship on this

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1 Commission is because most of us come from the
2 nonprofit community. Most of us come from advocacy
3 roles, and none of us are what we might call
4 professional politicians. So it warms our hearts to
5 have you here, and we felt that it was the most
6 appropriate way to end this discussion which at times
7 became very technical, and very machine-specific to
8 really look at the impact of all of this on people's
9 lives and on the quality of life in our communities.

10 It is with great pride and joy that I
11 introduce this our final panel. Jim Dickson is the

12 Vice President for Governmental Affairs with the
13 American Association of People With Disabilities, and
14 also is Vice Chair of the Leadership Council for
15 Civil Rights.

16 Kay Maxwell is the President of the League
17 of Women Voters of the United States. It was with
18 your organization when I was 16 years old that I was
19 involved in my first voter registration campaign. I
20 am so happy to meet you, Kay Maxwell.

21 Angela Arboleda is with the Civil Rights
22 Policy Analyst, National Council of La Raza.

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1 And Melanie Campbell, Executive Director
2 and CEO of the National Coalition on Black Civic
3 Participation, where our Vice Chair was a keynote
4 speaker yesterday and I was working on getting ready
5 for this hearing.

6 And Chellie Pingree, President of Common
7 Cause. A distinguished group of advocates, and we
8 are thrilled you're here and anxiously await your
9 remarks, beginning with Jim Dickson.

10 STATEMENT OF JIM DICKSON, VICE PRESIDENT FOR
11 GOVERNMENTAL AFFAIRS, AMERICAN ASSOCIATION
12 OF PEOPLE WITH DISABILITIES

13 MR. DICKSON: Thank you, Mr. Chairman.

14 Thank you for conducting this hearing with a civil
15 tone.

16 I have two disabilities. I am blind and I
17 am blunt.

18 (Laughter.)

19 MR. DICKSON: I have been voting for 36
20 years. This January, because of touch screen voting,
21 I voted secretly and independently for the first time
22 in my life. That was an incredibly empowering

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1 experience. It made me proud to be an American.

2 But I need to tell you about the
3 experiences that I have experienced relying on third-
4 party assistance, which is the only alternative for
5 disabled people to use. The experiences that I am
6 going to relate happened to me, but I can tell you
7 because I have worked in elections for 22 years full-
8 time that these experiences happened to millions of
9 other American voters: people who are disabled,
10 people who have limited English proficiency, and
11 people who are low-literate.

12 I had a poll worker say to me, in my very
13 first chance to vote I might add: "You want to vote

14 for WHO?!" And loud enough so it could be heard in
15 adjoining polling booths.

16 In another election, I had a poll worker
17 say to me: "You voted for President and Governor.
18 We're really busy and nobody knows who these people
19 are down on the ticket, so aren't we through?"

20 On yet another occasion--and I want to add
21 because of my career I've moved around. All of these
22 have happened in different jurisdictions.

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1 On another occasion, I had a poll worker
2 say to me when we got to the referenda: "Nobody
3 understands these. You don't want me to read them,
4 do 'ya?" I had to fight with the poll worker to hear
5 the referenda.

6 On another occasion, I had a poll worker
7 say to me: "We are really busy. Why don't you come
8 back later?"

9 These experiences happen to tens of
10 millions of Americans. We have a crisis in this
11 country of low voter participation, and one of the
12 reasons is because tens of millions of us cannot vote
13 a secret ballot. We have had to rely on strangers,
14 trust that they mark the ballot accurately, and we

15 have had to put up with the insults and indignities
16 that I have just described.

17 There are two secretaries of state in this
18 country who are in the forefront of this electronic
19 debate: Secretary Blackwell in Ohio has taken what I
20 think is a thoughtful, careful, deliberate approach,
21 and it has resulted in for the first time in the
22 Buckeye State hundreds of thousands of people will be

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1 able to vote secretly and independently for the first
2 time.

3 He looked at the systems. He hired
4 independent examiners. Very importantly, he
5 required that the systems be looked at as hardware,
6 as software, and in the context of elections.

7 There were improvements called for. Those
8 improvements were made. And as a result, based on
9 action by the Ohio Government, on Monday 31 counties
10 in Ohio are going to be using touch screens for the
11 first time this fall.

12 Unfortunately, Secretary Shelley's actions
13 have resulted in 2 million Americans losing the
14 ability to have--2 million Californians, 2 million
15 Californians who had a secret ballot will not have it

16 this fall because of his decertification.

17 The secretary is being rosy eyed to think
18 that the standards he just promulgated can be met in
19 six months. I have talked to county election
20 officials and their plan is to go to central count
21 optical scan.

22 We know that central count optical scan

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1 counts fewer votes than even punch cards. We know
2 that central count optical scan is three to four
3 times more likely to not count the vote of a person
4 of color than a person who is white.

5 The secretary's action means that, at a
6 minimum, at a minimum, there are going to be 350,000
7 Californians who are going to leave the voting booth
8 in March and will not have their vote counted. And
9 this has been done in the name of a theory, a theory
10 that has no fact.

11 When computer scientists say to us: How
12 do you know the system hasn't been hacked? That
13 reminds me of the question: When did you stop
14 beating your wife?

15 It is not a way to carry on public
16 discourse. It is not a way to build confidence in

17 our voting system.

18 This piece of paper is what California
19 election officials are going to have to count if they
20 get a paper trail. I have been in polling places and
21 in election offices when votes have been tabulated.
22 This (indicating) is the prototype.

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1 What is going to happen when we count
2 votes when a poll worker who is sleep-deprived, who
3 has been up for 15 straight hours, drops the roll
4 (dropping roll of paper)?

5 Thank you for your attention.

6 CHAIRMAN SOARIES: There goes our civility
7 right down the tube.

8 (Laughter.)

9 CHAIRMAN SOARIES: Thank you, Jim.

10 STATEMENT OF KAY MAXWELL, PRESIDENT

11 U.S. LEAGUE OF WOMEN VOTERS

12 MS. MAXWELL: Thank you, Mr. Chairman, for
13 the opportunity here today to present the views of
14 the League of Women Voters.

15 The immediate issue facing this Commission
16 and our Nation is the 2004 General Election. We
17 simply cannot afford a replay of 2000 when millions

18 of Americans questioned the outcome and the

19 legitimacy of the Presidential Election.

20 The 2004 election is in danger. Most

21 Americans will vote on the same machines that they

22 did in 2000. Reforms to ensure proper and accurate

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1 voter registration rolls are far from complete, and

2 citizen concern about the security of voting systems,

3 access to the vote, and the counting of votes

4 threatens the upcoming election.

5 The League believes that effective steps

6 must be taken immediately, and we call on you, the

7 Election Assistance Commission, to promulgate

8 emergency best practices for the 2004 election.

9 We favor such steps as enforceable

10 statewide security plans.

11 Physical protection of voting systems to

12 guard against tampering.

13 Standards to govern voting machine

14 preparation, testing, and vote counting.

15 And polling place practices to ensure that

16 machines work properly and that all voters do have

17 equal access.

18 In addition, specific security measures

19 are needed for each significant type of voting
20 machines that Americans will use in 2004. Punch
21 cards will be used by 20 percent of the voters.
22 Lever, by 15 percent. About 30 percent on optical

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1 scan. And electronic, by about 30 percent.
2 Each type of system rates a particular
3 security and access concerns that must be addressed.
4 It is vitally important that the debate about the
5 2004 election not scare voters away from the polls.
6 Telling people that their vote won't count can
7 discourage voter participation.

8 We have to encourage people to vote, while
9 at the same time we work to improve access and to
10 ensure that every vote will count.

11 Now the League believes that DREs can be
12 an important part of election reform efforts. Well
13 managed systems such as that you've heard described
14 in Georgia have strong public support, improve
15 access, and reduce errors in casting and counting the
16 vote.

17 But important questions have been raised
18 about DRE security, and the management and
19 operational practices that affect DRE performance in

20 the real world.

21 We take these questions seriously and
22 believe they must be dealt with by this Commission

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1 and by state and local election administrators.

2 It is important to carefully examine each
3 issue and to craft solutions that meet specific
4 problems. There is no panacea or silver bullet for
5 the problems we face. We must rigorously match
6 problems to solutions.

7 DREs must be properly tested, maintained,
8 managed, and operated. Otherwise, they will have
9 substantial problems. And there are examples of DREs
10 being mismanaged. So it is vitally important to
11 ensure that DRE systems, as well as other systems,
12 are properly managed.

13 At the same time, we should not assume
14 that only one type of voting machine is vulnerable to
15 attack, mismanagement, or operational problems.
16 Issues about the accuracy and reliability of DREs may
17 also apply to optical scan and other systems.

18 We must ensure the certification, testing,
19 and accuracy of the software and hardware used in all
20 voting systems.

21 Now because the election is just months
22 away, we must focus on the problems and possible

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1 solutions we face immediately. More systemic
2 solutions may be needed, but now, six months before a
3 Presidential election, is not the time to make major
4 changes in our large and diverse election systems.

5 Murphy's Law has not been repealed. Now
6 is the time to make management and operational
7 changes that can be absorbed before the November
8 election, and there are several important principles
9 to keep in mind.

10 First, fix the things that are broken.
11 Improved operational and management practices can
12 deal with the reported problems of many DRE systems,
13 but if particular machines or some types of machines,
14 or machines by a particular manufacturer are the
15 problem, then those machines should not be used.

16 Quite a bit can be done to improve their
17 reliability and security in time for the 2004
18 election, and my written statement does out line
19 several key action areas.

20 Second, the use of certified systems that
21 meet federal guidelines and standards is a

22 fundamental safeguard. There have been reports of

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1 the use of uncertified systems, and that of course is
2 simply unacceptable.

3 Third, voting systems must not result in
4 discrimination. Older voting machines have varying
5 rates of error depending on the characteristics of
6 voters, including socioeconomic status and
7 educational levels.

8 And as you've heard today, election
9 systems can currently provide full equality to people
10 with disabilities or limited English proficiency.

11 And technology is developing. We don't
12 have all the answers today that we will need to
13 improve the election system for 2006 and 2008. It
14 may be that the systems we should be using in the
15 future have not yet been designed.

16 Access issues need to be addressed.
17 Security issues and security solutions are also still
18 developing.

19 Now some of Ray's concerns about DREs pose
20 a particular solution, the so-called voter-verified
21 paper trail. We urge the Commission to look at this
22 proposal carefully and in detail. There are many

1 questions that must be answered before we go down the
2 VVPT route.

3 In my written statement, eight issue areas
4 are mentioned. In examining these types of
5 questions, the League has not been persuaded of the
6 wisdom of the voter-verified paper trail.

7 Proponents argue that the paper record can
8 be counted to accurately determine the outcome of an
9 election. But for this to work, it seems that every
10 voter must verify every ballot. Otherwise, there is
11 no assurance that the paper trail is accurate.
12 Unverified pieces of paper don't add accuracy or
13 security.

14 And even with paper records that are voter
15 verified, there are questions about the accuracy,
16 reliability, and fraud potential for the counting of
17 paper records with a long history of lost, mangled,
18 and manipulated paper ballots.

19 An alternative theory of the voter-
20 verified paper trail holds that the paper record is
21 valuable even if voters aren't required to verify it,
22 since it may indicate that a particular machine is

1 malfunctioning.

2 There are a number of problems with this
3 scenario. First, if a malicious programmer or an
4 outside hacker can change the electronic record of
5 the vote, such a skilled person can make the printer
6 provide a paper record that doesn't expose any
7 error.

8 And second, what happens if nine voters
9 don't look at their paper record but the tenth voter
10 reports that the paper record is wrong? Should we
11 assume that the previous nine votes were also wrong?
12 Do we need to call those voters back and ask them?
13 Do we need to somehow retrieve their votes from the
14 system?

15 Under the optional verification system, we
16 clearly cannot rely on those unverified pieces of
17 paper for a later recount.

18 And there are certification issues. In
19 our written statement there are seven concerns that
20 we indicate need attention. We are not aware that
21 any VVPT systems have been certified according to
22 federal guidelines that deal specifically with the

1 key concerns.

2 We believe the questions about the VVPT
3 system are sufficiently severe that the paper trail
4 system doesn't make sense for 2004. We are concerned
5 that it doesn't make sense for the long term, either,
6 but technology is constantly changing and the debate
7 over election systems is still developing.

8 The League of Women Voters believes our
9 Nation must focus on solving the very real
10 operational and management issues for voting systems
11 in 2004. We urge the Election Assistance Commission
12 to assist in this task, and we pledge our assistance
13 in those efforts.

14 Thank you.

15 CHAIRMAN SOARIES: Thank you, very much.
16 Angela.

17 STATEMENT OF ANGELA ARBOLEDA, CIVIL RIGHTS
18 POLICY ANALYST, NATIONAL COUNCIL
19 OF LA RAZA

20 MS. ARBOLEDA: Chairman Soaries, and
21 Commissioners DeGregorio, Martinez, and Vic Chair
22 Hillman:

1 On behalf of the National Council of La
2 Raza, NCLR, thank you for holding this hearing on
3 issues that are very important for the Latino
4 community.

5 NCLR is the largest national Latino civil
6 rights organization in the U.S. serving as an
7 umbrella organization for more than 300 local
8 affiliated community based organizations.

9 I appreciate the opportunity to appear
10 before you today to support a thorough revision of
11 voting technology. I respectfully request that my
12 written testimony be entered in the record in its
13 entirety.

14 For many years, NCLR, the Latino
15 community, and other language minority groups have
16 been patiently waiting for technology that responds
17 to the need of limited English proficient citizens.
18 For the first time, thanks to technological advances,
19 we have the potential to fully empower language
20 minority voters, those with sight impairments, and
21 people with limited literacy levels.

22 In my testimony I will discuss the

1 advantages and challenges of different voting
2 technologies and systems with respect to language
3 minority voters.

4 Despite the legal protections in the
5 Constitution and specific provisions in the Voting
6 Rights Act that protect limited-English proficient
7 voters, there is evidence that some jurisdictions do
8 not comply with federal language assistance
9 requirements.

10 In my written testimony, I provide select
11 examples of barriers faced by language minorities,
12 including Latinos, Asians, and Haitian voters, all
13 showing inaccurate translations, lack of
14 interpreters, and lack of bilingual materials.

15 Mr. Chairman, these and other language-
16 related barriers have a disparate, disproportionate,
17 and negative effect on Latinos and other ethnic
18 minorities.

19 In the absence of both policy
20 interventions and technological improvement, language
21 minority voters are more likely to be turned away or
22 deterred from voting, and less likely to have the

1 opportunity to cast a fully informed vote than other

2 Americans.

3 NCLR believes that there are three
4 considerations to guide the decisions in making
5 reforms to the Nation's voting systems. Voting
6 technology must provide for, number one,
7 nondiscrimination.

8 The administration of elections must be
9 guided by nondiscrimination practices. This includes
10 ensuring that the most secure and modern technology
11 is available to all voters in every precinct.

12 Number two, second-chance voting and voter
13 verification. The Help America Vote Act requires
14 that for the first time a voter be able to correct
15 and confirm his or her ballot before it is cast and
16 counted.

17 And number three, compliance with national
18 certification standards. Federal certification
19 standards required under HAVA require that voting
20 technology meet basic but important conditions to
21 ensure that ballots are appropriately cast and
22 counted, machines are secure and reliable, and that

1 they provide for second-change voting and
2 verification.

3 In light of these considerations, and
4 after reviewing DREs and their capabilities, we
5 believe that DREs have the inherent capacity to allow
6 language minorities, people with disabilities, and
7 those with limited literacy skills the opportunity to
8 vote independently and privately.

9 Data show that voters prefer electronic
10 voting because it is easier to use, thus increasing
11 voter confidence. Problems with over voting and
12 under counting ballots are reduced with electronic
13 voting systems.

14 DRE voting technology meets the voter
15 verification provisions required under HAVA. DREs
16 can work accurately and effectively, but like all
17 voting systems they require adequate procedural
18 safeguards and management.

19 And lastly, allegations of wrong doing by
20 a particular manufacturer are not a justification to
21 scrap the technology or punish all manufacturers.

22

1 -- an alarming mis-steps by leading manufacturers as
2 well as several reports of administrative and
3 technological glicks in the early use of these

4 machines.

5 This apparently has eroded confidence in
6 DREs among some groups. NCLR believes that it is
7 essential to take additional measure to improve
8 security and ensure voters that a ballot cast is a
9 ballot counted. However, we note that to date the
10 voter verified paper trail, VVPT, technology is
11 unproven. It has not been certified as a system that
12 fully provides access to language minorities and
13 people with disabilities.

14 Since no VVPT system is certified, it is
15 simply unrealistic to expect that it can be both
16 certified and widely implemented in time for the 2004
17 election.

18 Finally, NCLR urges that the following
19 recommendations be taken into account to ensure the
20 limited English proficient voters have the right to
21 cast a ballot with certainty and assurance that it
22 will be counted. NCLR recommends (1) that the

1 Elections Assistance Commission, EAC, promptly
2 develop voting systems guidelines or best practices,
3 including standards that address security concerns of
4 computers, computer data storage and network used in

5 standards for both DREs and VVPTs as well as future
6 technology; (2) the EAC take steps to ensure that
7 voting technology complies with national
8 certification standards with ample time for election
9 officials to put in place any security systems
10 necessary to ensure voter confidence and
11 participation; (3) the EAC articulate that extensive
12 poll worker training of voting technology is
13 essential as new systems are implemented; (4) the EAC
14 support broad voter education efforts to help the
15 public understand how to use this new voting
16 technology systems; (5) the EAC commissions or
17 supports a rigorous study that assesses the costs and
18 benefits of DRE systems with respect to limited
19 English proficient voters; and (6) the EAC focus
20 public attention to other equally important aspects
21 of the electoral process to promote more effective
22 and equitable election administration.

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1 Minority voters encounter difficulties at
2 different stages in the electoral process which may
3 preclude them from ever actually encountering modern
4 technology in the first place. These issues should
5 be scrutinized carefully by all committed to the

6 principles of equal opportunity in the electoral

7 process.

8 I thank the Chairman and Commissioners

9 once again for providing NCLR an opportunity to share

10 our views.

11 CHAIRMAN SOARIES: Thank you so much for

12 coming and for your views, both oral and written.

13 Thank you.

14 Ms. Campbell?

15 MS. CAMPBELL: Thank you, Mr. Chairman and

16 members of the Commission for inviting us, the

17 National Coalition to participate today in this

18 hearing.

19 For over 28 years, the National Coalition

20 has brought together national, state and local

21 organizations to address the disenfranchisement of

22 Black voters. The 2000 presidential election exposed

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1 the cracks in the nation's electoral infrastructure.

2 While Florida was just the tip of the iceberg, the

3 paper ballot fiasco raised public awareness of the

4 importance of reliable voting technology, poll worker

5 training and voter education.

6 In the aftermath of the election debacle,

7 the National Coalition launched the "Know Your Rights
8 Election Protection Project." This cutting edge
9 voter protection initiative represents a
10 collaboration of over 60 national organizations,
11 including the Lawyers Committee for Civil Rights
12 Under Law, the NAACP Legal Defense and Educational
13 Fund, People for the American Way Foundation, the
14 National Urban League, Center for Policy
15 Alternatives, the Asian Pacific American Labor
16 Alliance, Puerto Rican Legal Defense Fund, Democracy
17 South, Black Leadership Forum, Common Cause, Georgia
18 Coalition for the People's Agenda, the National
19 Newspaper Publishers Association, and so and so
20 forth, over 60 national, regional and local
21 organizations.
22 The overarching goals of the Know Your

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1 Rights Election Protection Project are to provide
2 voters with the information on how they can protect
3 their voting rights at the polls as well as to help
4 restore voter's confidence in the fairness of the
5 voting process. To achieve this goal, we must
6 address both real and perceived barriers. For our
7 democracy to work, our voting systems must be

8 transparent, secure and reliable.

9 Any voting technology that raises
10 questions about the integrity of the process should
11 raise alarm bells. No voting system is 100 percent
12 accurate and humans are fallible. That is why we
13 have a system of checks and balances. The goal is
14 not perfection. Instead, it is accountability and
15 safeguards.

16 The National Coalition has been in the
17 business of increasing Black voter participation
18 since 1976. Since Black Americans have historically
19 been disenfranchised, there's a deeply entrenched
20 skepticism regarding the voting process. The Florida
21 recount validated deeply rooted concerns about
22 fairness in the voting process. Electronic voting

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1 poses a number of concerns when assessed against the
2 backdrop of the ongoing voting rights movement.

3 Concerns fall into three broad categories for us:
4 casting, counting and confidence.

5 Casting, most voters are accustomed to
6 receiving a physical ballot when they enter a polling
7 location as we all know here today. A ballot is a
8 tangible item that represents their voice and voters

9 journey to the polls on election day in an effort to
10 exercise their civic duty with an expectation that
11 their vote will really make a difference. When using
12 a touch screen of voting, there is no physical
13 evidence of the vote and the absence of a physical
14 ballot leaves many voters unsure about the process.

15 Some wonder, if, perhaps, they made a
16 mistake. Others wonder where did their vote really
17 go. I can say that personally because I have voted
18 on the system and I'm in this business full-time and
19 wasn't sure what I just did when I voted in this last
20 primary. How it is captured and what will happen if
21 a system fails. And for some, in the voting age
22 population, who have more limited dealings with

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1 computer technology, the touch screen process seems
2 almost surreal.

3 Second, counting, in order to vote,
4 individuals must be 18 years old, registered and
5 either request an absentee ballot or travel to the
6 polls on election day. Until 2000, in spite of past
7 under and over counts, there was a general
8 expectation that every eligible vote was counted.

9 The electronic process is not understood

10 by voters or even poll workers who tend to be retired
11 senior citizens who have worked in the polls for
12 years. Computer malfunctions in the digital age are
13 common and consumers have learned to keep receipts
14 and documentation of transactions in the event that
15 they have to prove a computer error. Given this
16 experience, with everything from airline
17 reservations, banking or the posting of bill
18 payments, consumers have learned that, while
19 computers tend to be accurate, mistakes and
20 malfunctions occur. Based upon this general
21 experience, it is not unreasonable to expect that the
22 average voter will simply trust the computer nor

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1 should them.
2 Electronic systems can fail due to
3 problems with hardware, software, lack of training on
4 the part of poll workers or our gravest concern,
5 intentional tampering with the process. It should be
6 noted that in the absence of such failures,
7 electronic systems are faster and more accurate than
8 mechanical systems and would tend to minimize under
9 and over counts. The demand for a transactional
10 record in the voting process is essential to

11 providing voters with a check and balance process
12 that will help to ensure their vote is recorded and
13 counted.

14 Thirdly, confidence, which we believe is
15 one of the most critical elements of this discussion.
16 Voter confidence is the anchor of our American
17 democracy. In my experience over the past 20 plus
18 years in motivating and mobilizing voters, I have
19 found that voters must feel confident of their
20 ability to properly cast their ballot or they will
21 not venture out to the polls to participate. It is
22 equally important that voters believe that their vote

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1 will be counted, otherwise, they will stay at home
2 and not bother. The decline in civic participation
3 is well documented and attributed to a range of
4 factors, which in numerous cases can be overcome with
5 education.

6 It is critical that proper education is
7 employed to ensure that voters not only know their
8 rights, but they also gain a basic understanding of
9 how new voting systems machines operate.

10 Checks and balances, those who have worked
11 in the field of civic participation over the years

12 have a practical understanding of the many checks and
13 balances inherent in the existing system and the call
14 for voter verifiable paper ballots is actually a
15 demand for a further check as we transition into a
16 new system.

17 I commend the Election Assistance
18 Commission for convening this public hearing on the
19 use, reliability and security of electronic voting
20 systems. While the development of technical
21 standards should be left to the technicians, the
22 standards must not be developed in a vacuum. Simply

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1 stated, the standards must take into account human
2 factors such as voters confidence in the technology
3 and the impact on civic participation. Voter
4 verification is an issue that the National Coalition
5 has monitored since the first legally-sanctioned
6 online primary election in 2000.

7 I actually ventured into Arizona, along
8 with several other organizations, including
9 (inaudible) Legal Defense Fund, to monitor that
10 process. And, at the end of the day, what was very,
11 very clear is that it wasn't so much that people,
12 once they were confident in the machinery itself,

13 liked it. It went along age lines, also. By the end
14 of the day, the concern that we left with was that
15 when it came to the verifiable issue that the folks
16 who were doing this election would not address that
17 issue. It was not address and so then, again, voter
18 confidence was what was at stake.

19 Moving forward, it is important to
20 acknowledge why we are here and why we believe that
21 it is incumbent upon this Commission to explore the
22 need for voter verification in greater depth. Let us

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1 recall that the historical Florida count was the
2 major impetus for reform.

3 I would like to turn to one final example
4 in an effort to outline concerns from the field.
5 Georgia, as we all know, was the first state to
6 deploy a uniform electronic voting system statewide.
7 In 2002, the Georgia Coalition for the People's
8 Agenda, which is an affiliate of our organization,
9 lead our Know Your Rights Project in Georgia,
10 providing training and monitoring of the statewide
11 implementation of the new E-voting machines
12 manufactured by Debold Election Systems.

13 Early in the deployment process, the

14 question of voter verification arose. The state
15 relied heavily upon the vendor to respond to
16 questions about the new equipment. Each machine is a
17 stand-alone, which I'm sure you all heard this today
18 earlier, but where votes are captured on a hard drive
19 in the machine. This data is retrieved and reported
20 electronically at the end of the day. When the issue
21 of a voter-verified paper trail was raised, there
22 were typically two responses. The machines, which

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1 had already been contracted by the state, were not
2 equipped to generate a receipt. And, two, in order
3 to keep voting private, voters could never be
4 provided a copy of their ballot because this would
5 certainly lead to new forms of intimidation. Both
6 responses missed the point. Voters wanted assurances
7 that the vote cast will be accurately recorded and
8 counted.

9 Lastly, the response from the manufacturer
10 for the people who were working on this project who
11 the Georgia Coalition for Black Women contacted
12 DeBold in the hope of establishing a community-based
13 initiative to educate civic leaders and community
14 organizers. DeBold representatives never met with

15 the organization in spite of the fact that the
16 Coalition was on the front line contracted by the
17 State of Georgia to assist with the deployment and
18 voter education. Unless community participation is
19 in some way mandated for machine vendors, there is no
20 incentive for them to engage the community.
21 And, finally, I'd just leave a point of
22 someone who I had a chance to meet and probably many

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1 people in this room -- who passed away recently, and
2 that was the late Akin Gibbs, founder of True Vote
3 Systems out of Nashville, who quit his job as a
4 well-paid accountant to establish the only
5 minority-owned voting system firm in the country.
6 And he said it best. There has to be a much better
7 way. Thank you.

8 CHAIRMAN SOARIES: Thank you, Ms.
9 Campbell.

10 Last, but certainly not least, Ms.
11 Pingree.

12 MS. PINGREE: Well, thank you very much.
13 I want to thank all of you for being willing to serve
14 as commissioners for the work that you have ahead of
15 you, for including me and the concerns of Common

16 Cause here today and also two of my colleagues on the
17 panel who have deep concerns about this issue as well
18 and have been working so hard on this issue.

19 My complete remarks have been submitted to
20 you. I would just like to make a few remarks about
21 the highlights of some of my concerns. It's
22 obviously been a long day. You've spent a lot of

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1 time thinking about this issue and I wanted to put it
2 in a little bit of context that had meaning for me.
3 One of our board members, Robert Pastor is a
4 professor at American University, used to work at the
5 Carter Center, has spent many years working
6 internationally in elections and he produced a recent
7 report, looking at the 2000 elections in North
8 America. I just want to quote a little from his
9 report. "The millennium arrived on the doorsteps of
10 North American in a most unusual way. All three
11 governments in Mexico, Canada and the United States
12 had national elections in 2000, an unusual occurrence
13 in itself." He goes on to talk a little bit about
14 the results of that election, but, more importantly,
15 what there was to be learned from that process.
16 "Despite this political trauma experienced

17 by the American body politic in the Florida election
18 of 2000 and despite the long national debate on ways
19 to improve the electoral and campaign financing
20 system that followed, no American leaders stood up to
21 answer a question which now should be obvious to
22 anyone. What could we learn from our two neighbors?

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1 In fact, no one even posed the question.
2 The omission from the debate reflects a
3 debilitating flaw in the United States in arrogance and
4 disrespect of our neighbors an unstated belief that
5 we have nothing to learn and they have nothing to
6 offer. In fact, the most important concern coming
7 out of that election and the most disturbing
8 conclusion had to be that the United States
9 electoral system is unquestionably the weakest in
10 North America. That resulted in the Help America
11 Vote Act. It resulted in the reason that you are
12 here today, which we greatly appreciate, but also
13 results in the many hours that we have ahead of us.
14 As has been noted by many of the panelist
15 here and previously, we are about to face what could
16 be, pollsters tell us, a close election. It
17 certainly will be a closely watched election. After

18 Florida, and the concerns raised in 2000, and also
19 after the Help America Vote Act, which gave Americans
20 the confidence that something would be done. Yet, we
21 all know that because of the delays, the lack of
22 funding, likely many of the problems will not be

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1 solved.

2 I am here, as you know, representing
3 Common Cause, which I've been the president of for
4 the last year. An organization that has been around
5 since 1971 founded by John Gardner. We have been
6 involved in every civil rights and voting rights
7 issue in the last 34 years, from the 18-year old vote
8 to the Help America Vote Act requiring funding and
9 oversight.

10 Our concerns are clear in our printed
11 testimony. We strongly and emphatically support a
12 voter verified paper trail at this time for all
13 voting systems. We believe too many questions have
14 been raised about electronic voting systems, about
15 their manufacturers and the hasty implementation. We
16 do believe we need to take a step back and make sure
17 we are doing the right thing for what we consider a
18 very fundamental right.

19 We also share those concerns. Those deep
20 concerns of many who have worked for years to ensure
21 that all Americans have the right to vote, have equal
22 access to voting and have the right to vote in

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1 private. But we do believe that no one's right to
2 vote has meaning if the voter cannot be reasonably
3 assured that their vote was counted as cast. Some
4 people have suggested that raising concerns about
5 voting will discourage people from voting in
6 November. I think the cat is long out of the box.
7 And, in fact, we must raise those concerns. We do
8 not want to have another election day disaster and
9 people asking us then why didn't you raise the alarm.

10 I just want to speak briefly about my own
11 experience. I served for several years, in fact,
12 much of my life as an elected official. I have
13 participated in many elections and have to admit that
14 I've never voted on anything except a piece of paper.
15 I come from the State of Maine. I served in the
16 Maine Senate when party held the majority of the
17 Senate, lost the majority to the other party because
18 of a recount and that is one of the biggest concerns
19 about DREs, is how do you have a recount in an

20 election?

21 As a citizen, I watched what went on in

22 Florida. As a participant in the process, I have

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1 seen many times the need to have a paper verified

2 ballot so that we could count it again. I've also

3 watched the speaker of the house lose their seat from

4 a ballot-tampering scandle and I know how important

5 it is to have practices in place and eternal

6 vigilance in the polling place to make sure that

7 whatever system we use there is no tampering.

8 I also am proud to say that my daughter,

9 Hanna, serves in the Maine legislature today and

10 Maine is one of the first states to pass a bill to

11 require a paper trail for voting. Now they did so

12 with support of both parties, signed by the governor.

13 It went under the hammer, as we say. There was no

14 opposition. There was great support throughout the

15 state, a state that has one of the highest

16 percentages of voter in the country, considers it

17 very important to exercise your right to vote. The

18 bill was also supported by the local affiliate of the

19 Association of the Blind. Their testimony in favor

20 said that, while it was extremely important to vote

21 in private, it was also extremely important to make
22 sure your vote counted.

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1 A couple of other points, we consider that
2 safeguards must be put in place to assure voters of
3 the accuracy and security of the voting machine.
4 Good procedures are important. You've heard many
5 outlined today. All must be in place to make sure
6 that the technology is not flawed. Many people have
7 said that this outcry for a paper trail is a
8 centrally organized, well-financed campaign. I think
9 we all know that it has been a grassroots movement
10 that has grown throughout the country.

11 As a representative of an organization
12 that has affiliates in 38 states and someone who's
13 traveled extensively in the last year, I have seen
14 the growing concern, starting with a small group of
15 individuals and now becoming one of the questions I'm
16 asked more frequently than anything else, what are we
17 going to do to make sure that every vote is counted
18 in this election?

19 The companies that produce the equipment
20 for elections must be held to a far higher standard
21 of accountability and transparency. Yet, another

1 influence of money and politics and the importance of
2 clear laws around this state and the local election
3 officials must be far more vigilant in their
4 oversight of the vendors. The government, not the
5 vendors, must be in control of our system of voting.
6 Vendors should adhere to strict, nonpartisan policies
7 and practices. There must be a competitive and open
8 contracting process for purchase of voting machines.
9 There must be strict conflict of interest codes for
10 all elected officials and vendors. Testing of the
11 machines should be done publicly and by a truly
12 independent body. Testing should be done at every
13 step of the process, including the random testing of
14 machines on election day and there must be a truly
15 independent inspection of software.

16 One last remark from me. I had the great
17 -- Bosnia after the Dayton Accord, traveling around
18 to 17 polling places with the ambassador and the
19 opportunity as an American to observe what was going
20 on in a free country in their first opportunity to
21 vote. It is equally important that we protect those
22 same rights here in our country. We cannot see

1 ourselves as election observers in countries aboard
2 if we are not willing to look honestly and
3 forthrightly at the problems that we're facing, look
4 into the long-term, make sure we reinvigorate* voter
5 confidence, return people to the polls.

6 I appreciate the work that you're doing.
7 I know how difficult your charge is and how limited
8 your resources are, but we are counting on you to do
9 the right thing. Thank you very much.

10 CHAIRMAN SOARIES: Thank you so much and
11 thank you to the entire panel. Not only have you
12 been helpful and very clear in your recommendations
13 and raised very critical issues, you may be the panel
14 that adhered to our time schedule better than any
15 other panel. You win the prize.

16 (Laughter.)

17 CHAIRMAN SOARIES: Our vice-chair is a
18 former executive with the League of Women Voters and
19 has worked as a non-profit advocacy, Rita, I guess
20 most of her adult life when she wasn't in the
21 government. And she's going to lead our questions to
22 your panel.

1 COMMISSIONER HILLMAN: Thank you. I'll
2 start with Ms. Pingree. Other than the paper
3 verification for the voter, what other concerns does
4 Common Cause have about the use DREs in the
5 elections?

6 MS. PINGREE: Well, I think, as many other
7 people have expressed today, our biggest concerns are
8 in the ability of the voter to verify their ballot
9 and the opportunity to have a recount and ensuring
10 that the machines are properly certified and their is
11 no tampering or improper influencing of the machines
12 in terms of the software.

13 Many of the computer experts who have
14 expressed their views have many concerns about this.
15 And, again, I think the fundamental question of,
16 after you've cast your ballot on an electronic
17 machine, if your vote is not preserved, how do you
18 have a recount and how do you verify that the vote
19 was exactly what the voter intended?

20 COMMISSIONER HILLMAN: I don't know if you
21 were here earlier today, but there were -- I believe
22 it was when we had the panel of election

1 administrators and they did talk about the machine
2 having the capability to produce ballots, if
3 necessary. It would expensive. It would be time-
4 consuming, but if a recount required that, they could
5 do that. Does that address any of the concerns you
6 have about the recount difficulty?

7 MS. PINGREE: Well, I think the concern
8 that has been most often expressed is the ability for
9 the voter to see the ballot itself and to know what
10 was produced on the ballot to feel confident of that
11 ballot and that to be able to be used if there needed
12 to be a recount and also to verify and allow the
13 voter to verify that ballot.

14 COMMISSIONER HILLMAN: Thank you. Good.

15 Ms. Campbell, a little earlier we had the
16 county clerk from Travis County, Texas -- Austin,
17 Texas testifying and I asked her opinion about why
18 she thought that there was such a high level or lack
19 of confidence that voters have -- a high lack of
20 confidence, if that makes sense. And she was talking
21 about how voters don't know the process that happens
22 on election day and, I mean, there's an awful lot

1 that goes on, as you well know from 3:30 or 4:00
2 o'clock in the morning until midnight. And then,
3 depending on whether there is or isn't a recount or
4 so on and so forth. And you've addressed lack of
5 confidence as one of the factors that keeps voters
6 away from the poll. What would you suggest or have
7 you had time to give thought to how can the voter
8 have a higher level of confidence, not just in
9 whether the ballot they cast was what they intended
10 to because they don't see it, but in the other parts
11 of the process that have lead to lack of confidence?

12 MS. CAMPBELL: Thank you, Commissioner. I
13 mention Georgia as an example because it was the one
14 state that did this statewide and, to the credit of
15 the state, I believe the state government was open to
16 including the community whereas the manufacturer did
17 not. And it's not to make DeBold the lightning rod.
18 It's just real life example that here you had a group
19 of community organizations working together to assist
20 in giving voters confidence by going out with the
21 machines all across the State of Georgia and going
22 the community groups, going the churches, going to

1 the community centers, going into the schools and I
2 actually attended one of the town hall meeting, the
3 church in Atlanta that Joseph Lowry hosted, and there
4 was someone from the manufacturing company who was
5 attending and people had the concerns. People who
6 have voting for decades asked questions and you
7 couldn't get good responses. And, so part of it, as
8 I mentioned in our testimony, is that there has to be
9 some checks and balances and some inclusion in the
10 process as its developed with these companies and
11 that is one concrete way to assist in that process in
12 where you had a manufacturer who had the opportunity
13 who would not even have a sit-down conversation does
14 not assist in that arena.

15 COMMISSIONER HILLMAN: Just one follow-up
16 question. Do you think the voters would find it
17 interesting to know the various security measures
18 that election officials put in place from start to
19 finish around the machines, the counting process, et
20 cetera?

21 MS. CAMPBELL: I mentioned Arizona as an
22 example, which I don't remember -- I did the short,

1 truncated version of my comments -- was that it's not

2 so much people want to hear all the technical
3 nuances, but just like you go to the bank and put
4 your bank card in there, you have the option of
5 having a receipt. You can either say yes or you can
6 say no. But something as important as the vote, and
7 it means to what this country is about, why do we not
8 have this option?

9 One last point, we had a discussion
10 yesterday at the Press Club, which was mentioned.
11 And one of the things -- the discussion was Election
12 2004 Are we Ready? And the consensus was, no, we
13 were not. And there was panelist who made this
14 point, Dr. Bill Scriggs, and lightly but it was a
15 serious and surreal moment. He said that why is that
16 the lottery can pinpoint down to a science where a
17 ticket was purchased and whether the person who -- I
18 think some woman somewhere was about to -- I don't do
19 the lotteries, so I don't know a whole lot about it,
20 but that we can take that process, which is
21 electronic and a person can come and say, oh, I lost
22 my card and bought my ticket and it was lost. They

1 were able to tell that woman down to a science, no,
2 you didn't. You weren't there. This, that and the

3 other because the system were in place to do that.
4 And something as simple as that is -- we have the
5 technology. We are in the 21st Century. Why is it
6 that the voting system is such that we say that there
7 cannot be a process that is developed to give people
8 confidence. We do it for everything else electronic.
9 Why can't we do it for voting and that continues to
10 be what we hear in the field and also what the
11 discussion was yesterday. There has to be a way and
12 we are imploring this Commission, which I know this
13 is part of the process, to help us find a way to give
14 voters a confidence the system will work.

15 CHAIRMAN SOARIES: I want to make sure I
16 understand that one point.

17 MS. CAMPBELL: About the lottery?

18 CHAIRMAN SOARIES: No. If the development
19 of the electronic voting device essentially simulated
20 the experience of the lever machine, and if the
21 electronic machine can do at least as much
22 mechanically to record and count votes as the lever

1 machine, I'm still trying to understand what it is
2 about the electronic machine that now requires more
3 verification than the lever machine required, even in

4 recounts? The electronic machine has the capacity to
5 produce more information in a recount than the lever
6 machine did. But I never heard this discussion -- I
7 never raised the question myself when I was at that
8 table and I'm trying to understand what is it about
9 the electronic machine, which, in essence, simulates
10 what had been the lever machine electronically that
11 causes us to have less confidence in that than we did
12 the lever machine, which produced less information?

13 MS. CAMPBELL: I don't have all the
14 answers to that question, but I can only state it
15 from the experiences of what we hear and what we
16 experience in the capacity and also that the 2000
17 election is what was the lightning rod to make people
18 question the process. Heretofore, people did not
19 question the process. I don't think, if the 2000
20 election had taken place the way it did, you would
21 have what we heard before, the national civics lesson
22 that we are still experiencing almost four years

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1 later. And, from that process, you have more of an
2 awareness of the process and the voting public has
3 different kinds of questions and the solutions are
4 something that we're all sitting here trying to

5 explore so that at the end of the day what continues
6 to be -- what we continue to hear and -- the
7 technology side of it is, at the end the day, the
8 common point is that people have to have some way to
9 feel that their vote was verified. And, because this
10 discussion is around the technology, there are other
11 elements of that. We know that there's need for
12 voter education because technology for some is
13 something that's very intimidating. So some things
14 can be resolved just by people being able to touch
15 that machine and know what the ballot is going to
16 look like and I addressed that further in our
17 testimony here. And, so, at the end of the day, it
18 boils down to the confidence issue as the issue.

19 COMMISSIONER HILLMAN: Angela -- is it
20 Arboleda?

21 MS. ARBOLEDA: Arboleda.

22 COMMISSIONER HILLMAN: If we were having

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1 this hearing January 1 of 2005, and we were talking
2 about the November 2006 elections, what would your
3 concerns be about the paper trail, the voter verified
4 paper trail? I mean, we would have, presumably, 18
5 months to figure out, do studies and figure out what

6 would or wouldn't work. What would your concerns be
7 if we weren't up against a November 2004 election?

8 MS. ARBOLEDA: Well, it would all depend
9 on the results of the studies that we or that the
10 Commission would conduct. I cannot say what NCLR
11 would say about VVPTs until those studies are, in
12 fact, conducted. What we do know for certain is that
13 to date there is no VVPT technology that has been
14 certified and therefore we believe that it is
15 dangerous to tell the Latino community that the
16 answer to language minority and Latino voters is to
17 put all of their confidence on a paper trail instead
18 of saying what we know is that some DREs have the
19 capability to storing and recording this vote and
20 what we need to invest time on is to ensure the
21 Latino voters and other LEP language minority voters
22 have the ability and education tools to have

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1 confidence and to go into those polls and actually
2 use the technology that can speak to them in the
3 language that they're most comfortable in.

4 The danger here is that precluding voters
5 to use this technology will, in fact, deter language
6 minority from actually participating in electoral

7 process. Melony alluded to the lack of civic
8 participation and engagement. We believe the lack of
9 using DREs at this point actually adds to that
10 problem.

11 So, going back to your question, what will
12 we say in 2006, I am eager to find out what those
13 results of those studies are and I really don't have
14 any answers until that happens.

15 COMMISSIONER HILLMAN: Okay. Good.

16 I have a question for you, Ms. Maxwell,
17 but I wanted to ask Jim Dickson that same question.
18 So let me pose that to Jim and then I'll come back to
19 you.

20 And, Jim, that is, if we were having this
21 discussion, this hearing January 2005, preparing for
22 the November 2006 election, what concerns would you

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1 raise about paper verification?

2 MR. DICKSON: Madame Commissioner and
3 Mr. Chairman, my concern would be that we need to
4 test it in the real world in a variety of states,
5 since they all have different elections, different
6 procedures and we have to do that incrementally. We
7 can't do it across the country. It defies my

8 comprehension to take an idea that has never really
9 been used and install it nationwide is reckless.

10 In terms of 2006 and your question, I
11 don't think you can do the kind of development,
12 analysis and research of this idea in less than five
13 years and that number cuts a lot -- is generous
14 because when we have developed voting systems and
15 standards in the past, it takes years and years and
16 years. So, to try to telescope what is a multi-year
17 process into 18 months is just not doable.

18 COMMISSIONER HILLMAN: Thank you. Jim,
19 when you started your testimony, you did mention
20 about being able to vote in privacy for the first
21 time this year in the District of Columbia with the
22 new equipment and I just want to say that I have the

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1 privilege and opportunity to be there when Jim did
2 that and it was, in fact, a very powerful and
3 impactful opportunity to witness Jim being able to do
4 that by himself for the first time in his very short
5 life. We know you're not that old, Jim.

6 (Laughter.)

7 COMMISSIONER HILLMAN: Ms. Maxwell, given
8 what I know about your organization, I'm going to

9 just guess that the phones have been ringing and the
10 e-mail mailboxes have been full of people raising
11 concerns about the use of DREs and paper trail or no
12 paper trail and League has probably studied it and
13 it'll be an interesting conversation at convention
14 I'm sure.

15 When did that kind of volume of activities
16 around DREs land on the League's screen, if you will,
17 time frame?

18 MS. MAXWELL: I think probably it was
19 approximately a year ago. Once HAVA was enacted and
20 once we started getting organized with our leagues in
21 the states across the country trying to get league
22 members on the committees in the various states that

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1 were going to be designing the implementation plans,
2 as we started to have conversations about all the
3 aspects of HAVA implementation from provisional
4 ballots to all of the various issues that have been
5 addressed today. It's an issue that came up at that
6 point in time.

7 COMMISSIONER HILLMAN: Setting aside the
8 voter verified paper trail, and before 2000, were
9 there concerns that the League was hearing about or

10 discussing concerning the use of DREs?

11 MS. MAXWELL: No, not specifically. I
12 think most of the concern after the 2000 election
13 related to all kinds of issues of people arriving at
14 the polls and their names not being on the voter
15 registration list or obviously all the problems that
16 occurred, as we all know, with the punch cards in
17 Florida. It was more a concern of how the current
18 systems were not functioning and had not functioned
19 in the Year 2000 and I think we were looking at all
20 of the ways that we could improve all of those
21 systems, not just the machines. So it was not a
22 direct focus on DREs specifically at that point in

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1 time.

2 COMMISSIONER HILLMAN: My next question,
3 and my last one, is more to ask your opinion about
4 something. In the 1990s, New Mexico was introducing
5 the use of what they described as the first
6 generation DREs and it must have been interesting and
7 exciting and I was with at the League in the '90s and
8 we didn't discuss that. I'm sure the New Mexico
9 leagues knew all about it and it was probably
10 interesting and exciting. But nobody raised concerns

11 about where did these votes go into virtual land and,
12 certainly, 10 years ago, 12 years ago was an early
13 time to introduce electronic systems. Were we asleep
14 at the switch or has something changed drastically in
15 10 years that -- you know, should we have been paying
16 more attention to this and been giving the New Mexico
17 officials a run for their money 10 years ago?

18 MS. MAXWELL: Well, perhaps, ideally, had
19 we had unlimited resources, as a staff, we could have
20 been looking at all of these things. But I think the
21 fact of the matter is that, as all of us were going
22 along assuming that our elections were operating

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1 properly. That all of our votes, however we were
2 casting them, whether on levers, which happens to be
3 what I still do and actually have never used a
4 machine other than a lever machine. But I think as
5 we were looking at all this and assuming everything
6 was fine and it really wasn't until the 2000 election
7 that we discovered that things weren't fine and that
8 it cost us the confidence that we had. So I think
9 asleep at the switch, no, concerned about a lot of
10 different issues at the time. This didn't happen to
11 be on the radar screen, wish it had because I think

12 we all would have been better served had we
13 recognized some of the concerns and issues relating
14 to our election systems. But I'm not as concerned
15 that, perhaps, we weren't focused as much on the
16 machines themselves but that we should have, whether
17 it be nationally or in every state, more focused, as
18 I said on the accuracy of our registration lists.
19 Where we providing provisional ballots? All of those
20 other kinds of things that really make up an election
21 system. I think we were focused on a lot of those
22 kinds of things and always have been in our

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1 communities to be certain that an election runs well.
2 I mean, League members across the country are always
3 at precincts and polling places observing and being
4 sure that things are run properly. So I think we had
5 a broader focus and I frankly think that was the
6 right focus, not just on a machine.

7 COMMISSIONER HILLMAN: Thank you.

8 CHAIRMAN SOARIES: Thank you,
9 Commissioner. Thank you panel. We are very much
10 aware that voting is a process and not a machine.
11 But you've helped us zoom in on the voting device,
12 starting with electronic voting, in large measure,

13 because of what all of you have conceded. That after
14 Florida, the machine became the star of the show.
15 All of you are involved in a much broader and deep
16 involvement in the voting process and we would invite
17 you to stay close because we have many more issues to
18 confront, many miles before we sleep and we need your
19 assistance.

20 Commissioner DeGregorio. And we're in
21 such good time, I'll take credit for that, though.

22 (Laughter.)

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1 MR. DEGREGORIO: Thank you, Mr. Chairman.
2 Ms. Campbell, first of all, I want to
3 thank you for bringing up the name of Akin Gibbs. I
4 had the opportunity to meet Mr. Gibbs several times
5 at (inaudible) conferences, election officials
6 conferences and he was a true warrior in the election
7 field and I know that we all miss him and I think you
8 for bringing up his memory today. It's very
9 important that we do.

10 Ms. Maxwell, I want to compliment the
11 League for the work that the League's done. When I
12 was director of elections, I worked very close with
13 the local affiliate, but you continue to do good

14 work. I just read the best practices report that you
15 did for provisional voting.

16 MS. MAXWELL: Thank you. We're proud of
17 that.

18 CHAIRMAN SOARIES: We want to license
19 that, by the way.

20 (Laughter.)

21 MR. DEGREGORIO: I appreciate the
22 contribution that you make and all the organizations

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1 represented here that you all make in the process.
2 And many of you mentioned the sit-down conversations
3 you've had with state officials about concerns that
4 you had in the election process dealing with
5 electronic voting and probably other issues. But
6 there are over 7000 local election officials in the
7 country and you all represent hundreds, maybe
8 thousands of affiliates. I know you are here leaders
9 in Washington, but you represent a lot of affiliates
10 throughout the country and, if you could share with
11 me some of your experiences, positive and negative,
12 with local election officials because part of what, I
13 think, we want to do is try to work to get messages
14 to local election officials to work with

15 organizations, such as yourself, to understand the
16 issues that are of concern to you and the people that
17 you represent, not just about electronic voting, but
18 voting registration. Because we know that it's on
19 the front lines in those local election offices where
20 the voter registrations are going to get on the rolls
21 or not on the rolls that you all send in representing
22 people from your organizations. So, if you can just

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1 share with me some of those experience so that we, as
2 we develop a plan here for the work that the
3 Commission is going to do in the coming months that
4 we can incorporate some of the suggestions that you
5 may have. You just don't have to share them all
6 today, but you can share them with us later in
7 written testimony.

8 Let's start with Jim.

9 MR. DICKSON: Thank you for that question.
10 I want to first reiterate that the biggest historic
11 problem we have had with voter disenfranchisement and
12 therefore voter skepticism about voting, has been in
13 the area of the lists, keeping them accurate and up-
14 to-date. And I would really encourage the Commission
15 to very quickly start to address that issue.

16 (End of Tape 17.)

17 (Tape 18)

18 MR. DICKSON: The one overriding problem

19 that -- this largely impacts state election

20 officials. Eleven years ago, the president signed

21 into law the Motor Voter Law.

22 COMMISSIONER DEGREGORIA: MVRA.

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1 MR. DICKSON: MVRA. Part of that law

2 stipulates that disability and poverty agencies are

3 suppose to function as voter registration sites in

4 the same way that the department of motor vehicles

5 does. We have polling data and analysis as well much

6 too much antidotal data that tells us that less than

7 half of the agencies are implementing their

8 requirement.

9 Part of the Help America Vote Act provides

10 funds to the states to build a new electronic data

11 base. I would urge the Commission and plead with you

12 to require that any new electronic data base include

13 the implementation of Section 7 of MVRA. Half of all

14 disabled Americans -- I'm doing quick math, 16

15 million are not even registered. When Congress

16 passed the MVRA, it recognized that the department of

17 motor vehicles would be a great place because lots of
18 Americans go there. But Congress also understood
19 that people with disabilities, poor people have no
20 need to go to the DMV and so it put Section 7 into
21 place and that needs to be enforced and now there's
22 the money to do it. So I would encourage you, to the

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1 extent you have the power to make that part of their
2 data base plans.

3 CHAIRMAN SOARIES: I'd like to do this.
4 I'd like to make sure that the remaining responses
5 stay within the scope of the electronic voting issue
6 and, if there are other interaction items that are
7 worthy of note, if you would put those in writing.
8 Otherwise, we'll get into a whole HAVA hearing and
9 we'll be here until tomorrow. There are a number of
10 other HAVA related issues that are burning in our
11 hearts, voter registration, you know, ID issues and,
12 if I let the door open any wider, then I'm going to
13 have lose my prize.

14 (Laughter.)

15 CHAIRMAN SOARIES: So, if there are any
16 interaction issues that Paul raises related
17 electronic voting, please discuss those. And, then,

18 if those are others that are not related, if you
19 would just send those in writing. Thank you.

20 MS. MAXWELL: I would just make a couple
21 of comments. First of all, specifically, in terms of
22 electronic machines, one of the things I mentioned

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1 previously was the fact that League members across
2 the country are participating in the HAVA
3 implementation committees in the various states and I
4 think serving a valuable service in bringing together
5 the local and state officials in this process because
6 we have members of local leagues, the state leagues.
7 So I think they serve a particular function in
8 sharing the concerns of citizens with those who are
9 making the kinds of decisions relating to all kinds
10 of issues relating to HAVA, but, of course,
11 specifically, on DREs.

12 I think one of the other areas, and,
13 again, it's peripherally related to DREs, but it is
14 the whole education process. And I know there are
15 some funds out of HAVA that are suppose to support a
16 lot of that, but I think one of the things that the
17 league has always done and will continue to do, and
18 it will include how to use these new machines, is to

19 educate the voters because I think we are a trusted,
20 nonpartisan source for that kind of information. So,
21 certainly, all of that will continue to be done.

22 CHAIRMAN SOARIES: True. Thank you.

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1 MS. ARBOLEDA: Thank you for the
2 clarification, Chairman Soaries. I was scribbling
3 like crazy because we have plenty of concerns with
4 other sections in HAVA that affect disproportionately the
5 Latin community. Specifically, to answer your
6 question, I would suggest two things, extensive poll
7 worker training in the operation of these machines
8 voice, obviously, they are certified. But poll
9 workers need to have confidence in how to operate
10 these machines so that they can transfer this
11 knowledge to the voter who, perhaps, doesn't feel as
12 comfortable using it.

13 The second recommendation would be, as Kay
14 mentioned, a broad voter education, obviously,
15 nonpartisan campaign that speaks to the public that
16 brings the people together and that demystifies the
17 paranoia* that has been built in the past year.
18 Those two things are key.

19 Also, to spell out what are these machines

20 capable and incapable of doing in plain, simple
21 language. You know, you go to the screen and you
22 touch the screen and you cast your ballot and this is

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1 what happens. I mean, it speaks to you in Spanish,
2 if you need to or in Chinese or in Vietnamese or in
3 Cantonese. That is important. You don't have to pay
4 to use these machines. People in my community are
5 going, if I vote in those computers, do I have to
6 pay? We need to know this stuff. So those are just
7 a few recommendations and I look forward to another
8 opportunity in discussing photo ID and other issues.

9 (Laughter.)

10 MS. CAMPBELL: The only point I'd like to
11 make is my personal experience that I said earlier
12 that I actually -- going into the system where you
13 had a bank card at that someone handed you, put it in
14 the machine, you touch the thing and you handed it
15 back and just the personal experience that, quite
16 frankly, I left there thinking, did I really vote and
17 I do this all the time.

18 The only other thing --

19 CHAIRMAN SOARIES: It just didn't feel
20 like voting.

21 MS. CAMPBELL: My confidence wasn't there
22 when I left the polling place and it was my first

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1 time voting of electronically. I spent a number of
2 my years in Georgia where in Fulton County where they
3 had -- we liked the little chads, but, you know,
4 that's another lifetime ago. One of the things, when
5 we talk about checks and balances I hope you will
6 consider or even for the manufacturers to consider.
7 When Jim talked about the experience, I saw in
8 Houston, Texas that experience of seeing someone not
9 have the ability as a disabled citizen, who was a
10 paraplegic, who in Houston, Texas in Harris County,
11 specifically, and how they had to bring the paper
12 outside and there was no privacy. So I felt that and
13 I would hope that you all continue this that it's not
14 either/or. It's kind of a both/and scenario.

15 In my written statement, is that audio
16 could be used as an option for other folks who may
17 not be as literate and there are other kinds of
18 things like that. So that would be my only other
19 comments to that.

20 CHAIRMAN SOARIES: Okay. Ms. Pingree.

21 MS. PINGREE: Thank you. I think my

22 colleagues on the panel have mentioned quite a few

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1 things, but I'd just like to go back to a couple of
2 things that were in our recommendations,
3 particularly, as it concerns local elected officials
4 and those who are in a position to make the decision.
5 And some of these I consider structural problems with
6 our system of purchasing machines, making polling
7 place decisions. I think I've read that we have
8 something like 13,000 sovereign communities that in
9 one way or another are making electoral decision.
10 And, while there's a lot of debate about how much of
11 the decision-making should be federalized, how much
12 should be left to local officials, particularly, when
13 it comes to the purchase of machines and the
14 companies themselves.

15 The reason we have these recommendations
16 in here is because we want to take some of that away
17 from this whole debate. One of them says vendor
18 should adhere to strict, nonpartisan policies and
19 practices. There must be a competitive and open
20 contracting process for purchasing of voting
21 machines, strict conflict of interest codes for
22 election officials and vendors, independent testing

1 of the machines. I think all of these things would
2 make the job of the local election official far more
3 dependable.

4 You know, a lot of people serve in these
5 positions and don't want to be put in a position
6 where they're considered having a conflict of
7 interest or accepting some sort of gift in return for
8 the purchase of the machine. I mean, you've heard
9 the stories and we need you to change the system so
10 those questions just are no longer there. So that,
11 when we think about why we have the machines in place
12 that we do, we believe that they are there for good
13 reasons, for technically-appropriate reasons, not
14 because of who you made a contribution to or who
15 influenced you in that decision-making process.

16 So I would just say, you know, taking as
17 much of that away as possible, along with all of the
18 other things that have to happen once the machines
19 are in place could go a lot.

20 The other thing I want to emphasize is,
21 one of the reasons why I stood back and looked at the
22 perspective, you know, what's happened in other

1 countries? What do we do when we go observe
2 elections in other countries? You know, we have a
3 very fundamental set of questions that we ask and
4 it's embarrassing not to be asking them about
5 ourselves or it's embarrassing to be in the position
6 where our country now does not look as good as many
7 other places that we've been criticizing for a long
8 time.

9 And I do think that's what happened in the
10 2000 elections, while much of this was going for a
11 long time -- bad lists, disenfranchised voters,
12 machines that weren't working, improperly trained
13 poll workers who didn't know how to clear the
14 machines and all the things that had to be done.

15 For the first time, internationally, we
16 were looked at and we had to say, uh-huh, this is
17 America. We count on the vote. We're one of the
18 most proud democracies ins the world and we need to
19 keep that perspective and give it to local election
20 officials who sometimes don't have the opportunity to
21 see all that there is to see.

22 CHAIRMAN SOARIES: Commissioner Martinez.

1 COMMISSIONER MARTINEZ: Thank you,
2 Mr. Chairman.

3 Ms. Maxwell, my mother-in-law, Pat
4 Stanley, is the president of the League of Women
5 Voters in Midland County in west Texas. So she'll be
6 real embarrassed that I've just said that.

7 (Laughter.)

8 COMMISSIONER MARTINEZ: With the camera
9 rolling and I also might get an especially nice
10 Christmas present this year for having it.

11 MS. MAXWELL: Well, Mother's Day is coming
12 up.

13 COMMISSIONER MARTINEZ: Oh, yes. Well,
14 there's a Mother's Day present.

15 I mention that because I'm familiar with
16 the work that -- the very fine work of your
17 organization. I also, concurrent with my law
18 practice, before joining the Commission in December,
19 ran a non-profit 501(c)(3) organization that was
20 dedicated to giving money to other 501(c)(3)s that
21 did nonpartisan voter education and voter
22 registration activities. In that capacity, I relied

1 on a lot of the work that you all did at the League
2 and the research that you all did. And I'm wondering
3 if there's any research at all that you know of that
4 the League might be doing to see what the use of DRE
5 machines in jurisdictions that are using them does to
6 voter turn out?

7 MS. MAXWELL: We have not specifically
8 done any research in that regard and, frankly, we
9 don't have the capacity to do a lot of serious
10 research in that kind that you described. However,
11 we are looking toward this upcoming election from the
12 standpoint of at least asking our state and local
13 leagues for some antidotal information and some basic
14 questions that they might be looking at.

15 The league in Connecticut this past
16 primary election also was helping with the Secretary
17 of the State in Connecticut as various machines were
18 tried in that election and collecting some data. But
19 we are not really capable or -- we're capable. We
20 don't have the resources to carry out specifically
21 that kind of effort that you described. I certainly
22 wish that we did because it's the kind of data that

1 we need and that needs to be gathered.

2 COMMISSIONER MARTINEZ: Right. I agree
3 with that.

4 Ms. Arboleda, the same question. I know
5 that, obviously, NCLR does very fine work and very
6 fine research as well. I assume you have antidotal
7 evidence to, perhaps, give an opinion as to what the
8 use of DREs does for minority voters in terms of
9 whether it helps voter turn out, which is a huge
10 problem for Latinos or, perhaps, we just don't know
11 yet because it's relatively new in most
12 jurisdictions. But, anything along those lines that
13 NCLR might be doing or taking a look at?

14 MS. ARBOLEDA: Thank you,
15 Commissioner Martinez. On page 5 of my testimony, we
16 have some research from California, San Bernadino
17 County, specifically, that shows that 98 percent of
18 voters consider electronic voting superior or very
19 superior and this showed voter confidence. We can
20 only speculate from these numbers and others in my
21 testimony that voter confidence raises people's
22 ability and eagerness to turn out.

1 In other research and surveys of 14,000

2 voters, it showed that 97 percent of the voters found
3 the touch screens easy to use and easier than punch
4 cards in some instances. So that, unlike this,
5 limited as it is, show us that LEP voters, limited
6 English proficient voters are eager to use these
7 machines. It was told to me by one of my colleagues
8 from EPOC that a group of older Chinese American
9 people were taken to show them how to use this
10 touchtone screens and they were having the best time
11 of their life. They were saying that it was like
12 playing domino, technological domino and they
13 understood it.

14 They were eager to interact with the
15 technology and these were older Chinese American
16 women. Most of them did not speak a word of English.
17 So the limited research that we do have show that
18 DREs, in fact, provide an ease in their consciousness
19 and in their minds and that they ensure that the
20 voters turn out.

21 MS. MAXWELL: May I have just add one
22 quick addendum to one?

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1 CHAIRMAN SOARIES: Yes.

2 MS. MAXWELL: In the same way that we did

3 the best practices piece on provisional ballots that
4 you referenced earlier, we are continuing to do some
5 best practices papers on some of these other issues.
6 It's just not the extensive research that I presumed
7 you were discussing.

8 CHAIRMAN SOARIES: Jim, you can speak as
9 long as it's one minute.

10 MR. DICKSON: All right. I want to call
11 your attention to my written testimony. I placed in
12 there a summary of public opinion polls taken around
13 the country which show overwhelming voter confidence
14 in DREs across all racial, all age groups, all
15 education groups. I used less than a minute.

16 CHAIRMAN SOARIES: I don't think we should
17 underestimate, in response to Commissioner Hillman's
18 question, the historical context. Not only does
19 Florida 2000 place the voting device on the pedestal
20 and create this international embarrassment, but we
21 also have, following Florida 2000, a rapid decline in
22 public confidence in corporate leadership and we

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1 begin seeing the convergence of the perfect storm.

2 We also have a war and, if you study the
3 history of election reform in this country, it's when

4 young people are dying on foreign soil that we become
5 more sensitive to issues of expanding the franchise
6 and getting it right. And, so, if the fire got
7 started, we also can't ignore the gasoline being
8 poured on the fire by the president of a manufacturer
9 promising to deliver an election for a sitting
10 president.

11 And I asked the representative of that
12 company this morning if they've learned lessons and
13 he said that they've learned lessons. He wasn't
14 specific in what the lessons were, but I just think
15 that when we look at where we are today versus two
16 years ago when HAVA was signed, HAVA did not have in
17 mind this as its first challenge and all of these
18 events have converged for this moment in time and I
19 think it's more than a fire out in the field and all
20 of those factors have contributed to our having to
21 respond.

22 But it's not negative. It's just not

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1 negative. Some of the worse problems we've ever had
2 in this country were resolved because there was some
3 passionate debate that went on at the very least and
4 we welcome that and we welcome persons from different

5 perspective having the willingness to come to our
6 table because your presence indicates that we can be
7 the honest broker of a diversity of ideas. But we do
8 have to come to some common ground and synthesize
9 these concerns so that we can have both short-term
10 and long-term impact.

11 I want to thank you again for your
12 contribution to your process. You can stay right
13 there because we're about to wrap up and I'm afraid,
14 if you move, they make noise. Just don't move. Each
15 Commissioner will say their thank yous and comments,
16 briefly and then I'll just summarize and give you
17 some sense of where we're going next and then we'll
18 be done.

19 COMMISSIONER DEGREGORIO: Thank you,
20 Mr. Chairman. And it's just a simple thanks to all
21 of you. To our panelists, to those who came today,
22 those of you who had to be outside the room, we know

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1 there are people outside who could not get in because
2 of the difficulty and the overwhelming crowd that we
3 had. We thank the media coverage and we thank C-SPAN
4 for covering this event and, hopefully, in a couple
5 of days, you're able to click on at their website

6 this proceeding and share it with your friends

7 throughout the nation.

8 It's been an honor for me to listen today,
9 to ask some questions and I know that in addition to
10 the testimony we heard today, we received volumes of
11 e-mails and other faxes from people throughout the
12 country who wanted to give us their thoughts in this
13 important issue. So it's an honor for me. I learned
14 a lot and look forward to taking the information we
15 received today to put it to productive use.

16 MS. HILLMAN: And I join my colleagues in
17 expressing my appreciation for the attention that the
18 witnesses gave to their presentations. It certainly
19 help me learn an awful lot in a condensed period of
20 time, but we don't have a lot of time. So we do have
21 to learn on the fly, if you will, so that we can help
22 all of you, in particular, those who are responsible

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1 for administering the elections, to generate the
2 highest level of confidence among voters that we can.

3 We have to accept the reality of what
4 machines will be used in November. What we can do
5 between now and November regarding the use of any
6 particular equipment, but that the voters know that

7 it's not all gloom and doom. That there are a lot of
8 good things going on. There are a lot of good
9 organizations at work with election administrators to
10 address this and the input is helpful and it almost
11 makes me want to have another hearing next week.

12 (Laughter.)

13 CHAIRMAN SOARIES: Mr. Martinez.

14 COMMISSIONER MARTINEZ: Thank you,
15 Mr. Chairman.

16 I, too, want to express my thanks to all
17 of the panelists. I thought that the presentations
18 and the testimonies were well-prepared and very
19 compelling and I've learned a lot. I also want to
20 thank the Chair and the Vice-Chair because really the
21 impetus came from their collaboration several months
22 ago when we were talking about what we needed to

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1 right away aside from getting telephone and actually
2 seeing if we had an office somewhere and other
3 administrative responsibilities, which I know they
4 handled very admirably as well. The impetus for this
5 hearing came from their collaboration.

6 As we develop the vision for it, in my
7 opinion, this is what we envisioned. This kind of

8 dialogue. This kind of fact finding, if you will,
9 for this Commission, which I think is extremely
10 important. I would simply end my participation today
11 simply by reiterating what I started with this
12 morning and, that is, we take our obligation, we take
13 our responsibility very seriously.

14 I'm honored to be serving with my fellow
15 Commissioners and this is a historical act that is
16 happening that the federal government has now become
17 an active partner with our state and local
18 jurisdictions, with our civil rights and voting
19 rights advocates, with other stakeholders in trying
20 to improve the administration of our federal
21 elections. That's an important -- a very humbling
22 one as far as I'm concerned as well and this is a

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1 major first step in us being able to do our jobs
2 appropriately. I thank you all for being here and
3 I'm grateful to participate.

4 Thank you, Mr. Chairman.

5 CHAIRMAN SOARIES: Let me close by, again,
6 thanking Mike Levitt, the Administrator of the
7 Environmental Protection Agency and acting Deputy
8 Administrator Steve Johnson and Deputy Chief of Staff

9 Ray Spears for working very hard to accommodate us.
10 We do have accommodations, but none that would
11 facilitate this hearing and EPA has been so kind.
12 They've loaned us staff. They've given us space and
13 we just cannot thank them enough.

14 Also, there are so many people here who
15 participated in the crafting of HAVA. People whose
16 minds and hearts spent days and nights into this
17 legislation, which not only formed this Commission,
18 but which, in fact, made history in this country.
19 The United Auto Workers Union described HAVA as the
20 greatest civil rights legislation of the 21st Century
21 and I take that very seriously and it's an honor to
22 know that we have that kind of network around the

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1 country.

2 So many election officials have come here
3 today knowing that they would not have a chance to
4 speak. Some flew from Florida and other states and I
5 just want to thank you. Good to see you and it's an
6 honor to know that you care enough about our work to
7 show up physically.

8 Congressional staffers are here and,
9 because we have such a small staff, we just kind of

10 adopt them and make them our staff. They're our ad
11 hoc advisers and our envision staff members and I
12 thank the EAC staff, also.

13 A way of fear that citizens votes will not
14 count in the next presidential election is steady
15 spreading throughout the country and that fear
16 threatens to undermine the critical decisions that
17 need to be made to ensure the integrity of our
18 nation's voting process. The good news is that, as
19 Commission Martinez announced, starting next Monday,
20 the federal government, under our leadership, will
21 begin to distribute \$2.3 billion to states to assist
22 them in improving their voting process for federal

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1 elections. The bad news is that many states are
2 afraid to spend the money because of problems that
3 are now associated with new electronic voting
4 devices.

5 Prior to the 2000 presidential election,
6 most Americans applied little thought to the actual
7 mechanics of the voting process. The term "hanging
8 chad" had little meaning to most Americans. But the
9 events that occurred in Florida during the 2000
10 presidential election created a new awareness and a

11 national consensus that a flawed process could only
12 produce flawed results. And so Congress acted by
13 passing the Help America Vote Act of 2002, HAVA,
14 which President Bush promptly signed into law.

15 The first objective of HAVA was to assist
16 the states by funding the replacement of outdated
17 voting equipment, punch card and lever machines. For
18 many states, the voting equipment of choice quickly
19 became the electronic voting machine. The computers
20 were called in to rescue America's voting. Of
21 course, many Americans had already been using some
22 form of electronic voting prior to 2000.

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1 In fact, in 2000, over 12 percent of the
2 country, almost 12 million registered voters, used
3 electronic machines. While some 29 percent, 46
4 million registered voters, used optical scan
5 machines, which are another form of electric voting.
6 So the computer was not new to the voting booth.
7 What was new was that the federal government was
8 preparing for the first time in our nation's history
9 to get involved in voting as a national enterprise.

10 The rights of citizens to vote had been
11 protected by constitutional amendments and by passage

12 of federal laws like the Voting Rights Act of 1965
13 and the National Voter Registration Act. And, yet,
14 the federal government had never before created a
15 mechanism to define and support the administration of
16 federal elections with both specific requirements as
17 well as significant federal funding. Clearly, the
18 passage of HAVA with strong bipartisan support in
19 Congress, signaled that a national consensus had been
20 achieved. None of us wanted another election of
21 2000.

22 Importantly, no one involved in creating

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1 this new legislation, no one who envisioned HAVA
2 believed that voting machines alone represented the
3 solution. Accordingly, among other things, HAVA
4 mandates provisional ballots in every polling place
5 to ensure that no voter is turned away. That signs
6 be displayed at every polling place informing people
7 of their voting rights and that a complaint procedure
8 be established in every state that allows citizens to
9 have redress if they believe their voting rights have
10 been denied.

11 All of these mandates must be in place for
12 the upcoming November election and these mandates are

13 part of our mission. But that still leaves us with
14 the issue of the machines. Many thoughtful people
15 have come today and they've described the decision
16 that was made that electronic voting machines, now
17 used in 29 percent of the voting jurisdictions in the
18 country, are neither secure nor reliable and can only
19 be made so with the use of "voter verified paper
20 ballot" and then others believe that the safeguards
21 used in every election by experienced election
22 administrators provide ample and adequate security

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1 with regard to every type of voting machine,
2 including electronic machines.
3 And, so, here we are, the United States
4 Election Assistance Commission. And the EAC,
5 comprised of four senate-confirmed, presidential
6 appointees is created. Much long waited, but here we
7 are. And so, along with providing much needed
8 guidance and resources to states on the
9 administration of federal elections, the EAC is now
10 charged with updating federal standards relating to
11 the certification of voting equipment.

12 Due to the universally shared desire by
13 all Americans to bring the highest level of integrity

14 and fairness to the voting process, we conducted this
15 hearing today to explore the strengths and weaknesses
16 of the voting systems that will be used this
17 November.

18 We began today with electronic voting.
19 And, after today, we will look at every other major
20 voting device that Americans will use. Information
21 gathered today by these public hearings will provide
22 a basis for updating the voting system standards and

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1 for issuing guidance and best practices information
2 to all states. The first such public hearing that
3 took place today was on electronic voting and EAC has
4 asked tough questions of vendors, election
5 administrators, researchers about the security and
6 reliability of electronic voting.

7 Ultimately, all four EAC Commissioners,
8 two republicans and two democrats, are all strongly
9 committed to taking whatever actions are deemed
10 appropriate to ensure that our next federal election
11 will have the integrity that Americans expect and the
12 fairness that democracy demands. Thank you for being
13 here.

14 (Applause.)

15 (Whereupon, at 4:15 p.m., the above-

16 entitled matter was concluded.)

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