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4	U.S. ELECTION ASSISTANCE COMMISSION
5	EXCERPT FROM THE PUBLIC MEETING
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8	Taken at the Marriott Hotel
9	1535 Broadway, New York, New York
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11	On the date of Thursday, June 30, 2005
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15	COMMISSION MEMBERS:
16	Gracia Hillman, Chair Paul DeGregorio, Vice Chair
17	Ray Martinez, Commissioner
18	Tom Wilkey, Executive Director
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21	Start time: 9:30 o'clock, a.m.
22	Taken before: ELLEN REACH, a court reporter
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1	CHAIR HILLMAN: Good morning.
2	Welcome to this Public Meeting of
3	the U.S. Election Assistance Commission.
4	Could I ask and remind you to

5	silence your cell phones, pagers and any other
6	electronic device that might make noise and
7	disturb the proceedings of our meeting. Thank
8	you.
9	If you would stand and join me in
10	the Pledge of Allegiance.
11	(Assembly reciting the Pledge of Allegiance)
12	CHAIR HILLMAN: Thank you.
13	If we could have the roll call,
14	please.
15	MS. THOMPSON: Thank you, Madam
16	Chair.
17	Please respond by saying present or
18	here when I call your name.
19	Gracia Hillman, Chair?
20	CHAIR HILLMAN: Here.
21	MS. THOMPSON: Paul DeGregorio, Vice
22	Chairman?
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1	VICE CHAIR DeGREGORIO: Here.
2	MS. THOMPSON: Ray Martinez,
3	Commissioner?
4	COMMISSIONER MARTINEZ: Here.
5	MS. THOMPSON: Madam Chair, there
6	are three members present out of four.
7	CHAIR HILLMAN: Thank you.
8	It is wonderful to be here in New
9	York City. This is the first meeting that we
10	have held in this great city.

11	Doubly pleased that John Ravitz,
12	Executive Director of the New York City Board of
13	Elections is with us this morning to bring
14	greetings.
15	Mr. Ravitz, please. Thank you.
16	MR. RAVITZ: Thank you very much.
17	We want to welcome you to New York
18	City and hopefully you will have a wonderful time
19	here, spend money, which helps our revenue and I
20	would like to, on behalf
21	There we go.
22	CHAIR HILLMAN: Please begin again.
	4
1	MR. RAVITZ: I just asked everyone
2	to please spend money to help our city revenues.
3	But on behalf of the New York City
4	Board of Elections, we would like to welcome the
5	EAC here.
5	I would also like to recognize one
7	of our ten Commissioners who are here,
3	Commissioner Terry O'Connor, from the Borough of
9	Queens, is here to welcome you as well.
10	And it's good to see some very
11	familiar faces. Commissioner DeGregorio, as we
12	were talking earlier, has been in New York City
13	on Election Day during the last two general
14	elections.
15	And we are very happy and pleased -

16	and New York's loss is your gain in having Tom
17	Wilkey now as your Executive Director. And we
18	look forward to continuing our long working
19	relationship with Tom.
20	Just for those of you who don't
21	know, I was in the New York State Assembly for
22	12 years, representing the East Side of
	5
1	Manhattan, before becoming the Executive Director
2	of the New York City Board of Elections.
3	And, quite frankly, for 12 years I
4	only cared about one thing when it came to the
5	election process - making sure that my name was
6	on the ballot, not caring about anything else.
7	Well, the first day I took this job
8	I asked our Chief Voting Technician to open up
9	the back of one of our Shoup 3.2 lever machines,
10	because I had never seen the back of the machine,
11	I had only seen the front of the machine.
12	When you open up the back of one of
13	those beauties and you see the work that has to
14	go into that that our technicians have to do to
15	strap those machines to get the ballots ready, I
16	began to see already that I had a lot of learning
17	to do about the electoral process.
18	The other experience I had with the
19	Board of Elections staff was in 1996 on Election
20	Day. I was in one off my tightest races and I
21	was in front of one of my busiest polling sites,

22	which is Hunter College on the East Side of
	6
1	Manhattan.
2	I am just standing there greeting
3	voters and a woman came out around seven o'clock
4	in the morning and she said, "you are Assemblyman
5	Ravitz," and I said "yes". And she extended her
6	hand. I thought she wanted to shake my hand.
7	And she put a lever in my hand. And
8	I said, "well, what's this?" And she said,
9	"well, I just tried to vote for you and this
10	lever came out." And I said, "did you tell
11	anybody?" And she said, "no".
12	I said, "well, we have to go put
13	this lever back in because now no one is going to
14	be able to vote for me."
15	That hasn't happened in the three
16	years that I have been in this job.
17	But, again, just some background on
18	New York City. And Commissioner DeGregorio and
19	Executive Director Wilkey I think know it very
20	well.
21	We have 1369 poll sites in the five
22	boroughs of New York City. We have 7,639
	7
1	existing Shoup 3.2 lever machines that the City
2	of New York has been using since the early
3	1960's.

4	On Election Day we bring in 30,000
5	poll workers to man our polls in all five
6	boroughs and we try and service 4.2 million
7	voters.
8	HAVA, obviously, has been on all of
9	our minds. We have been waiting anxiously for
10	the State Legislature for the last two years to
11	put what they wanted to put into state statute in
12	regards to implementing of HAVA.
13	We have successfully - and I am very
14	pleased to say successfully - introduced the
15	first phase of the HAVA ID requirement in last
16	September's election. And we spent a lot of time
17	doing as much as we could to make this as
18	painless a process for those voters who fell
19	under the category of people who had registered
20	to vote by mail for the first time after January
21	1, 2003.
22	We had good success and that will,
	8
1	obviously, continue as we continue to make sure
2	that those people who fall into that category
3	will do so.
4	But, other than that, we were
5	waiting for the Legislature to act and this is
6	it. They finally, last week, finished their
7	legislative duties in putting into legislative
8	form the remaining pieces of HAVA.
9	The biggest issue that we have is

10	the Machine Bill and that's what - we are now
11	going to be beginning that process because under
12	this legislation that the State Legislature
13	passed, we are now going to have to have one new
14	voting system in each poll site in all five
15	boroughs for the 2006 election.
16	Now, I don't know what the Justice
17	Department is going to do regarding that
18	regulation. That's going to be up to the
19	lawyers.
20	We are moving forward and,
21	obviously, there are a lot of things that have to
22	happen on the state level with the state Board of
	9
1	Elections, as well as our Commissioners making
2	the determination which systems they would want.
3	But you should know that we at the
4	Board of Elections have not just been sitting on
5	our hands. We have put together working groups,
6	internal work groups of our own staff, reaching
7	out to work in trying to acquire consultants -
8	who will be able to help us as project managers -
9	move into this transition form.
10	And the Mayor of the City of New
11	York, in his budget that will be adopted in the
12	next few days, saw the need that we are going to
13	have to do to implement HAVA in these final
14	stages and came through with the money that we

15	needed to hire communication firms, to help us
16	with our public relations, to do what we have to
17	do in terms of hiring additional technical
18	people.
19	So we are going to be ready to go
20	once we know what the systems we are going to be
21	using will be.
22	This is our roadmap now that we will
	10
1	begin to start with.
2	But I have to tell you, and I say
3	this with all the sincerity that I can, I don't
4	know what's going to happen in 2006. Under the
5	state law we have to have 1369 machines, one in
6	each poll site. We probably will need an
7	additional 200 or 250 for spares, for training,
8	for demonstrations.
9	I don't know, once it gets to the
10	point where our Commissioners make a selection,
11	if any vendor is going to be able to produce
12	those type of numbers for us in that short a
13	time. Because we need as many of these new
14	systems in place so that we can make sure that
15	they interface with our existing systems that we
16	have in all five boroughs and our offices.
17	In addition to that, once we get
18	those 1369 plus machines, we are going to need
19	the other 6,000 machines very quickly after that
20	as well.

21	So the question that I will leave
22	all of you - and really to be up front with all
	11
1	of you - is that we are going to do everything
2	that we can to comply with the law.
3	But because of the small window that
4	the State Legislature really has given us in
5	terms of all the work that still has to get done
6	before I can tell you or my staff or the voters
7	of the City of New York what new systems they're
8	going to be voting on, a lot has to happen.
9	And we look forward to working with
10	you as we try to move forward in this regard. We
11	appreciate the fact that the money that you have
12	given to us and to the state has begun to come
13	through and now that we can actually use some of
14	that money.
15	But this is a process that is still
16	very fluid in my mind and it is one that's going
17	to have to be done, as we have always said, in a
18	very responsible way. Because the one thing that
19	we never want to lose sight of, is we do not want
20	to disenfranchise any voter.
21	When you are dealing with a city as
22	wonderful as New York City, when you have 4.2

1	million voters - some of them voting for the
2	first time, some of them who are going to be very
3	anxious about changing the way they have been
4	voting for years and years - a lot of work has to
5	get done.
6	But working with you and working
7	with the state Board of Electionss, I hope that
8	we can do that.
9	So, again, I want to welcome you
10	here. Hope that you have a wonderful conference
11	here in New York City. And we are always here to
12	the be of assistance to you when you are here in
13	our great city.
14	CHAIR HILLMAN: Thank you very much,
15	Mr. Ravitz.
16	Commissioners, we have before us the
17	agenda for today's meeting. And unless there are
18	any changes or edits to the agenda, it's
19	appropriate for adoption.
20	VICE CHAIR DeGREGORIO: So move.
21	COMMISSIONER MARTINEZ: Second.
22	CHAIR HILLMAN: Thank you very much.
	13
1	The agenda has been adopted.
2	Minutes for the May 24 meeting, are
3	there any corrections to the minutes? If not, it
4	would be appropriate to approve the minutes.
5	COMMISSIONER MARTINEZ: Move

6	adoption, Madam Chair.
7	VICE CHAIR DeGREGORIO: Second.
8	CHAIR HILLMAN: The minutes from May
9	24 have been adopted.
10	We have three reports this morning.
11	The first is an update on the Title
12	II requirements payments.
13	And, Mr. Vice Chairman, if you would
14	be so kind.
15	VICE CHAIR DeGREGORIO: Thank you,
16	Madam Chair.
17	Commissioner Martinez is also going
18	to share this responsibility this morning. But
19	let me say it's a pleasure to be here in New York
20	City and in New York State.
21	And, John Ravitz, thank you for
22	those remarks.
	14
1	We certainly recognize the pressures
2	that you have been under in trying to get some
3	things done here in New York State and at least
4	they made some steps. But we hope that we, as a
5	Commission, can be the best of help to you, share
6	information from other jurisdictions around the
7	country that have gone through some changes and
8	the changes that you are about to experience and
9	hope that we could be of help.

10	And I have been in New York a couple
11	of times. I was here last November for the
12	general election in Commune City (sic), up in the
13	Bronx up there. I saw on TV this morning that
14	they were without electricity last night and
15	thought, wow, that's tough.
16	There were 14,000 people at this one
17	polling place in the Bronx, in one of the largest
18	polling places in America, with 72 poll workers
19	to manage that one polling place. And it was
20	amazing to see that last November in operation.
21	I appreciate it.
22	I also observed the primary election
	15
1	up in upstate New York and I see Ed Szczesniak
2	here from Onondaga County in upstate New York and
3	got to observe a primary up there.
4	So I have seen the big city and I
5	have seen other areas of New York to see how
6	elections are conducted.
7	And the good news for the report
8	that we are giving today about the requirements
9	payments is that we are getting close to the end.
10	We started the process on June 9,
11	2004 to begin to disburse money to the states,
12	District of Columbia and the U.S. territories, 55
13	entities in total, to distribute money. And
14	there was \$2.3 billion appropriated for EAC to

15	distribute.
16	And I am pleased to report that we
17	are now down to the last \$115 million of that
18	\$2.3 billion.
19	Since our last meeting, Madam Chair,
20	we have disbursed funds to the State of
21	California - \$169 million; to the Territory of
22	Guam for \$2.3 million. And last, but certainly
	16
1	not least, and good news I know to all of New
2	York State - \$153 million to New York State for
3	fiscal year 2003 and 2004 money.
4	I am going to ask Commissioner
5	Martinez to perhaps talk about what may be left
5	for fiscal year 2004 distribution.
7	COMMISSIONER MARTINEZ: Thank you,
8	Mr. Vice Chairman.
9	Just to wrap up this part of the
10	agenda, all 55 jurisdictions covered by the Help
11	America Vote Act - 50 States, the District of
12	Columbia, the Commonwealth of Puerto Rico and the
13	eligible U.S. Territories - have received all of
14	their 2003 requirements payment.
15	There is also a pot of money that is
16	the 2004 Title II requirements payments and of
17	that, of those funds, 48 States have received
18	their disbursement or 48 of the 55 eligible
19	jurisdictions have received their disbursement

20	leaving seven jurisdictions remaining that are
21	eligible for the \$115 million or so Federal funds
22	that the Vice Chairman mentioned earlier.
	17
1	We anticipate and we are in touch
2	with all seven of those jurisdictions. I know
3	that two of them - Michigan and Texas - have
4	sizable '03 - I mean, sizable '04 requirements
5	payments left to pull down. And they, for some
6	of those jurisdictions, it is a question of
7	coming up with the appropriate 5% match that has
8	to come down from the State to be able to draw
9	down the Federal funds.
10	We are working with all seven
11	jurisdictions, Madam Chair, to distribute this
12	money in a timely fashion so that they can put
13	the money to good use.
14	CHAIR HILLMAN: Thank you very much.
15	Are there any questions of your
16	colleague who gave the second half of the report?
17	The next item we will receive a
18	report on are the Proposed Voluntary Voting
19	System Guidelines.
20	We have been working very diligently
21	and we are able to post the proposed guidelines
22	on our web site. The appropriate notification
	18
1	has been sent to the Federal Register so that the

2	information will be available as well through
3	Federal Register Notice. And the 90 day public
4	comment period can begin.
5	And Carol Paquette, who has been
6	serving as our Interim Executive Director, and is
7	now working with us to help us finalize our work
8	on the guidelines, will give us a report and an
9	update.
10	Carol, thank you.
11	MS. PAQUETTE: Madam Chair,
12	Commissioners.
13	Is this on?
14	THE CHAIR: Tap it. See the slide
15	button on top.
16	MS. PAQUETTE: As you are aware.
17	Section 202 of HAVA directs the EAC to adopt
18	Voluntary Voting System Guidelines and to provide
19	for
20	CHAIR HILLMAN: Could you move the
21	mike just a little bit closer. I think we are
22	getting signals that
	19
1	MS. PAQUETTE: Sure. Section 202 of
2	HAVA directs the EAC to adopt Voluntary Voting
3	System Guidelines and to provide for the testing,
4	certification, decertification and
5	recertification of voting system hardware and
6	software by accredited test labs, among many

7	other duties that are assigned to the Commission.
8	To assist EAC with the voting system
9	guidelines work, HAVA provides for the
10	establishment of a body of subject matter
11	experts, called the Technical Guidelines
12	Development Committee.
13	This fifteen person body, under the
14	specifications in HAVA, is drawn from a variety
15	of organizations who have particular expertise
16	and interest in the subject matter, such as the
17	National Association of State Election Directors,
18	the Access Board, the American National Standards
19	Institute and the IEE, among other organizations.
20	The Technical Guidelines Development
21	Committee is Chaired by the Director of the
22	National Institute for Standards and Technology,
	20
1	NIST, and NIST is charged with providing
2	technical support to the work of the TGDC.
3	EAC has provided nearly \$3 million
4	this fiscal year to fund the work of the TGDC and
5	NIST.
6	Under HAVA the TGDC is tasked with
7	developing initial recommendations for voting
8	system guidelines and providing those
9	recommendations to the Election Assistance
10	Commission.
11	The TGDC and NIST worked very

12	diligently on this effort for the nine months
13	provided by HAVA and they provided a very
14	excellent product for the Commission to review.
15	They completed their work and
16	delivered their initial set of recommendations to
17	the Commission on May the 9th.
18	The recommendations provided by the
19	TGDC augment the 2002 Voting System Standards
20	particularly in the area of accessibility,
21	usability and security of voting systems.
22	This includes new requirements for
	21
1	accessibility, for voting system software
2	distribution, for voting system setup validation
3	and use of wireless.
1	Also in recognition of the fact that
5	several states have enacted legislation requiring
5	voter verified paper audit trails, the guidelines
7	also include performance specifications for this
3	capability.
)	We would note that for federal
10	system certification purposes, the voter verified
11	paper audit trail are optional. They are there
12	for the use of those states that have chosen to
13	require this capability.
14	We would also note that a paper
15	audit trail is only one of several technical

16	approaches to provide voters an additional means
17	to the DRE summary screen to verify their ballot
18	choices.
19	The Commission expects to be working
20	with the TGDC and NIST to develop similar
21	specifications for audio, video and cryptographic
22	solutions that provide comparable capabilities
	22
1	for voter verifiability.
2	Subsequent to receiving these
3	recommendations from the TGDC, EAC has been
4	performing its due diligence of thoroughly
5	reviewing these recommendation and preparing them
6	for presentation for public comment.
7	In particular, we have performed the
8	legal analysis of the guidelines to ensure that
9	all the aspects are fully in compliance with the
10	governing statute, HAVA.
11	This has resulted in some changes in
12	the accessibility provisions, for example. In
13	particular, Requirement 2.2.5 regarding
14	accessible voting systems, if the procedure for
15	voters is to submit their own ballots, then we
16	have changed the requirement from a 'should' to a
17	'shall', that voters who are blind are able to
18	perform this activity independently.
19	Essentially the idea is that if the
20	requirement is for the voter to be providing some

21	manipulation of the ballot, of the sighted voter,	
22	that those with impairments should be able to do	
	23	
1	the same thing.	
2	In addition to these changes in the	
3	accessibility section, selected portions of the	
4	document have been revised to reflect the new EAC	
5	process for national certification of voting	
6	systems. And this was adopting the sections that	
7	describe the previous NASED qualification process	
8	to describe the EAC certification process. And	
9	also we made updates throughout the document to	
10	reflect new HAVA terminology.	
11	As you noted, Madam Chair, the	
12	Federal Registered Notice was published	
13	yesterday, June 29th. And that begins the 90 day	
14	public comment period.	
15	We have copies of the Federal	
16	Register Notice that are on the table for people	
17	coming into the room. And that provides a full	
18	description of the various ways that the public	
19	can comment on these guidelines and also how to	
20	obtain copies of the guidelines.	
21	I would note, in addition to making	
22	the guidelines available on our web site, they	
	24	
1	are available on request in paper form or in	

2	CD-ROM.
3	We have also provided it on our web
4	site in both PDF and HTML format, so that those
5	interested parties who use assistive technology
6	are able to read the document.
7	I would like to conclude by noting
8	that we are holding three hearings on the
9	guidelines, one today immediately following this
10	meeting.
11	We have a second hearing scheduled
12	for July 28th which will take place at California
13	Institute of Technology. And we have a third
14	hearing in August in Denver.
15	And we will have more information
16	forthcoming as these meetings are finalized.
17	Are there any questions?
18	CHAIR HILLMAN: Thank you very much
19	Because we are having the hearing
20	this afternoon, we will be able to get into a lot
21	more discussion.
22	But I was wondering if you could
	25
1	just tell us what somebody who is viewing the
2	document on the EAC web site can expect to see.
3	I mean, it is a very large document. And so we
4	don't want people to be deterred because they
5	think they have to sift through 300 and something
6	pages of material.

7	MS. PAQUETTE: Yes, this is a rather
8	formidable document. It is about 250 pages.
9	CHAIR HILLMAN: All right. So I
10	exaggerated.
11	MS. PAQUETTE: And for ease of use
12	on the web site, we had it posted in a number of
13	ways. So if someone wants to download the entire
14	document, they can do that.
15	The document is actually in two
16	volumes. One volume is for voting system
17	performance requirements and the second volume is
18	for testing requirements. You can also download
19	the volumes separately.
20	In addition, with each one of the
21	volumes, you can read or download each section of
22	the volume independently.
	26
1	So you can sort of treat this in
2	somewhat bite-sized pieces.
3	And, as I said, it's downloadable
4	from the web site and also available in other
5	media for people who wish it.
6	CHAIR HILLMAN: Thank you.
7	Commissioner Martinez.
8	COMMISSIONER MARTINEZ: Thank you,
9	Madam Chair.
10	First of all, I want to say that the
11	publication of this draft of the Voluntary Voting

12	System Guidelines I think represents perhaps one	
13	of the most significant, if not the most	
14	significant, accomplishment of this new agency.	
15	We have been around for 18 months	
16	and certainly this is - in addition, obviously,	
17	to distributing the funds, which we have been	
18	working on since the first day that we were	
19	officially appointed to this position - I think	
20	the development of these guidelines is a	
21	significant step forward.	
22	And I applaud our staff for all of	
	27	
1	the fine work that they have done. And also the	
2	partners that we had - all of the members of the	
3	Technical Guidelines Development Committee and,	
4	of course, the National Institute of Standards	
5	and Technology. I know some of their staff are	
6	represented here as well.	
7	We are certainly very grateful for	
8	the work that has been done.	
9	I know, Carol, one of the questions	
10	that I have been getting - and I think rightly	
11	so - and as I have gone and traveled around to	
12	talk about this process for the past couple of	
13	months - is what was the EAC, in receiving the	
14	initial recommendations that came from NIST and	
15	from the TGDC, what was the EAC doing in terms of	
16	its internal processes to analyze the initial	
17	recommendations and to move forward with	

18 publishing the draft of the Voluntary Voting 19 System Guidelines. 20 And from my perspective, and I'll 21 let you chime in, but from my perspective, what 22 has been happening for us internally, for the 28 1 past six or seven weeks, has been the type of due 2 diligence that any Federal agency ought to be 3 conducting, especially when we are in receipt of 4 such a highly technical document as is the 5 Voluntary Voting System Guidelines or as is the 6 initial recommendations, actually, that came over 7 from the TGDC. 8 Our internal process has revolved 9 primarily around the idea of having our own legal 10 counsel take a look at the initial 11 recommendations that came from the TGDC and to 12 analyze those recommendations to ensure 13 conformity with our governing statute for this 14 agency, which is the Help America Vote Act. 15 And so any changes or any departures 16 that would be noted between what we published in 17 the past few days, or late last week, versus what 18 was given to us from the TGDC in the form of 19 initial recommendations revolves around that type 20 of due diligence - a legal analysis to ensure 21 compliance with our governing statute.

	22	Any comment from	m your perspective
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1	that you have been doing, obviously, the
2	day-to-day personal work on this for us, any
3	comment about that process?
4	MS. PAQUETTE: Well, certainly, as
5	you note, the legal review for compliance with
6	HAVA has been substantive work that has been
7	done.
8	As I indicated, we went through the
9	document also to change the previous terminology
10	to terminology that's used in HAVA. The
11	rationale for doing that was that this is a
12	guideline document. It is going to be adopted by
13	the Commission after we have opportunity to
14	consider the comments that are provided over the
15	summer. And it will be a document that will be
16	used for the national certification and, if
17	adopted by the states, also for state
18	certifications of voting systems.
19	So since this is a document that
20	will have some significant duration of life, we
21	thought it advisable to start it off with the
22	terminology that is going to be used moving
	30
1	forward. And so that we made an attempt to do

that.

2

3	Similarly, as I indicated, we also
4	gave a high level description of the new voting
5	system certification process that the EAC will be
6	undertaking shortly, again, transitioning that
7	responsibility from the National Association of
8	State Election Directors.
9	So we are looking at this document
10	to provide a basis - and recognizing that we
11	expect to get many comments on the document and
12	it will certainly be undergoing further changes
13	over the next 90 days - but we wanted to start at
14	least with a common set of terminology and to
15	look forward to the future use of this document.
16	COMMISSIONER MARTINEZ: One quick
17	follow-up question. Just to clarify, again, the
18	thrust of our due diligence for past six or seven
19	weeks for the EAC has been a legal analysis on
20	the requirements.
21	That legal analysis was not
22	conducted by the TGDC. Clarify me if I am wrong.
	31
1	My understanding is that there was
2	obviously a great deal of work done to ensure
3	that the requirements were attestable, objective
4	and in every way possible compliant with Federal
5	Law. But there was a not a legal analysis that
6	was done by counsel to NIST or anybody else to
7	ensure that the requirements that were finally

8	adopted by the TGDC in the form of initial
9	recommendations, were, in fact, in conformance
10	with the Help America Vote Act.
11	MS. PAQUETTE: Yes. And as you may
12	recall, at the final plenary session of the TGDC,
13	the TGDC requested that a legal analysis be
14	performed to ensure that the provisions that were
15	being put forward were fully in compliance with
16	HAVA.
17	Of course, under our responsibility
18	as the interpreter of HAVA, we would normally do
19	that anyhow. But, again, it was with the request
20	of the TGDC to cover that concern that they had
21	as well.
22	COMMISSIONER MARTINEZ: Thank you,
	32
1	Carol.
2	One final question, Madam Chair. I
3	know that I have exceeded my time.
4	We have our General Counsel, Juliet
5	Thompson, here. It is also important, I think,
6	for full public view, that the public be allowed
7	to see what was given to the EAC in the form of
8	initial recommendations by the TGDC versus where
9	the EAC ends up in its final adoption of these
10	guidelines.
11	So, Madam Counsel, I guess my
12	question is, I know that there is a mechanism

13	within HAVA that addresses it so that at the end
14	of the process when we go final with adoption of
15	the Voluntary Voting System Guidelines, is there
16	a requirement that we also simultaneously publish
17	what came to us initially as the initial
18	recommendations from TGDC?
19	MS. THOMPSON: Commissioner
20	Martinez, the drafters of HAVA did specifically
21	deal with this in Section 221(f) of HAVA.
22	Therein they direct the TGDC to publish the
	33
1	recommendations at the time that the EAC adopts
2	its Voluntary Voting System Guidelines.
3	COMMISSIONER MARTINEZ: Thank you,
4	Madam Chair.
5	CHAIR HILLMAN: Thank you,
6	Commissioner Martinez.
7	Mr. Vice Chairman, you have been our
8	designated Federal officer for the Technical
9	Guidelines Development Committee. I don't know
10	that Congress did this on purpose, but it gave
11	the TGDC nine months to produce a document.
12	That is about the length of time it
13	is to give birth to a baby. So the baby was born
14	and I know that you are a very proud parent.
15	I wondered if you had any comments
16	or questions for Ms. Paquette.

1 /	VICE CHAIR DEGREGORIO: Thank you,
18	Madam Chair.
19	Yes, I am the proud parent of four
20	wonderful daughters and I give my wife full
21	credit for what she had to go through for nine
22	months to bring them into this world.
	34
1	But we went through a nine month
2	period, too, to come up with this and I have been
3	very involved in the process. And it's a
4	process, Madam Chair, that we all can be proud
5	of.
6	Because I know, Madam Chair, that
7	the four Commissioners - Commissioner Soaries was
8	with us - we were all committed to get this
9	process implemented in a timely manner. And we
10	worked very hard to get the members of the TGDC
11	appointed in a timely basis and they began their
12	work on July the 9th and completed it on May the
13	9th, nine months later.
14	And just a little perspective here
15	on what's happened in the past.
16	You may recall, Madam Chair, that
17	there were guidelines issued in 1990. Actually
18	they were called standards, Federal Voting System
19	Standards, issued by the Federal Election
20	Commission. And they were updated in 2002.
21	It took 12 years to get from 1990 to

22	2002	update
	2002	apaate

35

1	And then we are now updating and
2	augmenting and improving on the 2002 standards.
3	And it's really been a nine month process to do
4	that, not necessarily a three year process.
5	And we do have to give a great
6	thanks to the members of the TGDC - some members
7	who are here today - who worked very hard, and to
8	the staff at NIST who supported them in this
9	process.
10	Certainly we followed very closely.
11	But we made it very clear from the beginning, we
12	wanted to follow a process that was dictated by
13	HAVA. And I believe, Madam Chair, we have done
14	that.
15	And they have done it in a way that
16	has been transparent and we have done it in a way
17	that is transparent and I believe will continue
18	to be transparent.
19	And this is the beginning of that 90
20	day process to have public hearings and to hear
21	about this.
22	And I want to ask Carol Paquette
	36
1	about how the public comment period will work and
2	how transparent will it be.

3	And when people do make comments on
4	this document over the next 90 days, how will
5	that be affected, how will that get on web sites,
6	and how will that be brought to our attention and
7	to the attention of the public so it's done in a
8	very transparent manner?
9	MS. PAQUETTE: Yes, Vice Chairman.
10	As I noted, the document is posted
11	on the EAC web site. We also have on our web
12	site an on-line comment form, if you will, that
13	people can go right to the web site and enter
14	their comments on the document. They could be
15	reading the document in one window and commenting
16	on the other, if they are so inclined.
17	In addition, we have established
18	Let me finish with that part.
19	Those comments then go into a data
20	base and each comment, we have a public
21	obligation to review the comments for
22	inappropriate language and other inappropriate
	37
1	comments. But once that very initial screening
2	has been done, all comments will be posted on the
3	web site so anyone can see what the comments are.
4	In addition, we have established a
5	special e-mail box: votingsystemguidelines@
6	EAC.gov.
7	For those individuals who don't have

8	Internet access or who may feel more comfortable
9	writing an e-mail or who may have documents they
10	wish to send us that wouldn't lend themselves to
11	being inserted in the comment page - although we
12	accept attachments on the comment page - this
13	provides another mechanism for individuals to
14	provide their comments.
15	And, of course, we are not averse to
16	taking comments by mail. And we have provided
17	our address in the Federal Register Notice and,
18	of course, also on our web site.
19	We ask that those comments be
20	specifically addressed to Voting System
21	Guidelines Comments, so that they can be rapidly
22	sorted out from the other mail that we receive
	38
1	and appropriately treated.
2	We have a mechanism with the on-line
3	comment data base that any comments that are
4	received by e-mail or by mail, that we can enter
5	them into the data base.
6	So by whatever means the comments
7	come in to us, they will ultimately be posted in
8	that data base and available for anyone to
9	review.
10	VICE CHAIR DeGREGORIO: I understand
11	that the TGDC received, continued to receive

12	comments after their cutoff date for producing
13	their initial set of draft recommendations to us.
14	Will we receive any comments that
15	people have made to the TGDC since that period?
16	Because people are commenting on a document that
17	they produced, but it certainly can instruct us,
18	too.
19	MS. PAQUETTE: Yes. The comment
20	period on the TGDC draft, I believe, ended a week
21	or so before the April plenary meeting in order
22	to prepare the materials for that meeting.
	39
1	We have received from NIST the
2	comments that they have received up until, I
3	think, about a month ago. And we have those
4	comments also to review. That was on the body of
5	the document as well as comments on the glossary
6	section, which is a fairly expanded portion of
7	the new guidelines document.
8	And we will be reviewing those.
9	And, certainly, as we continue working with NIST,
10	if they continue to receive comments that we need
11	to consider in our process, they will pass those
12	on to us.
13	VICE CHAIR DeGREGORIO: Thank you,
14	Madam Chair.
15	CHAIR HILLMAN: Thank you.
16	It certainly is an incredible piece
17	of work and we are pleased to be able to hold our

18	first hearing to get this part of the process
19	underway. Thank you very much.
20	Before we go to the final report, I
21	want to back up a minute to the Title II
22	requirements payments, because I neglected to
	40
1	emphasize that I think it's pretty incredible
2	that in one year time, given all the start-up
3	challenges that we had as a Commission, we were
4	able to disburse over \$2.2 billion in funds to
5	the States.
6	And I think a lot of people in the
7	public, a lot of voters, don't understand the
8	incredible amount of money that the Federal
9	Government has made available to states to be in
10	compliance with the Help America Vote Act.
11	But I want to just say thank you to
12	my two colleagues who were serving as a task
13	force to work with staff, but also to the staff,
14	and, in particular, to Margaret Sims, who is not
15	able to be with us today, for the incredible
16	amount of work that she did as a one-person
17	office, to process all of the requirements
18	payments, which meant reviewing materials from
19	the states - and in some instances states
20	received two payments at different times.
21	So it is conceivable that she was

22	dealing with as many as 100 different
	41
1	applications for funding. And it was just an
2	incredible process that was expedited.
3	And the General Services
4	Administration, of course, was very cooperative
5	and moving the funds just as quickly as we gave
6	notice to them.
7	So I think we ought to all be proud
8	and pleased that we have been able to move
9	through this, and working with the remaining
10	seven or so states who are doing the final work
11	to receive their final funds.
12	Our last report is on Statewide
13	Voter Registration List Guidance.
14	And I am sure, I mean, I really
15	enjoy looking out at our meetings and seeing
16	people who are interested enough in our work to
17	attend our meetings and listen to what we say,
18	hopefully, visit our web site, and help us do
19	diligence on the responsibilities assigned to us.
20	But I am sure that some of the
21	language we use must be just unnecessarily
22	burdensome - guidelines and guidance and why
	42
1	guidance and why guidelines.
2	So I would just ask, Ms. General
3	Counsel, if you would explain, in your
4	introduction of the guidance, why we are

5	referring to guidance on the statewide vote
6	registration list, but guidelines on the voting
7	systems.
8	MS. THOMPSON: Thank you, Madam
9	Chair. Thank you for the opportunity to bring
10	you a report on the progress of the guidance that
11	we are issuing on statewide voter registration
12	lists.
13	For the benefit of those of us or
14	those of you who have not had the opportunity to
15	be with us at other hearings, let me explain that
16	under Section 311 of HAVA, the statute gives the
17	Commission not only the authority, but the
18	requirement, of issuing interpretive guidance to
19	the provisions of Title III of HAVA. Those are
20	several, including the requirement that states,
21	"implement a statewide voter registration list."
22	In April of 2005 we published a
	43
1	document in the Federal Register which is our
2	proposed guidance on statewide voter registration
3	lists. That document was developed through a
4	working group of state and local election
5	officials, representatives from the Department of
6	Justice, technology experts and a partnership
7	with the National Academy of Sciences.
8	There was a 30 day comment period

9	that followed that publication. That period has
10	now closed. And, to bring you up to speed, we
11	received 320-odd comments during the period of 30
12	days. The comments were quite high quality.
13	They were received from state and local election
14	officials, from community interest groups and
15	from individuals.
16	To give you a bit of a
17	characterization of what the comments were,
18	primarily the state and local election officials
19	were interested in the architectural structure of
20	the data bases and the language of HAVA itself.
21	I know that we have thrown around
22	some terms that may not be as intuitive to
	44
1	others, such as top-down and bottom-up. But that
2	makes reference to the architectural structure of
3	the data base.
4	For instance, a top-down system
5	would involve a data base wherein the state
6	controls the main data base for the state and
7	information is fed through either dumb terminals
8	or other access points through the local election
9	officials.
10	The state has the ability through
11	that system to be able to perform list
12	maintenance to coordinate with other state data
13	bases and to verify registrations through the
14	Department of Motor Vehicles and, if necessary,

15 through the Social Security Administration. 16 On the contrary, or in the bottom-up 17 approach, data is actually received up from data 18 bases at the local level into a central data base 19 that is housed at the state level. 20 And it's just a bit of a difference 21 in architecture. But I thought it would be 22 appropriate to more or less explain what that 45 1 concept it. 2 As I stated, the state and local 3 election officials were most interested in that 4 concept, but also gave us some very good comments 5 on the language of HAVA and its mandates and 6 particularly the mandates of the National Voter 7 Registration Act as well. 8 In contrast, the community interest 9 groups provided comments on what I will say was 10 not included in the guidance. They focused on 11 issues, such as security of the data bases. And, 12 certainly, this is an issue which is near and 13 dear to our hearts and we have continued to work 14 with the National Academy of Sciences, on 15 developing security guidelines and security 16 protocols that will assist states in making sure 17 that this very important pieces of information, 18 regarding all the voters in the country, are kept 19 secure.

20 In addition to that, the focus of 21 the community focus groups was also on issues of 22 list maintenance and verification, to assure that 46 1 when these tasks are performed, that there are 2 matching protocols that make sense, that are non-3 discriminatory, and that produce good results in 4 terms of accepting voters or removing voters when 5 appropriate. 6 Just to give you a little bit of an 7 idea of where we will go from here, we are in the 8 final stages of reviewing these 320 comments and 9 we will have a product for your review, Madam 10 Chair and Commissioners, in the next week or so. 11 At that time, after there has been a 12 consensus around the idea of what the final 13 guidance will look like, it will be published in 14 full in the Federal Register, along with an 15 analysis on a categorical basis of these comments 16 that we received. 17 In addition to that, we will, of 18 course, produce a booklet which will excise some 19 of the technical language that goes into the 20 Federal Register Notice, but contains all of the 21 guidance and meat of this document, to be made

available to the public, to the states, to

1	whomever desires to have a copy.
2	If I can answer any questions,
3	please.
4	CHAIR HILLMAN: Thank you very much.
5	Mr. Vice Chairman, any questions?
6	VICE CHAIR DeGREGORIO: I know this
7	has been an important process, because many
8	states are facing the January 1, 2006 deadline on
9	implementation. And I don't know how New York is
10	going to get there, but I know they are going to
11	try very hard.
12	Will this guidance, you think, when
13	we finally publish it, be beneficial not just for
14	the short term, but for the long term for the
15	states to provide matches and other information
16	that they need to have the voter registration
17	lists and to provide people with every
18	opportunity to cast a ballot?
19	MS. THOMPSON: Absolutely, Mr. Vice
20	Chairman.
21	Our goal here was to develop
22	guidance that would inform the states during the
	48
1	development of their voter registration data
2	bases, that would help them form the processes
3	that they would use for years to come in
4	implementing this.

5	CHAIR HILLMAN: Commissioner
6	Martinez.
7	COMMISSIONER MARTINEZ: Very
8	quickly, Madam Chair, I want to just clarify a
9	couple of the procedural aspects of this.
10	The first is that part of what we
11	have been trying to get our arms around - again,
12	for this new agency and in keeping with our
13	authority under the Help America Vote Act - is to
14	try to fulfill the service aspect of what our
15	agency ought to be with regard to our primary
16	stakeholders.
17	And what I mean by that is that, we
18	are, in one instance, an entity that provides
19	Federal funding to states to help implement these
20	uniform administrative requirements in Title III.
21	But we are also an agency that has an obligation
22	to ensure that we work with the states in a
	49
1	partnership to ensure that there is an
2	understanding as to how to implement these
3	various administrative requirements.
4	States are given great latitude in
5	how to achieve the end result. And, yet, they
6	also need a Federal agency that would assist them
7	in making sure that if there are ambiguities in
8	any particular sections of our government
9	statute, that we can help to clarify some of

10	those ambiguities.
11	And just from a procedural
12	perspective, that is really what we tried to
13	accomplish in fulfilling our obligation, to issue
14	this guidance.
15	Juliet, if you can just comment on
16	that real quick.
17	MS. THOMPSON: Certainly,
18	Commissioner Martinez.
19	I don't know quite where to begin.
20	COMMISSIONER MARTINEZ: I will start
21	for you.
22	The point that I am making is that,
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1	for example, we had one working group meeting
2	with State and local election administrators to
3	help us to arrive at an initial draft of language
4	for this guidance. But in keeping with trying to
5	fulfill or to provide a service to state and
6	local governments, for example, we have held a
7	follow-up meeting, again, under the umbrella of
8	the National Academy of Sciences, where we
9	invited not policy makers to the table, but we
10	actually invited information technology experts,
11	IT folks who don't normally sit around the same
12	room with each other. Usually they talk to each
13	other via e-mail, but don't actually physically
14	get into the same room to talk about such an

15	important objective like building a statewide
16	voter registration data base.
17	So from a procedural perspective, we
18	tried to be responsive to our state and local
19	partners by providing a service and the service
20	is to put the IT folks from state governments
21	together with IT experts provided by the National
22	Academy of Sciences. And let's try to solve some
	51
1	of the technical difficulties dealing with
2	privacy and security concerns that have been
3	brought to our attention over and over again for
4	the past 18 months.
5	I think I just answered my own
6	question, but that's where we were going.
7	MS. THOMPSON: Well, a little
8	transitional thought there. And that is, while
9	we certainly adopt voluntary guidance as to each
10	of the sections of Title III, it is vitally
11	important to us that the states and local
12	election officials, and those that are involved
13	in the election administration process,
14	wholeheartedly adopt this and make this a part of
15	their own.
16	So we have taken steps to ensure
17	that those folks are involved in the process, as
18	you described, in the beginning, as well as
19	continuing through with the technical working
20	group to work on more of the specific

21	technological issues.
22	COMMISSIONER MARTINEZ: Thank you
	52
1	Madam Chair.
2	CHAIR HILLMAN: Thank you very much.
3	Certainly on the voter registration
4	list guidance, I mean voter registration goes to
5	the heart of what elections and is what elections
6	are all about, is a pinnacle of democracy in this
7	country. And many, many groups and individuals
8	are concerned with the integrity of voter
9	registration lists because many of the issues
10	that have arised have arised because people feel
11	they were supposed to be registered, showed up to
12	vote, but their names were not on the list.
13	So I know that we are making every
14	effort to keep groups and individuals fully
15	informed of the progress about this and to help
16	them see the relevance of this document against
17	the work that they do in their community.
18	And I know that we will continue to
19	do that.
20	Other than the Federal Register
21	Notice, how will groups know when the final
22	guidance has been published?
	53
1	MS. THOMPSON: We will certainly put
2	this up as a permanent feature on our web site.

3	In addition to the publication in the Federal
4	Register, I would anticipate that we would also
5	distribute this to key stakeholders of ours so
6	that they will be aware that this document is out
7	and available.
8	And, of course, anyone is welcome to
9	write us and ask us for a copy as well.
10	THE CHAIR: If there are no other
11	questions on the guidance, it brings us to a
12	close in the meeting.
13	Before I do that, I want to
14	acknowledge the presence of - speaking of
15	stakeholders - some of our key partners and
16	people who work with us along the way. And just
17	a couple of public announcements.
18	We have with us Everybody here
19	today is very important to the work we do and I
20	know that. I just don't know everybody who is
21	here.
22	But I do want to call attention to
	54
1	some people who work with us in different
2	capacities.
3	We have two members of our Board of
4	Advisors. The Election Assistance Commission has
5	a 37 member Board of Advisors and we have with us
6	today Wes Kliner and Sharon Turner-Buie.
7	And Ms. Turner-Buie is also Director

8	of Elections for the great city of Kansas City,
9	Missouri, and she also serves as a member of the
10	Technical Guidelines Development Committee. So,
11	wearing all three hats, thank you very much.
12	Another important stakeholder, the
13	National Association of Secretaries of State.
14	And with us, as always, is Leslie Reynolds, who
15	is Executive Director. Thank you, Leslie.
16	We have also Ed Szczesniak, who is a
17	member of the Election Assistance Commission
18	Standards Board. We have a 110 member Standards
19	Board and we appreciate you being with us.
20	We talked a lot about the Technical
21	Guidelines Development Committee and the hard
22	work that NIST did. And we have with us Craig
	55
1	Burkhardt, from the Department of Commence, who
2	also works with NIST and the Technical Guidelines
3	Development Committee, and Allan Eustis, who was
4	very involved working with the TGDC from the
5	National Institute of Standards in Technology.
6	From our Justice Department
7	partnership, we have Brian Heffernen and Chris
8	Herren somewhere. I think they are still here.
9	Thank you very much. We appreciate everything
10	that Justice is doing with us to ensure
11	compliance and provide information to the states.
	1

13	believe Brit Williams, for the Center for
14	Election Systems at Kennesaw State University in
15	Georgia is here, also a member of the Technical
16	Guidelines Development Committee.
17	Thanks to all of you for traveling
18	to be with us here today. We appreciate that.
19	Public announcements. We are going
20	to take a break when this meeting adjourns in
21	about two minutes and we will set up for our
22	public hearing which will begin at 11 o'clock.
	56
1	This is our first hearing on the
2	proposed Voluntary Voting System Guidelines.
3	The public restrooms are on the
4	eighth floor. There are no facilities on this
5	floor so you will have to go to the eighth floor.
6	And we will assemble again at 11
7	o'clock for the beginning of the hearing.
8	We will take a lunch break at about
9	12:30 for one hour, come back at 1:30 and
10	anticipate that the hearing will go on until
11	about 5 p.m.
12	Mr. Executive Director, are there
13	any other announcements that we need to make?
14	THE EXECUTIVE DIRECTOR: I have
15	none. However, if I could have one minute to
16	CHAIR HILLMAN: You may have more
17	than one minute. You can have two.
18	THE EXECUTIVE DIRECTOR: Thank you

19	First of all, I want to say it's
20	great to be home for a day. This city means a
21	great deal to me and the folks at the New York
22	City Board of Elections and I have a long history
	57
1	of working together and I want to thank Director
2	Ravitz for his comments this morning.
3	And I just want to point out that we
4	certainly realize that they have a great deal
5	ahead of them in the next year. But I want to
6	remind them that I was here on that fateful day
7	of September 11th.
8	And the very next day, out of when
9	everybody was still in shock and sadness and
10	grief, on that very next day the City Board of
11	Elections met to reschedule and redo an election
12	in less than two weeks.
13	And then, after that, did three more
14	elections before November 6th.
15	So if they can do that - and I
16	watched that up close and personal - I think they
17	can do anything they set out to do.
18	And they will have a lot of support
19	behind them.
20	And so, thank you, John. And it's
21	good to see so many acquaintances.
22	I see a fellow colleague from the

1	League of Women Voters, the former President of
2	the League, Marion Sinek is here and others from
3	the City Board.
4	This is a great experience for me.
5	In fact, the Chairman of the State Board of
6	Elections has just walked in, Carol Berman, now
7	the Vice Chairman, I guess; they have switched.
8	I want to acknowledge her.
9	But this is a great opportunity for
10	me. And in the nine days that I have been on the
11	job, I have already discovered what a remarkable
12	staff of people that I have joined, very
13	dedicated, very dedicated to everything they do
14	and, of course, the three Commissioners who are a
15	real joy to work with.
16	And I am looking forward to being
17	with them and working with them shoulder to
18	shoulder.
19	So thank I very much, Madam Chair.
20	CHAIR HILLMAN: Thank you and we
21	will assume - I don't normally assume anything -
22	but we will assume you really enjoyed your first
	59
1	meeting as Executive Director.
2	THE EXECUTIVE DIRECTOR: So far.
3	CHAIR HILLMAN: Thank you very much.
4	If there are no further items of
5	business, it is appropriate to adjourn the
6	meeting.

/	COMMISSIONER MARTINEZ: 50 move.
8	VICE CHAIR DeGREGORIO: Second.
9	CHAIR HILLMAN: The meeting is
10	adjourned and we will reassemble at 11 for our
11	Public Hearing.
12	(Thereupon, at approximately 10:35
13	o'clock, a.m., the above meeting
14	was adjourned.)
15	* * * * *
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5	CERTIFICATE
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7	
8	I, ELLEN REACH, a Stenotype Reporter
9	and Notary Public of the State of New York do
10	hereby certify that the within transcript is a

11	true and accurate record of the Public Meeting of
12	the U.S. Election Assistance Commission, held on
13	June 30, 2005.
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20	ELLEN REACH
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4	U.S. ELECTION ASSISTANCE COMMISSION
5	PUBLIC MEETING
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8	Taken at the Marriott Hotel
9	1535 Broadway, New York, New York
10	
11	On the date of Thursday, June 30, 2005
12	
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14	
15	COMMISSION MEMBERS:
16	Gracia Hillman, Chair
17	Paul DeGregorio, Vice Chair Ray Martinez, Commissioner Tom Wilkey, Executive Director
18	
19	
20	
21	Start time: 11:00 o'clock, a.m.
22	Taken before: ELLEN REACH, a court reporter

1	TESTING LABORATORIES' PERSPECTIVES
2	ON THE PROPOSED VVSG
3	
4	CHAIR HILLMAN: If we could get
5	assembled, please, so the hearing can begin.
6	We are going to begin this hearing.
7	If I could remind you please to turn
8	off your - or at least silence - your cell
9	phones, pagers and any other electronic devices
10	that might make noise and distract from the
11	proceedings.
12	Thank you very much.
13	If I could please ask everyone to
14	please stand and join me in the Pledge of
15	Allegiance.
16	(Assembly in Pledge of Allegiance)
17	CHAIR HILLMAN: If we might have the
18	roll call, please.
19	MS. THOMPSON: Certainly, Madam
20	Chair.
21	Commissioners, please respond by
22	saying here or present when I call your name.

1	Gracia Hillman, Chair?
2	CHAIR HILLMAN: Here.
3	MS. THOMPSON: Paul DeGregorio, Vice
4	Chairman?
5	VICE CHAIR DeGREGORIO: Here.
6	MS. THOMPSON: Ray Martinez,
7	Commissioner?
8	COMMISSIONER MARTINEZ: Here.
9	MS. THOMPSON: Madam Chair, there
10	are three members present.
11	CHAIR HILLMAN: Thank you.
12	Commissioners, we have before us the
13	agenda for today's public hearing. If there are
14	no adjustments to the agenda, it would be
15	appropriate to move adoption.
16	COMMISSIONER MARTINEZ: Move, Madam
17	Chair.
18	VICE CHAIR DeGREGORIO: Second.
19	CHAIR HILLMAN: Thank you very much.
20	We have our agenda adopted.
21	The purpose of today's hearings is
22	for the Election Assistance Commission to receive

1	testimony and comment on the proposed Voluntary
2	Voting System Guidelines.
3	For those who were with us earlier
1	this morning at our meeting, you did hear several
5	minutes of discussion about the guidelines, our
5	acknowledgement of the work of the Technical
7	Guidelines Development Committee that produced a
3	recommendation and delivered that recommendation
)	to us on May 9th.
10	Our former Interim Executive
11	Director, Carol Paquette, will make a brief
12	presentation that will put this hearing in the
13	context of where the Election Assistance
14	Commission is today with respect to the proposed
15	guidelines that we have now made public.
16	Ms. Paquette.
17	MS. PAQUETTE: Yes, Madam Chair and
18	Commissioners, thank you very much.
19	Section 202 of HAVA directs the
20	Election Assistance Commission to adopt Voluntary
21	Voting System Guidelines and to provide for the
22	testing, certification, decertification and

1 recertification of voting system hardware and

JJ HCai	mg
2	software by accredited test labs, among many
3	other duties that are assigned to the Commission.
4	To assist the Commission with the
5	work of developing the guidelines, HAVA also
6	provides for the establishment of a body of
7	subject matter experts, called the Technical
8	Guidelines Development Committee, otherwise known
9	as the TGDC.
10	The composition of this 15 member
11	committee is drawn from a variety of
12	organizations, again, and specified by HAVA.
13	These organizations include the National
14	Association of State Election Directors, the
15	Access Board, the IEEE, the American National
16	Standards Institute, and other representatives as
17	designated in the statute.
18	The TGDC is chaired by the Director
19	of the National Institute for Standards and
20	Technology, NIST, and NIST is charged with
21	providing technical support to the work of the
22	TGDC.

1	In this fiscal year, EAC has
2	provided nearly \$3 million to fund this work of
3	the TGDC and NIST.

4	The statute tasks the TGDC with
5	developing recommendations for Voluntary Voting
6	System Guidelines and providing those
7	recommendations for the consideration of the
8	Election Assistance Commission.
9	The TGDC and NIST have been hard at
10	work at this task for nine months, the time
11	period which is allocated by HAVA, and have
12	delivered a very good product to the EAC for us
13	to begin our review on May the 9th.
14	The recommendations provided to the
15	Commission by the TGDC essentially augment the
16	2002 Voting Systems Standards, most particularly
17	in the areas of accessibility, usability and
18	security.
19	This includes new requirements for
20	accessibility, voting system software
21	distribution, system setup validation and the use
22	of wireless communications.
	7

Since some states have required the
use of voter verified paper audit trails, the
recommended guidelines also include performance
specifications for this capability.

We would note for the Federal

6	certification purposes of voting systems, these
7	are optional. They have been included for use by
8	those states that have added this as an
9	additional requirement for their voting systems.
10	We would also note that paper audit
11	trails is only one of several technical
12	approaches to providing voters an additional
13	means to verify their ballot in addition to the
14	DRE summary screen. And the Commission plans to
15	work with the TGDC and NIST to address the
16	development of similar specifications for audio,
17	video and cryptographic approaches to voter
18	verification.
19	Having received the recommendations
20	on May 9th, the EAC has been, in the intervening
21	weeks, performing its due diligence requirements
22	as the responsible Federal organization for HAVA,
	8
1	to thoroughly review these recommendations.
2	In particular, we have performed a
3	legal analysis of the proposed guidelines and
4	recommended guidelines to ensure that they are
5	fully in compliance with the Help America Vote

This has resulted in some changes,

Act.

6

8	particularly in the accessibility provisions.
9	And I would note as an example requirements 2.2.5
10	and 2.2.6, dealing with voter verified paper
11	audit trails, that if the normal procedure is for
12	voters to submit their own ballots, then the
13	accessible voting station needs to provide the
14	same capability for voters who are blind.
15	That is an example of where the
16	Commission changed a 'should' recommendation to
17	'shall', to be in conformance with Section 301 of
18	HAVA.
19	In addition, the Commission has
20	revised selected portions to reflect the new EAC
21	process to carry out the HAVA mandate for the
22	national certification of voting systems. We
	9
1	have also made some updates throughout the
2	document to include the new terminology that has
3	been specified by HAVA.
4	For example, the testing of voting
5	systems used to be called a 'qualification'
6	process and HAVA now uses the term
7	'certification' process.
8	We have made these changes in the

document because this is a document that will

a

10 have a substantial life in being used for the 11 testing and certification of voting systems, both 12 at the Federal level and at the state level. 13 That was the principal rationale for the changing 14 of terminology, to put in an appropriate floor 15 for the terminology that will be used as this 16 document is used as a reference for testing 17 purposes in the coming years. 18 We certainly expect to have many 19 more changes coming in over the course of the 20 summer and we will certainly be summarizing at 21 the end of that comment period the further 22 changes that have been made to the document and

10

1 how the various comments have been handled. 2 The Federal Register Notice on the 3 availability of the guidelines for public comment 4 was published yesterday, June 29th. And that 5 begins the 90 day public comment period. 6 In the Federal Register Notice and 7 also on our web site we provide fairly extensive 8 information on how parties can obtain a copy of 9 the document and also how they can provide 10 comments.

The document is a very substantial

12 document. It's about 250 pages. And to 13 facilitate ease in getting the document, we have 14 published it on our web page. It is available in 15 both PDF and HTML formats, so that those parties 16 who use assistive devices will be able to access 17 the document. 18 We have also posted it in a manner 19 so that the entire document can be downloaded or 20 selected sections can be downloaded, again, to 21 make it easier for people to deal with this 22 fairly substantial document.

11

1 We will also provide copies in hard 2 copy or on CD-ROM. 3 If people wish to send requests by 4 e-mail or by mail to the Commission, we have 5 provided a number of mechanisms for people to 6 submit comments. 7 On our web page we have included an 8 application so that people can log on to the web 9 page and go to the comment screen and provide 10 their comments directly to the web page. 11 Supporting that comment page is a data base where all the comments will be stored 12 13 and allow for the comments to be posted and for

14 anyone to also look at comments that have been 15 provided to the document. 16 We have established a special e-mail address: votingsystemguidelines@EAC.gov, for 17 18 those individuals who prefer to send us comments 19 by e-mail. 20 We, of course, will also receive 21 comments by mail. We ask that those be provided, 22 addressed specificaly to Voting System Guidelines 12 1 Comments, so that they can identified and handled 2 expeditiously. 3 We are providing, in the data base 4 of comments, the ability for the comments 5 received by e-mail and by mail to also be entered 6 into the data base so that we will have one 7 reference source, where comments from all sources 8 will be collected and posted, both for our own 9 review and analysis, as well as the review by 10 other interested parties. 11 I would also note that we are having 12 three hearings in addition to the one just 13 convened. We are holding a second hearing on 14 July 28th at the California Institute of 15 Technology, and a third hearing in August in

16	Denver.
17	And further specifics will be
18	forthcoming as we get that meeting planned.
19	Are there any further questions?
20	CHAIR HILLMAN: Before I turn the
21	mike over to my colleagues, can you just state
22	for the record where the California Institute of
	13
1	Technology is leasted. I be see the in
1	Technology is located. I know it's in
2	California, but
3	MS. PAQUETTE: It's in Pasadena.
4	CHAIR HILLMAN: Thank you very much.
5	Commissioners, before I turn the
6	mike over to you, I just want to acknowledge that
7	we have with us today members of the Technical
8	Guidelines Development Committee and from the
9	National Institute of Standards and Technology.
10	And I would just like to acknowledge
11	from the TGDC Sharon Turner-Buie, who is a member
12	of the EAC Board of Advisors and Director of
13	Elections for Kansas City, Missiouri. And we
14	also have Brit Williams, who is with the Center
15	for Election Systems - I probably messed that up,
16	Brit, but forgive me - at Kennesaw State

University, in Georgia. Thank you for being with

18	us.
19	And from the National Institute of
20	Standards and Technology, which is a part of the
21	U.S. Department of Commerce, we have Craig
22	Burkhardt, who is actually counsel with the
	14
1	Department of Commerce, and has been working with
2	NIST on the development of the guidelines, the
3	proposed guidelines, and Allan Eustis, who is
4	with the National Institute of Standards and
5	Technology.
6	An important part of the comment
7	period is that the EAC Board of Advisors, which
8	is made up of 37 members, and the EAC Standards
9	Board, which is made up of 110 members, will each
10	go through a process to review the proposed
11	guidelines and offer comments to us.
12	And we have with us, in addition to
13	Ms. Turner-Buie, we have Wes Kliner from, I
14	believe, Tennessee, but I thought I heard you
15	moved, so I am going to acknowledge Tennessee.
16	Thank you very much. As a member of the Board of
17	Advisors, thank you very much for being with us.
18	And I think we might have a member

of the Standards Board still with us, Mr.

21 the Standards Board. Thank you. 22 This has been a very wonderful labor 15 1 of love or labor of something that we have been 2 through to produce these guidelines. So if we 3 get emotional about this, it's because we are 4 very, very attached to both the process and the 5 document. 6 And, Mr. Vice Chairman, it would be 7 appropriate if you would like to give some 8 comments to or ask some questions of Ms. 9 Paquette. I know your name, Carol. 10 VICE CHAIR DeGREGORIO: I think 11 labor is an apt description since it was a nine 12 month process to get done. And we know that to 13 have a child it takes nine months. And this was 14 a big child of the EAC to come forth from the 15 Technical Guidelines Development Committee. 16 And I know I made some comments 17 earlier at our meeting this morning, a few 18 minutes ago. 19 But I do think that this has been a 20 very important process that the Help America Vote 21 Act spells out to give the voters of this country

Szczesniak - is Ed Szczesniak still here - from

a greater trust in our voting systems. And it's

1	the first time that the Federal Government has
2	put real money behind it.
3	Our Chair mentioned that nearly
4	\$3 million has been appropriated by the EAC to
5	NIST for this process. And it is the first time
6	we have had some scientists look into this and
7	provide us their guidance.
8	And I think as we go through this
9	over the next 90 days we will see the fruits of
10	their work come forth as we see the human factors
11	and security and other aspects that have been
12	changed since the 2002 standards and that have
13	been enhanced since the 2002 standards were
14	developed, that have improved this product and
15	made it better for the public out there, election
16	officials.
17	And I look forward from hearing from
18	the testing laboratories, from the vendors and
19	from the advocates and from the public, and to
20	hear their feedback in this process as we
21	finalize this document and then move forward with
22	this, because we know that it's going to have a

2	positive impact.
3	So all the input that we can get to
4	make that happen is important to me as a
5	Commissioner, as has been since we started this
6	process in June 2004.
7	So thank you, Carol, for providing
8	that history of where we are with this and I look
9	forward to the testimony we are going to hear
10	today.
11	CHAIR HILLMAN: Thank you.
12	Commissioner Martinez.
13	COMMISSIONER MARTINEZ: Thank you
14	Madam Chair.
15	I will be very brief. I do have one
16	quick question for Carol. But just as an
17	introductory statement, I guess I said earlier in
18	our public meeting portion of this day that this
19	is, I think, perhaps the most significant thing
20	that this Commission has done thus far in our
21	short 18 months or so of being in existence.
22	So my thanks to all of our partners

major impact out there. And we want it to be a

2	Voluntary Voting System Guidelines: our partners
3	at NIST and the Department of Commerce and, of
4	course, all of the members who served on a
5	voluntary capacity with the Technical Guidelines
6	Development Committee. We are so grateful and
7	indebted for your service and we thank you for
8	it.
9	I guess for me, there was a poll
10	that was taken a few weeks after the November
11	2004 election, which was not too long ago, by NBC
12	News and the Wall Street Journal, and it said
13	something like a quarter of all American
14	surveyed, that a quarter of those surveyed in
15	that poll did not believe in the accuracy of the
16	voting systems that they were using to cast a
17	ballot in November of 2004.
18	And as a Commissioner - really, as
19	an American - we should just be troubled, I
20	think, by such a high level of lack of confidence
21	in the very machinery and the tools that help our
22	democracy to continue to exist.

in helping to developing this first draft of

1	And that's why, again, I point to
2	this as being among the most significant
3	accomplishments that we have undertaken here at
4	this Commission.
5	So I hope, Madam Chair and Mr. Vice
6	Chairman, that at the end of this process what I
7	hope and I know will be a very transparent and
8	very open and, yes, at times perhaps even an
9	emotional process for us to go through, because
10	there are so many things at stake here, from
11	accessibility for individuals with disabilities,
12	to folks who believe strongly that there ought to
13	be mechanisms in place to ensure better accuracy
14	of ballots that have been cast
15	I think this is one of our
16	panelists, welcome.
17	So, Madam Chair, I would simply say
18	that I think we have undertaken a significant
19	project and it's one that I know that we will all
20	feel better about at the end of the process.
21	Carol, if I could, there was a
22	clarification I think that I wanted to make to

2	You were giving an example of our
3	legal analysis and you were talking specifically
4	with the functionality of voting systems where
5	the voter has to cast the ballot aside from, for
6	example, on a DRE you can punch a button that
7	says 'cast ballot'. But there are other voting
8	systems, like optical scan systems, for example,
9	where the functionality of casting a ballot
10	requires a voter to do something other than
11	hitting a button on a touch screen. And you
12	refer to that as VVPAT.
13	But I think what you meant to say is
14	that we changed this 'should' to a 'shall' when
15	it comes to the functionality of those type of
16	systems and not necessarily when it comes to
17	VVPAT, because VVPAT contemplates that a voter
18	gets to see something behind a screen, but not
19	walk away with a particular ballot and have to go
20	cast it in another location.
21	So in describing that example, when
22	we made a change from a 'should' to a 'shall',

one of the things that you said.

2	think what you meant it in was the context of the
3	functionality, for example, an optical scan
4	voting system.
5	MS. PAQUETTE: You are correct,
6	Commissioner.
7	COMMISSIONER MARTINEZ: That's it.
8	Thank you, Madam Chair.
9	CHAIR HILLMAN: Today's hearing is
10	in four sections. We have Panel Number 1,
11	presentations from the testing laboratories. And
12	presenting this morning will be Mr. Joe
13	Hazeltine, Senior Director, Eastern Test
14	Operations with Wyle Laboratories, and Ms.
15	Carolyn Coggins, Director of ITA Operations at
16	SysTest Labs.
17	Following Panel 1, we will take a
18	lunch break. And when we reconvene at about
19	1:30, the second panel will make presentations
20	and these will be people representing vendors and
21	we will have presentations from people
22	representing ES&S, Vote Here, Sequoia Voting

you said that "in the context of VVPAT," but I

1	Systems and AccuPoll.
2	Panel 3 will be presentations about
3	the specific section of the guidelines or
4	sections of the guidelines that address voter
5	verifiable paper audit trails and perspectives
6	will be presented by four individuals.
7	And then the final section, which I
8	don't know if the mike is - the final section
9	will be public comment period. And we do have
10	people who have registered in advance requesting
11	an opportunity to make a comment.
12	So, can people hear me? No, I
13	didn't think so. I am not sure. Here we go.
14	I am going to repeat that anyhow. I
15	was just explaining the make-up of the four
16	panels for today.
17	So thank you very much to Mr.
18	Hazeltine and Ms. Coggins.
19	And, Mr. Hazeltine, if we could call
20	on you first.
21	MR. HAZELTINE: Thank you, Madam
22	Chair and members of the Commission.

1	I have been asked to speak on the
2	Voluntary Voting System Guidelines, the impact
3	from the
4	CHAIR HILLMAN: The mike isn't on
5	here.
6	MR. HAZELTINE: Thank you, Madam
7	Chair and members of the Election Commission.
8	I have been asked to speak on the
9	impact of the Voluntary Voting System Guidelines
10	from a testing laboratory standpoint. And you
11	have a copy of my presentation. I am just going
12	to kind of go through that.
13	I guess, first, in talking about the
14	impact, one is to discuss what's the same in this
15	document as the 2002 Voting System Guidelines.
16	And when we look at Volume I,
17	Sections 2.1 through 2.2.6 and then 2.2.8 to
18	2.6 - which is System Functional Capabilities -
19	have remained the same.
20	Section 3 on hardware, Section 4 on
21	software requirements are the same.
22	Section 5 on telecommunications are

1	the same.
2	Section 6.1 to 6.6.4.3 on security
3	are the same.
4	Section 7 on quality assurance and
5	Section 8 on configuration management
6	requirements are the same.
7	So, the bulk of the document remains
8	the same as before.
9	In Volume II, we see even more -
10	Sections 2, 3, 4, 5, 6 and 7, which would be
11	Description of the Technical Data Package,
12	Functional Testing, Hardware and Software, System
13	Integration and Examination of Configuration
14	Management Practices - have all remained the
15	same.
16	Appendix A, the Description of the
17	National Certification Test Plan is the same, and
18	Appendix B, the Description of the National
19	Certification Test Report.
20	So, again, the bulk of the documents
21	remain close to as it was before.
22	But there been of some changes and

l	they are significant.
2	In Volume I, Section 1 has been
3	redone. Primarily it is new text on the program
4	that clarifies the requirements.
5	In Section 2.2.7 is probably the
5	largest change to the document, where there are
7	many new requirements on Human Factors and
3	compliance with HAVA 301(a)(3) were added. And,
9	certainly, that's an important revision to the
10	document.
11	Section 6.6.4 to Section 6.8.7.5
12	added many new requirements dealing with
13	security, wireless and the verifiable voting
14	paper audit trail.
15	Appendix A was added, which is a
16	very good thing, adding a glossary.
17	Appendix B, adding references,
18	again, a good thing.
19	Appendix C added best practices for
20	election officials and Appendix D added
21	independent dual verification systems.
22	We also added Appendix E, which was

1	the NASED Technical Guide, Number 1, dealing with
2	colorblindness and some of those issues.
3	Volume II had two changes.
4	Section 1, the revised National
5	Certification Testing Guidelines, shifting over
6	from NASED to the Elections Assistance
7	Commission.
8	And then Appendix C, where we added
9	the National Certification Test Design criteria,
10	the revision, in the back of that.
11	So kind of what was changed, in a
12	nutshell.
13	So if we look at what the impact is
14	to a testing labs, or to us, the Volume I Section
15	1 change, we are
16	CHAIR HILLMAN: Technology always
17	challenges us, always.
18	MR. HAZELTINE: We are back on.
19	Volume I Section 1, the
20	introduction, there is a new certification that
21	is required for independent testing authorities
22	that would now come through the National

- 1 Institute of Standards and Technology, through
- their NVLAP program, so it's a new certification,

3	similar to what we already have. But it will
4	require some additional work.
5	In Section 2.2.7, Volume 1, Human
6	Factors Assessment, accesibility changes were
7	made. And certainly those are major changes with
8	a major impact to the work that we will have to
9	do.
10	In Volume 1, 6.6.4 of the software
11	security, that's relatively small changes, which
12	is mostly administrative. Their impact to us is
13	minor.
14	And 6.7 of Volume I, wireless
15	requirements, would have an impact if that
16	technology were implemented. There are several
17	places where expert staff is needed. There are
18	cryptiographic (sic) issues and other things
19	which would require quite a bit of additional
20	work.
21	In Section 6.8 of Volume I, the
22	Voter Verifiable Paper Audit Trail, I would

- 1 consider those to be relatively small. They are 2 administrative type changes. For us the impact
- 3 is not all that difficult from a testing
- 4 laboratory.

5	Certainly, Volume I, Appendix A, B,
6	C, with the glossary, references and best
7	practices, there is no real impact to us. It
8	certainly adds to the clarity of the document and
9	allows you to understand terminology being
10	addressed much better.
11	Appendix D, where the Independent
12	Verification Systems comes into Volume I, that
13	would be a major impact when implemented because
14	it really requires two systems. So you are
15	basically doing the testing twice, so it would be
16	an impact as far as the work.
17	Appendix E, the NASED Technical
18	Guide is small, mostly administrative changes for
19	us.
20	In Volume II, Section 1, the
21	National Certification Program Guidelines, there
22	were some clarification text added. There is no
	29
1	real impact added to us. That is the same
2	practices the 2002 standard required.
3	Appendix C, the National
4	Certification Test Design Criteria, really no
5	impact to us in as far as conducting a normal
6	test program. If the specimen did fail, there
_	r r o

7	would be some additional testing requirements to
	•
8	work with. But if the system passes, it would
9	pretty much would be a very similar process.
10	I am talking about possible issues
11	where we get into a little more detail of areas,
12	as we went through it where - I wouldn't say
13	concerned - we were just identifying.
14	We will need guidance on the
15	summative usability test required for partially
16	blind, blind, persons with limited motor control,
17	persons with limited command of English, and the
18	general population.
19	I have given some of the references
20	of where that would be in the document. But we
21	will need guidance on how to conduct those tests
22	in the future.

1	For the accessible voting station,
2	guidance with personal assistive devices is too
3	broad. We would need to know exactly what we are
4	talking about there and what devices could be
5	connected and what our requirements would be to
6	evaluate those.
7	I noted that the voter control of
8	contrast must be reset after the vote was cast.

9	They do have the ability to reset contrast. But
10	I didn't see anywhere else in the document where
11	it would reset back to some nominal value for the
12	next voter.
13	Synchronized audio with those
14	scrolling screens, that could be an issue with
15	testing. That would have to be defined exactly
16	what we mean there.
17	The Auto Tactical Interface
18	requirements will require more testing,
19	certainly, because it's a new feature. Certainly
20	a good feature, but a new one.
21	The audio qualification to ANSI
22	C63.19 would require more testing. That's where
	31
1	we have to classify the actual microphones and
2	system ratings.
3	Our recommendation at Wyle would be
4	that we consider EIA/TIA 968, which was the old
5	FCC Part 68 document which regulated telephony
6	(ph) and has much - I don't know - I would say
7	are better rules - that are rules which are well
8	known, have been in place for a number of years,
9	does include hearing aide compatability and does

include a process that is somewhat better

11 understood by testing laboratories. 12 The guidance on testing cochlear 13 mounted hearing devices that we needed in here, 14 that could be an issue because I imagine that 15 there are a number of different types. So that's 16 an area of concern. 17 The frequency range of 315 Hz to 18 10 kHz, that requires now equipment of the new 19 testing techniques. Once again I would suggest 20 looking back at the ITA/TIA 968, the old FCC Part 21 68 document where the frequency range was not 22 quite so broad and test equipment already exists 32 1 for it. 2 Another document would be TIA 470, 3 which would address the acoustic performance as 4 well. 5 The rate of speech control where you 6 are allowed to, actually adjust or advance how 7 fast or how slowly the audio playback is would

require more testing and we would need some

levels. Well, reasonable can be interpreted in

different ways, so we would need some help on

guidance on that. It says within reasonable

that.

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13 Confirmation of the blind paper 14 ballot would require some additional testing, 15 additional skill. We need someone who could read 16 those ballots to make sure the system is 17 performing properly. 18 The actuation force requirement test 19 required in test fixtures so that we can do, I 20 believe that is 22 newtons of force, so we would 21 need some additional devices to run that test. 22 We would need a wheelchair to be

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1 provided so that we can evaluate the clearance 2 requirements in Section 2.2.7.4. And there are a 3 number of those. They are good requirements, 4 there are just a number of them. 5 And for the English illiterate voter 6 machines, would require interpreters be present 7 during some parts of the testing. The required 8 languages should be specified. Right now it's 9 quite broad and that would require some 10 additional work on our part. 11 Wireless documentation in accordance 12 to 6.7.2.1.3.1 - there are a lot of numbers 13 there - but requires a "subject area recognized 14 expert." So that would need to be identified and

15	provided to us.
16	If wireless systems currently don't
17	exist, but if they do, that would be be an issue.
18	The wireless system requires that it
19	be able to operate with or without the wireless
20	capability. So that would require us testing it
21	twice, with and without.
22	Encryption verification also
	34
1	requires an expertise in the field and we would
2	need some help there.
3	Again, the Voter Verified Paper
4	Audit Paper Trail testing poses no significant
5	testing issue. It does involve more time, but
6	it's not a technical challenge for us.
7	Am I going too fast?
8	SIGNERS: We can't hear you.
9	CHAIR HILLMAN: If you could move
10	closer to the microphone.
11	MR. HAZELTINE: When I taught I
12	always had two hours of notes and one hour of
13	speech, so I learned how to speak quickly.
14	CHAIR HILLMAN: Mr. Hazeltine, we
15	know you live and breathe this stuff, but some of
16	us are running to catch up.

17	MR. HAZELTINE: I'm sorry.
18	CHAIR HILLMAN: No problem.
19	MR. HAZELTINE: Witness IDV Systems,
20	again, will have twice the amount of testing
21	because there are two devices. I had mentioned
22	that earlier.
	35
1	The bottom line, from our viewpoint,
2	is to be Wyle's viewpoint, we consider the
3	Voluntary Voting System Guidelines to be a
4	significant improvement over the past two
5	documents, the 2002 and 1990 versions,
6	particularly in Human Factors, Accessibility and
7	Security.
8	It's quite well done. There are
9	some issues, but they are resolvable.
10	Prior to implementation, further
11	clarification would be required, but I don't
12	believe it's all that difficult to get that data
13	to us.
14	The current 2005 Voting System
15	Voluntary Guidelines that are out are in need of
16	some corrections and formatting, primarily in
17	correct references and page numbering. Section

2.2.7 is probably the one that would need the

19	most work there.
20	Independent testing laboratories do
21	have some cost requirements through the
22	accreditation through NIST which is not an issue.
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1	It's just a thing to be noted.
2	We will need some guidance for
3	testing laboratories in several areas, which I
4	have identified in the presentation.
5	There will be some new testing. It
6	will add costs to the certifying of the voting
7	machine.
8	From Wyle's standpoint we are
9	already training our staff to the new document.
10	I know it's a draft, but it's probably going to
11	be fairly close to the final format. We will be
12	ready to implement by the end of the 90 day
13	comment period. We are quite confident on that.
14	And we feel that the mandatory
15	implementation date of 24 months after the
16	comment period is both reasonable and do-able.
17	And I'd like to thank you once again
18	for your time. I have provided my contact
19	information for you on the last sheet and I am
20	certainly willing to answer any and all

21 questions.

22 CHAIR HILLMAN: Thank you.

1	Commissioners, if we could just
2	agree that we will let Ms. Coggins make her
3	presentation and then open it up for questions to
4	both. Thank you.
5	Ms. Coggins.
6	MS. COGGINS: Thank you. Thank for
7	inviting me here today to provide some comments
8	on the proposed Voluntary Voting System
9	Guidelines.
10	First let me say that it is my
11	perception that in view of the HAVA January 2006
12	deadline, there is significant concern in the
13	states and the vendors in how the Human Factor
14	requirements stack up against the current testing
15	of accessibility to the 2002 standards.
16	I think Joe has done a really good
17	job of talking about impact in the long term. I
18	thought I may address my remarks a little to the
19	transition period of providing a little bit of
20	insight as to where the differences are for
21	people are going to have to be making some
22	decisions for January 2006.

1	First I just want to say this
2	release was made available late last week so
3	these comments are based on my preliminary review
4	of the guidelines and should not be considered
5	complete research.
6	Also, there has not been really a
7	peer review on the comments, which is our normal
8	process, in view of the time frame. These are my
9	initial interpretations of the guidelines and
10	shouldn't be considered a formal in-depth
11	analysis. We actually are going to make a
12	recommendation that maybe the EAC consider
13	providing this as a service to the states and the
14	vendors in the interim.
15	Third, in identifying those
16	differences, it does not mean that the systems
17	qualified to the 2002 standards do not contain
18	some of these required features. It means that
19	they weren't required to contain these features
20	when they were tested to the 2002 standards.
21	A vendor may have incorporated some
22	of these features into their systems. In that

1	case, the ITA would have been tested to them.
2	The first group of changes is audio.
3	And in the 2002 standards it did not identify
4	specific decibel volume settings for the initial
5	volume or minimum volume control. The VSS did
6	specify maximum, so things were tested to that.
7	In the 2002 VSS it did not identify
8	specific frequencies over the audible range. So
9	that would be something that would need to be
10	tested.
11	The 2002 VSS did not stipulate the
12	use of human recorded speech rather than
13	synthesized speech. There are 2002 qualified
14	systems that use synthetic speech.
15	And there appears to be a
16	contradiction in this requirement to the
17	underlying principle that you don't dictate a
18	design.
19	And it seems within the discussion
20	on this requirement, it is preferred not to use
21	synthesized speech. But that may be an issue as
22	to systems that are out there

1	The 2002 VSS did not stipulate that
2	voters control the rate of speed. And now also
3	the voting system guidelines indicate this as a
4	'should' and not a 'shall'. So I'm not clear
5	whether or not the intention is that that will be
6	a requirement or if that's just
7	A 'should' is normally optional when
8	you are looking at a requirement. And there are
9	vendors out there who have addressed this issue.
10	The next group of changes deals with
11	controls. The 2002 VSS did not stipulate that
12	mechanically operated controls or keys on the
13	voting system shall be tactilely discernible
14	without activating those keys. I'm not sure that
15	that is a really significant issue as far as
16	current systems out there. It doesn't pop to
17	mind that that seems to be a problem.
18	2002 VSS does not stipulate that the
19	status call logging or toggle control keys, such
20	as shift keys, shall be visually discernible and
21	discernible either through touch or sound. That
22	was not stipulated. Nothing comes to mind as

1	being really an issue with that though.
2	The 2002 VSS did not stipulate that
3	controls shall not require direct bodily contact
4	or for the body to be part of any electrical
5	circuit. Additionally, it did not stipulate that
6	the voting system shall provide a mechanism to
7	enable non-manual input that is functionally
8	equivalent to tactile input. This would be along
9	the lines of CIVNTOP (ph).
10	And, also, this is stated as a
11	'should' and not a 'shall'. But there are
12	systems out there, 2002 qualified, that did
13	incorporate this type of technology.
14	And the same with the next
15	requirement, that the VSS stipulates voters who
16	lack fine motor control or use of their hands
17	perform submission of ballot.
18	Again, that's something that vendors
19	have addressed, some.
20	Also the guidelines, as Joe had
21	said, are changing the physical reach. They are
22	much are more detailed and the numbers appear to

- 1 have changed. So that's something that may need
- 2 to be addressed.

3	There are systems out there that
4	have really addressed some of these issues
5	through documentation. I have not done a
6	complete analysis of all the changes that went
7	into effect and the measurements. But in some
8	cases this may actually be It's an issue of
9	setup and it may actually be something that car
10	be handled from documentation levels.
11	CHAIR HILLMAN: You will need to
12	speak into the mike directly. You are turning
13	away from it and I think they can't hear you.
14	MS. COOGINS: I'm sorry. I am
15	usually so loud, they usually tell me to quiet
16	down.
17	Visual sight impairments is the next
18	group, the final group. The 2002 VSS did not
19	stipulate a system adjusted by the voter or poll
20	worker, including font size, color and contrast
21	shall automatically reset to the default after
22	each voter.

1	This was actually addressed in a
2	NASED bulletin. So it is my feeling that most
3	systems should have tested that.
4	The NASED bulletins were part of

5	The implementation program is this mechanism for
6	having additional bulletins for clarification,
7	were part of the
8	CHAIR HILLMAN: Tap it and see what
9	you are getting.
10	MS. COGGINS: Is that any better?
11	CHAIR HILLMAN: Yes. Just have it
12	as close to you as you can.
13	MS. COGGINS: Okay.
14	CHAIR HILLMAN: Okay. There you go.
15	Do you want to start over and repeat
16	everything
17	No, I'm only kidding.
18	MS. COGGINS: Do you really want to
19	hear it?
20	So in terms of the NASED Technical
21	Bulletin Number 1, that was a mechanism that was
22	part of the 2002 implementation program that
	44
1	A 111 122 11 11 2 A 1 1
1	there would be additional bulletins for updates.
2	So that should have been tested.
3	The 2002 VSS did not stipulate that

all tests intended for the voter during the

voting session be presented in sans serif font.

It did state that there should be a clear font.

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7	I don't know I am under the
8	impression that states do actually stipulate
9	certain fonts on their ballots. So is this
10	perhaps an issue with compliance with state laws
11	or are all states using this font.
12	If this is a common thing, I'm not
13	aware of that.
14	The 2002 VSS did not stipulate
15	minimum figure to ground ambient contrast ratios
16	for text to informational graphics. So that
17	would be something that would have to be tested.
18	And, lastly, the VSS did not
19	stipulate a minimum size for sensitive touch
20	areas. So that would be something that, although
21	I haven't researched the actual sizes, but I
22	don't think that that will wind up being greatly
	45
1	significant to systems that were already
2	qualified.
3	And, as I said, I understand that
4	the guidelines are just out for public comment.
5	But in view of the phone calls that I have
6	•
	received from states - asking me, oh, my God, I
7	have a system; I want to buy it. Am I going to

be in trouble if I buy this system because it's

9	2002 qualified? What does this mean? - I would
10	recommend that in order to keep the states and
11	the local jurisdictions informed and the vendors
12	and public, that the EAC at least initiate
13	publishing a formal gap analysis between the 2002
14	voting system standards and the proposed voting
15	system guidelines.
16	In doing so, I believe that will
17	help states ask vendors about specific questions
18	about their voting systems. Also, vendors with
19	2002 VSS qualified systems that support things
20	that are proposed in the guidelines could request
21	the lab to provide independent verification of
22	any supported gap-identified functionality and

1	that this could then go as addendums to their
2	reports.
3	Let's see. There are actually -
4	because of time - there are a number of items and
5	I think Joe went through a number of items.
6	In an overall comment
7	Am I off again?
8	CHAIR HILLMAN: Yes.
9	MS. COGGINS: I didn't touch it.
10	CHAIR HILLMAN: He's working on it.

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that
be
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ices
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There is one instance in the Voter

Verified Paper Audit Trail, it appears in the

electronic ballot could be the ballot of record.

guidelines that either the paper or the

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13 And in Section 152 of the VSS, which has not 14 change in the guidelines, it actually says that a 15 paper based voting system can't record, store or 16 tabulate selections. 17 So this seems to be a conflict. 18 And I may be misinterpreting what is 19 in the new and changed guidelines. But that just 20 seems to be something that maybe should be looked 21 at. 22 So in terms of just the imprecise

1	language, we would like to see that addressed.
2	Lastly, there is one item that we,
3	as the labs, in the NASED technical committee
4	meeting, had discussed: issuance of a
5	clarification bulletin that addressed some of the
6	issues encountered in interpretation with the
7	code review standards, and specifically the
8	application of the term in module in various
9	requirements.
10	But, also, the VSS gave us very
11	broad language on some security requirements and
12	code review. Well, just basically, security
13	requirements. And it allowed the labs on their
14	own to interpret some coding practices as

15	insecure.
16	The problem is, these practices are
17	not explicity identified and that leads to
18	inconsistent application. A good example of this
19	is the bar coded password.
20	The labs hope that more explicit
21	requirements for security review would be part of
22	this release. And that's something that I think
	49
1	I would like to see in the security requirements
2	of best practices or here are the things in code
3	review that we want to make sure exist.
4	Again, as I said, the imprecise
5	language is really one of my concerns, is that
6	all requirements really have testable criteria.
7	Overall, the standards are good and
8	we look forward to testing to these and we will
9	submit specific comments on these through the
10	comment process.
11	CHAIR HILLMAN: Okay, thank you.
12	While the little problems that we
13	are having with the technology here don't disrupt
14	our meeting, you can imagine it wouldn't be funny
15	if we were encountering these little problems

with voting machines on Election Day, pointing

17 clearly to the need for good guidelines, testing 18 and certification and re-testing and 19 recertification as necessary. 20 I thank both of you for your 21 comments this morning. The responsibility for 22 accrediting test labs and the whole certification 50 1 process is one that the Federal Government, 2 through the Election Assistance Commission, is 3 embracing for the first time. It is a 4 significant and rather awesome responsibility. 5 And it absolutely is important for us to receive 6 your comments against the guidelines as you have 7 noted. 8 The purpose of this hearing, the 9 purpose of the entire 90 day process, is for us 10 to receive this kind of critical input and for us 11 to have an opportunity to explore some of the 12 comments that you have made and we welcome this 13 opportunity to do that. 14 Commissioners, I think we have sufficient time. We have about, in total, 30 15 16 minutes. And so I guess if we divvy it up 10/10

and 10, that does include responses back. So we

beg your indulgence to confine your responses to

17

20	against the time limit.
21	Thank you.
22	Commissioner, Mr. Vice Chairman.
	51
1	VICE CHAIR DeGREGORIO: Thank you
2	Madam Chair. And thank you both for the
3	excellent presentation and the written comments
4	that you have provided us.
5	We certainly recognize that this is
6	a first cut for you since these guidelines were
7	just published in the Federal Register and we
8	recognize that over time you will probably add to
9	these comments.
10	But, initially, they are well done
11	and they certainly raise a lot of important
12	issues for us to look at over the next 90 days,
13	because you are the ones that will have to test
14	the equipment to these guidelines. And you have
15	certainly raised some issues here that are
16	important for us to consider.
17	One thing that I have heard from
18	election officials around the country about these
19	new guidelines is the time that may be required,
20	the additional time that may be required to test

questions, if it appears we are bumping up

21 this equipment against these new guidelines for 22 the equipment to be qualified or certified. 52 1 And do you see, because you have 2 been in this business for quite a while now, that 3 these guidelines will add additional time to the 4 process to qualify a voting system when it is 5 presented to us and when you have to test it 6 against these guidelines? 7 Mr. Hazeltine, you can certainly --8 MR. HAZELTINE: Mr. Vice Chair, yes, 9 I do. Off the top of my head, I am looking at probably one to two weeks. There are additional 10 11 activities. They are not tremendous, but there 12 are additional activities. 13 VICE CHAIR DeGREGORIO: What is the 14 average time? You say one or two weeks 15 additional, so what --16 MR. HAZELTINE: Well, the average 17 time for a system, from start to finish, is 18 normally a three to four month time frame. So we 19 are not talking about an order of magnitude 20 change. 21 VICE CHAIR DeGREGORIO: What about a

cost increase to the client? As I understand it,

1	it's going to be the vendors that will pay you
2	all to test their equipment against these
3	guidelines. Is there going to be a significant
4	cost increase as a result of this
5	MR. HAZELTINE: I wouldn't say there
6	would be significant. Yes, the activities will
7	go up, so that the time we spend will go up and
8	corresponding new costs.
9	MS. COGGINS: I would say it will
10	add a small amount of time. It's not really
11	significant. Whether they pass or fail is, a lot
12	of times, whether it takes longer or not.
13	So if they come and they have to
14	actually retest, then it takes longer and it
15	costs more.
16	So it's hard to necessarily put a
17	number. You always talk about a number that is
18	successful. But a one week test may require a
19	two month re-engineering effort. So that would
20	be the situation.
21	And you have a very different, a new
22	vendor has a very different experience from a

1	vendor who is in the market and has deployed
2	voting systems and has been doing this a long
3	time.
4	So one person it may take just an
5	extra day for a test. It also depends on what
6	the systems themselves contain.
7	So if we have already tested for
8	some of these things, then there really wouldn't
9	be any additional testing because the VSS
10	requires that we test to their own requirements
11	in certain optional functionality or additional
12	functionality.
13	There I went again.
14	CHAIR HILLMAN: It will be fixed
15	during our break so that we don't have to go
16	through this. So our apologies to the two of
17	you.
18	MS. COGGINS: Not at all.
19	So that's basically it. There are a
20	lot of variables that are involved in it. It
21	depends on the vendor.
22	It will add some time; it will add

1	some expense. And I think also in terms of some
2	people, there will be significant times of
3	engineering. That I think would be more of the
4	time that I see, is engineering the products to
5	reach some of these requirements.
6	But in terms of testing, it probably
7	would be a 5 to 10 percent increase.
8	VICE CHAIR DeGREGORIO: Previous
9	standards have had an implementation period.
10	When the 1990 standards were developed, there was
11	a several year implementation period. And in
12	2002 there was, I believe, a two year
13	implementation period.
14	We have proposed in this draft a 24
15	month implementation period, which would take us
16	to the fall of 2007, before these guidelines
17	would take effect and have to be
18	Is that a reasonable approach in
19	your view, Mr. Hazeltine?
20	MR. HAZELTINE: Mr. Vice Chair, as I
21	said earlier, I think that is both reasonable and
22	do-able.

1	There are some things which I think
2	need to be on the fast track, which would be the
3	Sections 2.2.7, the accessibility requirements.
4	MS. COGGIN: The market will not
5	wait for them to be put into place. The market
6	will dictate to us that we have to move faster on
7	these.
8	So while we may have - we will have
9	vendors who will be competing to try and get
10	there before others. So at the lab, we will be
11	trying to get there as quickly as possible.
12	So two years is, it's a good cutoff.
13	Because as we found in 2002, there were
14	situations where people weren't ready to get
15	there. But I don't know that people will
16	actually
17	Somebody will be ready to go three
18	months from now, in my interpretation.
19	VICE CHAIR DeGREGORIO: If a state,
20	for instance, chooses to adopt a VVPAT portion of
21	this and have its implementation effective for
22	next year, for next year's election, the

1	equipment they are going to use, because their
2	state law or state regulation requires them to
3	use the VVPAT if they use DRE equipment, so you
4	would be prepared then to test this equipment
5	against the VVPAT section of these guidelines,
5	again, if the states chose to adopt that and have
7	a different implementation date?
3	MS. COGGINS: It depends upon
9	In terms of our dealing with the
10	vendor, it's really, we would be working on what
11	their requirements would be.
12	If they are designing their system
13	to a particular state's requirements, then we
14	would need to design test cases for that.
15	The good news would be that,
16	ultimately, we probably are going to be able to
17	re-use that with other vendors. But, initially,
18	getting out there
19	You actually are to look There's
20	very much custom work that's done in every ITA
21	qualification because no two systems are truly
22	the same. So while you can work off a really

- 1 high level set of requirements, when it comes
- 2 into an implementation and, in fact, we have

3	this discussion sitting in a lot of cases where
4	we are sitting in a room and we are testing
5	something on one voting system and we go, oh, my
6	gosh, this is so much like such and such. Did we
7	test them for that? Oh, no, but they don't do
8	this piece, they don't do write-in's the same.
9	Whew, okay, we are covered. Yes, we tested it to
10	the correct standard in that particular case.
11	So every system actually has a great
12	deal of customization on the test cases.
13	So I think it's actually our normal
14	process that we really have to be responsive to
15	the system. And while the good news will be that
16	we will be able to repeat processes more
17	consistently across various vendors, at this time
18	we actually have to respond to whatever a vendor
19	design is, because that's what the VSS says that
20	we do.
21	MR. HAZELTINE: Relative to the
22	Voter Verified Paper Audit Trail, I see no real
	59

2	The major thing that we need - I
3	have already talked to Mr. Wilkey about this - is

4 the compliance matrix. And we have begun

issues with it.

5	discussing having a meeting later this month to
6	do that.
7	Once that's in place, we are ready
8	to go.
9	VICE CHAIR DeGREGORIO: Thank you,
10	Madam Chair.
11	CHAIR HILLMAN: Okay. Thank you.
12	For your entertainment pleasure, we
13	are raising and lowering the blinds, as you can
14	see. Kind of looks like we are now in a
15	submarine and submerging at any moment now.
16	Seriously, for the people on this
17	side of the room, even though the sun is
18	filtered, it was getting kind of warm and then
19	little technical gliches with plants and other
20	things being in the way.
21	So, hopefully, you were entertained
22	for a moment. But we should be squared away now.
	60
1	Thank you
_	Thank you. Commissioner Martinez.
2	
3	COMMISSIONER MARTINEZ: Thank you,
4	Madam Chair.
5	My thanks to both of you as well for
6	making the time and the effort to be here. And

7	as the Vice Chair has noted, we were trying to
8	get this out as soon as we could. And,
9	unfortunately, it took us a little bit longer to
10	do our internal due intelligence. So it was just
11	out last week.
12	And we appreciate that you have done
13	a rather hasty, but I think a very excellent,
14	analysis for us to begin to think about with
15	regard to
16	There goes my mike. Am I back on?
17	Everybody hear me?
18	with regard to the Proposed
19	Voluntary Voting System Guidelines.
20	I want to start with a general
21	question for the both of you.
22	And that is, one of the things that
	61
1	we have to contemplate right now at the EAC,
2	along with our partners at NIST and of course
3	with the TGDC, is the idea of what happens after
4	this initial, after this first draft is adopted
5	in full or in final form.

And that is to say that there has

been, we have deliberated internally and talked

amongst ourselves with NIST and the TGDC about

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)	whether this is a Version I versus a Version II
10	coming out at some point in the near future.
11	And I wondered, from your
12	perspective, since you actually have to do the
13	use of the requirements and the actual testing of
14	the voting systems, what life would mean for the
15	testing labs if we were to embrace a chronology
16	that says we go final with VVSG in 90 days with
17	this version and then soon thereafter, let's say
18	six months after that one goes final, we come out
19	with a Version II, another set of, again, revised
20	Voluntary Voting System Guidelines.
21	Is that problematic from your
22	perspective? What opinion would you like to
	62
1	offer us so that we can be better informed in
2	trying to make a decision about the timing of
3	what comes after this, if anything?

I	offer us so that we can be better informed in
2	trying to make a decision about the timing of
3	what comes after this, if anything?
4	Mr. Hazeltine.
5	MR. HAZELTINE: Thank you,
6	Commissioner Martinez.
7	From a testing laboratory
8	standpoint, we can be ready in 90 days as to the
9	standards, and if you decide to revise it 90 days
10	later, we can probably be ready for that one as

11	well. From a reality standpoint, test, the
12	vendors will not be
13	CHAIR HILLMAN: Your mike.
14	MR. HAZELTINE: Once again, we can
15	be ready from a testing laboratory standpoint.
16	But I do think the vendors would have some
17	problems with that. It would be a continuing
18	ratchet of requirements that the systems need to
19	have.
20	I frankly think that we need to
21	reach some point of stability that people can
22	design to and then if we want to move from
	63
1	forward from that.
2	COMMISSIONER MARTINEZ: Ms. Coggins.
3	MS. COGGINS: I would agree also in
4	terms of, in all quality systems, management of
5	change is one of the important factors. So as a
6	test lab, that's one of our mandates, that we
7	need to be able to do that.
8	I also agree with Joe in that I
9	don't think it's just the vendors. I think it's
10	also the states.
11	There is paralysis if you have

got -- Maybe it's better that it comes in six

13	months or maybe it's better that you defer the
14	first one six months.
15	But the basic issue is, people don't
16	know what to do. They don't know whether to buy;
17	they don't know what's going to happen; are they
18	going to lose their HAVA funds?
19	That's information that I am getting
20	from the states where they are calling me and
21	asking me, you know, what does this mean. What
22	does it mean these changes of standards?

1	COMMISSIONER MARTINEZ: Is there a
2	process right now with the current 2002 VSS and
3	the NASED process where if they want to add
4	something to the existing standards, it is done
5	via an amendment of some kind to the 2002 VSS?
6	Or is there a process, if they
7	identify something that needs to be addressed - I
8	think you mentioned something about a bulletin
9	that might be issued by NASED or something like
10	that - so there is a process right now.
11	Can you say something a little bit
12	about that real quick, Mr. Hazeltine.
13	MR. HAZELTINE: Commissioner
14	Martinez, yes. NASED over the years has issued a

15	number of technical guidances that kind of
16	attaches, kind of like an appendix, if you will,
17	to the standard and provide guidance to us and
18	also to the vendors on what the requirements of
19	the system are.
20	That is a kind of a stop gap way of
21	adding things in small pieces.
22	MS. COGGINS: The problem in the
	65
1	process at this point is you have this transition
2	between NASED and the EAC, so we are in
3	paralysis, an example being this bulletin that we
4	talked about about a year ago, can we get this
5	out.
6	And at this point NASED is
7	anticipating giving this over to the EAC. So,
8	yes, the method is there, but the will is not
9	there, in my belief. I'm not trying to speak for
10	anybody else or anything here.
11	But there is just, people are in
12	this flux and they are not quite sure. If I put
13	out a bulletin today, what's the impact?
14	COMMISSIONER MARTINEZ: Right. I
15	guess what I am trying to get at, if I am trying

to make a decision about what happens next, is

17	the process working the way it exists now, in
18	that if there is a deficiency that's identified,
19	that you don't have to go through a whole
20	promulgation process again of redoing or revising
21	the entire VSS, but instead you would address
22	those particular deficiencies via a bulletin or
	66
1	via some sort of a more responsive mechanism.
2	And it sounds like that is working right now.
3	So as we contemplate how to
4	structure ourselves - since we are, by law,
5	supposed to take over this process - that is
6	something that we should be informed about,
7	basically.
8	MS. COGGINS: The system is there.
9	It's just not currently working It's not,
10	nothing is going on, it really is. But, yes,
11	there is a mechanism.
12	COMMISSIONER MARTINEZ: And one that
13	works, Mr. Hazeltine?
14	MR. HAZELTINE: Yes, I believe it
15	does.
16	COMMISSIONER MARTINEZ: In your
17	testimony, Mr. Hazeltine, you have referenced the
18	fact that in some areas - for example, in the

19	BBSG - the section dealing with wireless
20	technology, that you would need to acquire
21	subject matter expertise. Is that available? Is
22	it even out there?
	67
1	MR. HAZELTINE: Commissioner
2	Martinez, I am not sure and we have not
3	researched that.
4	I am sure there are experts in blue
5	tooth and 80211 or BT (ph) whatever.
6	COMMISSIONER MARTINEZ: So there is
7	personnel that you can get.
8	MR. HAZELTINE: There is. And we
9	have a good bit of expertise in the same thing as
10	well.
11	Frankly, wireless, I'm not sure if
12	the technology is ready for implementation,
13	primarily from a denial service viewpoint.
14	COMMISSIONER MARTINEZ: Do you
15	agree? Are there some areas that it's going to
16	be necessary to acquire some additional
17	expertise?
18	MS. COGGINS: Yes, I think that one
19	of our comments about imprecise language is that,
20	it's saving you are becoming a subject matter

expert but it's not identifying thequalifications of the subject matter expert.

1	That may be something that is going
2	to be addressed in the accreditation criteria.
3	But we would like to see in the voting guide that
4	it actually references a subject matter expert
5	who is accredited by the lab or whatever is the
6	specific thing.
7	But, yes, that is some of the
8	imprecise language that we would like to see
9	clarified.
10	COMMISSIONER MARTINEZ: I guess
11	going back to something that my colleague, the
12	Vice Chair, was talking about earlier, one of the
13	things that we had certainly emphasized - and I
14	know that the members of the TGDC were in
15	agreement with this - and that is to try to
16	deliver - with the VVSG - to try to deliver a
17	product that could be responsive to the upcoming
18	Federal election cycle next year, if at all
19	possible.
20	And, in particular, what we were
21	dealing with was the fact that - I think at last
22	count - something like 16, maybe 17 states, now

1	have madated, via legislative action or
2	administrative rule, the use of VVPAT technology.
3	And for those states that have moved
4	in that direction - and for perhaps others that
5	will move in that direction between now and the
6	next election cycle - that there would be a means
7	to be able to test
8	For example, if I use a DRE in a
9	jurisdiction right now, but the vendor in the
10	area has developed a VVPAT technology that could
11	simply be, essentially, plugged into that
12	existing DRE, that the plug-in, the added device,
13	the VVPAT component, can be tested in an
14	objective repeatable manner, that would happen,
15	obviously, through your test labs.
16	And what I you hear you all saying
17	is that you can be ready to do that once we go
18	final with the VVPAT section of this VVSG. Is
19	that correct, Mr. Hazeltine?
20	MR. HAZELTINE: Commissioner
21	Martinez, that is correct. Of the requirements
22	in the document, that was probably some of the

1	most straightforward and easiest to implement.
2	COMMISSIONER MARTINEZ: Ms. Coggins,
3	do you agree?
4	MS. COGGINS: Yes. In fact, we are
5	already testing that because vendors have already
6	addressed that.
7	COMMISSIONER MARTINEZ: So,
8	irrespective of whether a state decides to pull
9	down that section of the VVSG early, a vendor
10	might come to you after we go final with that and
11	say we want to be among the first to be tested
12	against the new VVPAT requirements, you all are
13	going to be ready to do is so is what I am
14	hearing you say.
15	MR. HAZELTINE: Yes, sir.
16	MS. COGGINS FOGEL: In fact, I think
17	we have been contacted by a vendor already who is
18	anticipating this and has asked us if they can
19	start testing sometime this month.
20	COMMISSIONER MARTINEZ: I will take
21	this opportunity, I think we will talk more about
22	this this afternoon, that we go out of our way in

1	this document, in the VVSGV, to add language - I
2	think it's in the appendix right now, in Appendix
3	D - but to say to the general public and to the
4	reader of the VVSG that VVPAT is but one of many
5	ways to achieve what is termed independent
6	verification by NIST and by the TDGC. That other
7	ways to achieve independent verification - aside
8	from using VVPAT technology - is out there.
9	And at some point perhaps - or
10	perhaps it's usable now - but that there are
11	other means to achieve this.
12	And at some point down the road -
13	perhaps through an amendment process to the VVSG
14	when they go final, perhaps in the next iteration
15	of the VVSG - there would be other testable
16	requirements for other means of achieving
17	independent verification.
18	Are you following what I am saying?
19	MR. HAZELTINE: Yes. If I were to
20	understand what you are saying, I don't think you
21	want to do anything which would stifle
22	technology.

2	MR. HAZELTINE: Let the vendors be
3	creative and come up with other ways of meeting
4	the requirements.
5	The requirements, I think, are well
6	stated in the document.
7	COMMISSIONER MARTINEZ: Right. But
8	what you said in your testimony is getting to
9	other means, testing the requirements for other
10	means of independent verification will require
11	additional major effort on your part.
12	MR. HAZELTINE: As stated in
13	Appendix D, the dual system where you have got
14	the one system and you go back and you repeat the
15	count on the second system, that is two pieces of
16	hardware; that's twice as much testing.
17	There are other ways to do that.
18	COMMISSIONER MARTINEZ: Right.
19	Any comments, Ms. Coggins?
20	MS. COGGINS: No. In terms of
21	testing, it's going to be nothing really
22	different from what we are currently doing now.
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COMMISSIONER MARTINEZ: And I am

CHAIR HILLMAN: Excuse me, not a bad

getting a bad stare from the Chair.

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4	stare. I am just letting you know we're a little
5	over time.
6	COMMISSIONER MARTINEZ: I will do
7	one quick, perhaps more of a statement, and you
8	all can do a quick comment, if you want.
9	The gap analysis that you have
10	suggested for the following reason: the current
11	set of voting system standards, the 2002 VSS, was
12	promulgated by our predecessor agency, the
13	Federal Election Commission. It was promulgated
14	over a two or three year period and it went final
15	sometime - I don't remember the exact month in
16	2002 but perhaps one of you can tell me.
17	MR. HAZELTINE: Effective January 1,
18	2004. At that point everything had to comply.
19	COMMISSIONER MARTINEZ: Right. But
20	the FEC Commissioners voted
21	MS. COGGINS: It was actually
22	published in April 2002.
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1	
1	COMMISSIONER MARTINEZ: That's the
2	date I was looking for.
3	MS. COGGINS: It was released in a
4	meeting in May in Colorado.
5	COMMISSIONER MARTINEZ: The point

6	that I would make, then, to go to your suggestion
7	on the gap analysis, is that, HAVA came along
8	after the 2002 voting system standards went
9	final.
10	So HAVA, like it or not, HAVA has
11	some voting system standards itself in Section
12	301, which are nothing at all voluntary, in fact,
13	they are mandatory on 1/1/06 - or, actually on
14	1/1/06 - upon all jurisdictions covered by HAVA.
15	So the gap that you have,
16	essentially, is that you have current voting
17	system standards that were promulgated before
18	HAVA was even close to its final form.
19	So if you are a vendor, you get
20	tested to the 2002 standards, you still don't
21	have anybody to tell you - other than perhaps
22	your own internal counsel and your own
	75
1	deliberation and your own specifications that you
2	would impose upon yourself as a vendor - whethe

would impose upon yourself as a vendor - whether
your system is compliant with what Congress came
out with in the Help America Vote Act, in Section
301, particulary 301(a)(3), which is the
accessiblility language.
Would you all agree with that?

ð	Mr. Hazeitine, go anead, or whoever.
9	MR. HAZELTINE: Mr. Martinez, I
10	would agree with that.
11	I believe the common sense way of
12	looking at this, there are voting systems that
13	are out there now which are complying with the
14	majority of this document other than the HAVA
15	requirements.
16	HAVA work station, the voting
17	stations, will probably end up being an
18	independent voting station at the polling place.
19	So it is actually almost a separate piece of
20	hardware.
21	COMMISSIONER MARTINEZ: Ms. Coggins,
22	you were going to say something.
	76
1	MS. COGGINS: I would say that it's
2	not just that You have partial compliance at
3	this point, based upon the vendors. You are
4	correct, yes, you had a gap between the time when
5	the standards were there and when HAVA was
6	imposed.
7	And, truly, that gap actually is
8	until today, because this is really the first

time those standard are there. So it has been, I

10	don't know what, is it three years or something?
11	COMMISSIONER MARTINEZ: Right.
12	MS. COGGINS: So that's truly what
13	the gap is.
14	COMMISSIONER MARTINEZ: Right.
15	MS. COGGINS: So, yes. And you have
16	had people who have tried to anticipate this and
17	have tried to get there. So in terms of what
18	they are looking - the information - I would
19	absolutely suggest that this information be put
20	out for the benefit of everyone.
21	COMMISSIONER MARTINEZ: Thank you
22	Thank you, Madam Chair.
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1	CHAID IIII I MAN, Okov
1	CHAIR HILLMAN: Okay.
2	Our Executive Director has a
3	question or two that he wants to ask, so I am
4	going to share my time with him.
5	But I am going to exercise my
6	prerogative to go first. So if we run out of

time, you don't get to ask your question.

What does it mean to you that the

about guidelines instead of standards? What, if

language has been changed and we are now talking

I'm only kidding.

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12	anything, in the field does that mean?
13	MR. HAZELTINE: Madam Chair, I am
14	aware of a number of documents. Sometimes they
15	are called guidelines; sometimes they are called
16	standards.
17	They are called That's the
18	requirements requirement. So that really the
19	name is no major consequence.
20	MS. COGGINS: I agree. We are being
21	asked to test requirements and the vendor is
22	actually, when they come to us to initiate a
	78
1	contract, they are specifying test us to this.
2	And so that's what we are testing now, that's our
3	interpretation.
4	CHAIR HILLMAN: So the quality has
5	no effect on it?
6	MS. COGGINS: No.
7	CHAIR HILLMAN: I was momentarily
8	interrupted, I believe, when you were responding
9	to the Vice Chairman's question about the length,
10	the anticipated length of time it would take to
11	test under the guidelines.
12	Could you just tell me, ballpark,
13	what that was.

14	MR. HAZELTINE: Madam Chair, my
15	response, right now, our initial review, is maybe
16	one to two weeks. It is not a tremendous
17	CHAIR HILLMAN: In total?
18	MR. HAZELTINE: One to two weeks on
19	a program which probably takes normally about
20	three months.
21	CHAIR HILLMAN: So we are talking
22	three to four months.
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1	MR. HAZELTINE: It would probably
2	end up adding a half a month to it.
3	MS. COGGINS: One of the things that
4	is a little difference between the last, that,
5	and this initiative, still kind of up in the air
6	where we are going, SysTestLabs is both a
7	hardware and software test lab.
8	So our test cycle may be longer
9	because we have a bigger scope.
10	Currently, Wyle is a hardware ITA
11	and SysTest is a software ITA, the initial
12	software ITA.
13	So that may be There is a
14	different scope of testing that goes on.

For us the test effort is - it can

16	be two months to - we have had people go 18
17	months. So it just depends on the quality of the
18	system that's brought to mark.
19	THE CHAIR: Did you want to correct
20	something, Mr. Hazeltine?
21	MR. HAZELTINE: Yes, ma'am.
22	We would certify for both.
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1	CHAIR HILLMAN: I think I heard you
2	correctly say that there would be an increase in
3	the cost of testing, but it wouldn't be a huge
4	increase.
5	All things are relative. So, is it
6	5%, 10%?
7	I know we are ballparking here. But
8	I'm trying to get an appreciation as to whether
9	the cost of testing is going to increase 25%,
10	50%, 10%?
11	MR. HAZELTINE: Madam Chair, it's
12	not in those ranges.
13	Just using this straight map, you
14	say it's a three month program - and to your 12
15	weeks, you are adding two.
16	So 8 to 10%, somewhere in that
17	range, doing it as an engineer.

18	CHAIR HILLMAN: Even with some of
19	the other things that you said you would have to
20	bring into the testing process because of the new
21	requirements?
22	MR. HAZELTINE: There are new
	81
1	requirements; they require new tests, primarily
2	the functionality of things.
3	Once you have gone through it the
4	first time, you have all the fixtures and the
5	knowledge. So it becomes somewhat repetitive.
6	But the first time through it will
7	always be a bit of a challenge.
8	The accreditation is an additional
9	cost for us. It's not necessarily something
10	which the vendors would be picking up.
11	CHAIR HILLMAN: Ms. Coggins.
12	MS. COGGINS: Would you repeat the
13	question.
14	CHAIR HILLMAN: It was just about
15	the increase in cost to test against the new
16	guidelines.
17	MS. COGGINS: I would not see it as
18	being a significant cost, relative to the overall
19	cost of an effort.

20	It is, again, it's really dependent
21	upon the system that is brought us, independent
22	conditions, as to the length of the time and the
	82
1	a a st
1	cost.
2	CHAIR HILLMAN: My final question is
3	for you, Ms. Coggins,
4	You said in the beginning of your
5	presentation, you were talking about the quick
6	time that you used - and we appreciate it - to
7	review the guidelines and that your normal peer
8	review process could not be engaged.
9	And then you talked about the gap
10	analysis.
11	You said something about providing
12	this as a service to the states. So my question,
13	if you can remember, is, what is the 'this'?
14	MS. COGGINS: The gap analysis.
15	It's basically providing information
16	so that the people understand, here are the
17	likely things you need to be looking for. Ask
18	your vendor, do they have an alternative method,
19	a non-tactile method for entering the voting
20	system.

If they have got that, check off the

That's basically it.

box; we've got one. And is it in their report.

2	The other thing, too, is, states may
3	have the opportunity to request additional
4	documentation on specific issues, if they are not
5	seeing these clearly identified in the
6	qualification reports that have been issued.
7	So that might be something so
8	that
9	I know they are all concerned.
10	CHAIR HILLMAN: Thank you.
11	Mr. Wilkey.
12	THE EXECUTIVE DIRECTOR: I will
13	stick to the time limit. I don't want to lose my
14	job before I get my first paycheck.
15	First, I want to make just a quick
16	comment to both of you - and I wish that the
17	other ITA was here also.
18	I have had the distinct honor and
19	pleasure of working with you in a prior life over
20	the past number of years and you have always
21	shown a very high level integrity, of
22	professionalism in everything you have done, as

1	well as all of the members of the NASED Board,
2	who have given hundreds of hours of time or
3	talent, without remuneration, without any kind of
4	assistance whatsoever.
5	I just have one question, and
6	primarily for you, Carolyn.
7	You made some general comments about
8	it needs to do this or it needs to this
9	throughout your document. Is it your intent,
10	when you go back, to give us some suggested
11	language that you would like to see?
12	And, Mr. Hazeltine, you could also
13	answer this.
14	CHAIR HILLMAN: Just a second.
15	Could you please repeat your question, Tom,
16	because the signers are having a hard time
17	hearing you.
18	THE EXECUTIVE DIRECTOR: I think you
19	made a number of general comments that it needs
20	to do this or it needs to do that, without giving
21	some specific language that you think would make
22	it better.

1	I ask you this because I don't think
2	there is anyone who has seen this equipment up
3	close and personal as you have.
4	So I think if you could give us some
5	specific language that you would like to see, it
6	would be very helpful.
7	Is it your intent to do that?
8	MS. COGGINS: I think in terms of,
9	in trying to say that something needs to be more
10	detailed, okay, it may be that the language we
11	can provide is, we need a limit. I can't tell
12	you the limit. I can't say - because that's
13	defined in the voting systems. It doesn't allow
14	me to do that.
15	So we can't actually set the
16	standard, per se, but we can indicate, yes, this
17	language, I need a little more detail on what is
18	the limit here. Or, in some cases, like we have
19	seen, there is issues where it's talking about
20	unacceptable font. It would be helpful if you
21	provided, okay, give us four - I'm sorry, not
22	font, format - give us four acceptable formats

and then say you can also do it in publicly
acceptable ones. Honing things down a little bit
makes it easier not only on us, but makes it
easier on the entire community.
Now we have two standard methods of
file transfers.
MR. HAZELTINE: I have no problem
providing additional guidance. I think we can
give you some additional guidance to work with.
CHAIR HILLMAN: Thank you. Thank
you all very much.
And we will break now for lunch.
I will ask if there are any
announcements before we do this.
MS. THOMPSON: Madam Chair, you just
may want to make the announcement again about the
restrooms.
CHAIR HILLMAN: Just a reminder that
the public restroom facilities are on the 8th
floor. They are not on this floor.
And we will begin again at 1:30.
Thank you very much.

AFTERNOON SESSION

2005 Hear	ring
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3	PRESENTATION FROM VENDORS
4	REGARDING THE PROPOSED VVSG
5	
6	CHAIR HILLMAN: The United States
7	Election Assistance Commission's hearing on the
8	proposed Voluntary Voting System Guidelines will
9	resume.
10	Panel Number 2, presentations from
11	vendors, those companies that manufacture the
12	equipment hardware and software that compose
13	voting systems.
14	We have with us today Mr. John Groh,
15	President of Election Systems and Software
16	International, also known as ES&S Mr. Jim Adler,
17	CEO Vote Here; Mr. Alfie Charles, Vice President

and Mr. Dennis Vadura, CEO of AccuPoll.

that we can set up for Panel Number 3.

We will engage with this panel until

about 2:45 and then we will take a short break so

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1	Gentlemen, thank you for being with
2	us. And without any further ado, I will go in
3	the order that I introduced you. So if we could

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4	start with Mr. Groh.
5	I think what we will do is receive
6	your presentations and then we will ask questions
7	following the fourth presentation. Okay.
8	MR. GROH: Thank you, Chairman
9	Hillman.
10	Again, for the record, my name is
11	John Groh. I also serve as Senior Vice President
12	of Election Systems and Software, Inc., which is
13	our American side company.
14	Today I brought along with me,
15	though, a peer of mine, Ken Carbolito, who is
16	Senior Vice President of product development and
17	software development for our company.
18	We want to thank you for inviting us
19	to be here today to present ES&S's views
20	regarding the proposed Voluntary Voting System
21	Guidelines, Version I.
22	I want to acknowledge first the
	89
1	leadership and the hard work that the EAC and
2	your staff has accomplished. It is remarkable to
	•

many of us that are in this business that you

have been able to make as much progress and so

soon.

3

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6	Now let me get into a little bit of
7	the topic today about Version I. But indulge me
8	a little bit to allow me to share a little bit of
9	history on our company, because I think it sets
10	the stage of why we would be someone that could
11	speak to this.
12	For over 35 years, ES&S has been at
13	the forefront of driving election systems
14	innovation and working with election officials to
15	enhance the voting experience for all.
16	We are the largest and most
17	experienced provider of election systems and
18	services, supporting elections across the country
19	and throughout the world.
20	We are very proud of the fact that
21	twice now we have been the first major election
22	systems vendor to certify our entire product line

against the Federal Voluntary Voting System

Standards, first in 1990 and again in 2002.

In our opinion, the adherence to

standards and the rigor of the certification

process is critical to maintaining the integrity

of our elections. Therefore, we will tell you,

we embrace this process wholeheartedly.

8 I offer this background because it 9 underscores the fact that ES&S is not new to the 10 standards or the certification process. We 11 understand a dynamic standards process is key to 12 motivating innovation and continued enhancement 13 of the voting technology. 14 That is why ES&S has been 15 enthusiastically providing input during the TGDC 16 and NIST portion in written form and by attending 17 and participating in all meetings throughout the 18 current guidelines development. 19 Let me give you some general 20 observations. Through this lens of our 21 experience, we are pleased to offer some initial 22 thoughts regarding Version I. Because the draft

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1 guidelines are extensive and were just issued 2 this week, it will take some time to complete a 3 thorough review. 4 Much like the former presenters 5 today, we too will have a peer review of this and 6 will provide very detailed written commentary on 7 this. 8 In reviewing the draft guidelines,

there is nothing more important than giving the

10 process the time and the deliberation it deserves 11 to get it right. And I want to say this again, 12 because we think this is the most important 13 component of this, giving all of us enough time 14 to get this right and deliberate on it correctly. 15 One criteria for us has been 16 paramount, as we look at the process we have been 17 engaged in, and that's feasibility, and that's 18 feasibility for many areas. 19 Technical feasibility because the 20 guidelines must be implemented and have to have 21 any real effect and also in the guidelines, the 22 feasibility of achieving the EAC deadlines of

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1 implementation and covering the additional costs 2 associated with substantial upgrades to product. 3 The EAC and NIST and the TGDC 4 rightly determined that an interim step in the 5 guideline development process may be necessary, 6 with the very specific and limited goal of only 7 addressing significant limitations in the 2002 8 standards. 9 All along ES&S understood that the 10 objectives of this interim process was a 11 complement to the 2002 standards, not really

12	meant to replace them.
13	So our first observation about the
14	proposed guideline, particularly given the
15	intention to pursue a second version soon, is a
16	belief that, in sum and content, Version I may
17	have gone beyond the original intent and scope as
18	defined by the EAC.
19	As proposed, the Version I would
20	impose a substantially new expectation on vendors
21	and election administrators alike. That raises
22	some challenging technical issues I will try and
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1	address.
2	But it also means that the
3	implementation will take significantly more time,
4	add costs and complexity.
5	On this point we appreciate the
6	Version I effective date provision, clarifying
7	that the guidelines will go into effect 24 months
8	after their final adoption by the EAC.
9	Certainly, given all that must be
10	done to develop the new product and testing
11	authorities, we believe it will take at least the
12	afforded time to accomplish this task as a
13	supplier or a vendor. In fact, when you consider

14 that it took five full years to develop the 15 implementation of the 1990 standards and then 16 three years to do the same in 2002, this proposed 17 timeline for Version I is aggressive. 18 However, and again recognizing how 19 firmly we support an evolving standards process, 20 and how committed we are to continued voting 21 system enhancement, know that we will move 22 forward aggressively in that direction.

1	The effective dates provisions are
2	important because they begin to send messages to
3	states and localities that they can move forward
4	with purchasing new systems to meet the HAVA
5	requirements, especially in Section 301, before
6	these new guidelines are in full force.
7	In other words, what we are
8	recommending is the need for a strong
9	reaffirmation that voting systems certified to
10	the 2002 standards achieve the objective laid out
11	in HAVA, providing a substantial improvement over
12	older voting technologies.
13	Every election official who is
14	working to comply with the January 1, 2006
15	deadline must know that they can purchase

16	certified 2002 systems with the confidence that
17	these systems will fulfill the mission and
18	mandate of HAVA.
19	In addition, they should know that
20	they will be able to continue to use these
21	systems for years to come, that they will not be
22	required to replace HAVA-required technology with
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1	new products that meet the proposed Version I
2	until it is necessary.
3	If, in fact, this could be a
4	requirement in the future, they also should know
5	that funding may be provided to cover the cost of
6	a second upgrade of equipment.
7	Without sending a strong message to
8	state and local election administrators along
9	these lines, we believe that some may opt for
10	missing the HAVA deadlines to wait for
11	implementation of Version I, and we think that
12	would be a mistake.
13	Now to the technical issues. The
14	technical context of the Version I, here again
15	with an eye towards feasibility, first, just to
16	reiterate - if the proposed Version I is
17	implemented as it is drafted today, you should
-,	input do it is dialited today, you should

know that compliance will or may require
comprehensive product development.

For those of us who embrace
continually evolving standards and who work hard
to meet the challenges of updated guidelines,

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1	this is a substantial undertaking. At ES&S we
2	have a passion for this innovation so we don't
3	want to say compliance is impossible. But,
4	without question, it will take time and add
5	significant cost and complexity.
6	Take, for example, the setup and
7	validation requirements of Section 6.4, calling
8	for hardware and software verification systems
9	provided through third-party vendors which must
10	perform their function without utilizing the
11	voting system software. This will require a
12	whole new approach to voting system hardware.
13	In addition, to comply, ES&S would
14	have to sacrifice a key security feature of our
15	current voting systems product, the inability to
16	interface with any outside components.
17	We intentionally developed our
18	products without any ports or other connection

points, to eliminate the potential for tampering

20 via connected sources. 21 Now under Section 6.4, the only way 22 we can comply would be to incorporate the very 97 connection port we have excluded from our design. 1 2 Similarly, the voter verifiable 3 paper audit trailer, or VVPAT provision, raises 4 serious concern. 5 To be clear, ES&S applauds EAC's 6 attempt in the proposed Version I guidelines to 7 provide some guidance on this point. 8 Our position on VVPAT has always 9 been that while we have absolute confidence in 10 the reliability, accuracy and the security of our 11 voting systems, we know that many election 12 officials and the public, for that matter, want 13 the added benefit that VVPAT brings. 14 We also understand that this is an 15 important consideration for raising the public's 16 overall confidence in the voting process. 17 For vendors and election 18 administrators who have already started to 19 address the issues of VVPAT, the proposed Version 20 I is overly prescriptive and could very well

erode the progress many of us have already made.

22	Specifically	we are	concerned	abou
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1	the requirement defined in Section 2.2 as it
2	relates to 6.8, which relates to maintaining
3	voter anonymity and providing accessibility for
4	the visually impaired.
5	We support both of those goals.
6	However, to fulfill the specific Version I
7	requirements, including that voter receipts must
8	be shuffled or reorganized in some way, we would
9	have to go back to the drawing board on our VVPAT
10	solution. In fact, we think most, if not all,
11	vendors would be in the same predicament, because
12	many of us - of the available systems today -
13	have used a paper roll.
14	In addition, there is an issue of
15	general inconsistencies between provisions of the
16	proposed guidelines. In considering the Version
17	I as a whole, we have found several instances
18	that we will comment on where the requirements of
19	one section may conflict with the requirements of
20	another.
21	Consider, for example, the following
22	two requirements.

1	In Section 2.2.2.2, it requires that
2	any audio-tactile interface shall allow the voter
3	to have the information provided by the system
4	repeated. But then in Section 5.4.2, it requires
5	that no key or control on a voting station shall
6	have a repeat feature enable. We will need
7	guidance on this.
8	In our more detailed written
9	responses we will provide some additional
10	examples of this same occurrence. Therefore,
11	before finalizing the Version I, some
12	clarifications and revisions in several instances
13	may be necessary.
14	Going to recommendations, taking
15	into consideration feasibility, time
16	requirements, and added complexity associated
17	with implementing Version I, we have three
18	recommendations for the EAC.
19	One, allow election officials to
20	confidently move forward with the current
21	standard; clarify through a safe harbor statement
22	that states and localities that one in need to

1	make purchasing decisions today to comply with
2	HAVA, can do so under today's standards and that
3	systems purchased today will not have to be
4	replaced in the future or when the next version
5	comes out.
6	My second recommendation - I would
7	like to indulge a little bit of the EAC's ability
8	for me to amend my proposal or recommendation in
9	a follow-up further recommendation - but we have
10	stated in two, that because of the time and added
11	complexity and cost of implementing Version I,
12	you may wish to consider to combine Version I
13	with upcoming Version II.
14	This would eliminate confusion in
15	the marketplace and allow all of us the time we
16	need to effectively develop and implement very
17	clear and understandable standards. Today, at
18	this moment, I know much more from this morning's
19	sessions that would require me to say I want to
20	amend this because I think I have more clarity on
21	what you mean by the 24, and then having Version
22	II follow after that 24 month period and not in

l	series, as opposed to overlapping in great
2	extent.
3	Our third recommendation is for you
4	to carefully consider the comments from those who
5	must implement and run the elections: the
5	election administrators that are out there and
7	those who design, develop, build - and the ones
3	you have heard from this morning - test, and
)	deliver this very unique specific technology.
10	So, in conclusion, we thank you
11	again for this opportunity to share our
12	perspective on Version I, its content and
13	challenges around the implementation.
14	We also hope, as you gather input
15	over the 90 days and consider the feedback, that
16	you will call on all of us to assist in any way.
17	Certainly there are aspects of the
18	areas that will require modification and others
19	that raise substantial concern. However,
20	overall, this is a step in the right direction.
21	And, again, we applaud you for it.
22	Again, we will be following up with

1 additional and more specific written feedback

2	almost weekly. In the meantime, please accept
3	these comments as a first contribution to this
4	process.
5	CHAIR HILLMAN: Thank you.
6	Mr. Adler, before you begin, I want
7	to make a clarification here for the benefit of
8	the record.
9	The proposed Voluntary Voting System
10	Guidelines that the Election Assistance
11	Commission has put forth, we do not consider this
12	a Version I. We are not thinking about this in a
13	Version I, Version II.
14	And I understand there was earlier
15	language that may have led people to believe
16	that.
17	But our responsibility was to issue
18	guidelines and the Technical Guidelines
19	Development Committee did put forth
20	recommendations that would augment and update the
21	2002 standards, as well as covering some
22	additional components.

1	We recognize that it was almost
2	impossible, in nine months, for the Technical
3	Guidelines Development Committee and NIST to have

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4	done a thorough covering of everything that needs
5	to be addressed. And so we expect and do plan
6	that we will add to the proposed guidelines.
7	But we do not discuss it We
8	aren't, at this point, discussing it as a Version
9	I/Version II. We don't want to confuse anybody
10	that we are going through all this effort on a
11	Version I that might be replaced in very short
12	order by a Version II.
13	There will be one version of the
14	guidelines and they will be updated and augmented
15	as the Technical Guidelines Development Committee
16	and NIST has time to do work on, but not in any
17	way to have people think that this will be set
18	aside and totally replaced.
19	MR. GROH: And I thank you for
20	clarifying it. That is one of the major intents
21	of coming to meetings like this, to have this
22	interface.

1	We get clarification where there may
2	be some, as we have interpreted, a wrong
3	misinterpretation.
4	CHAIR HILLMAN: No problem. I just
5	wented to make cure that we were all

6	The other point that I meant to
7	address before the panel presentation began is
8	how we determined what the presentations from the
9	vendors would be today.
10	We were looking for a blend. There
11	are many vendors who make voting systems.
12	And I am just going to call on our
13	General Cousel, Juliet Thompson, to give a brief
14	explanation as to what we were seeking to
15	accomplish by the diversity and representation on
16	this panel.
17	MS. THOMPSON: Thank you, Madam
18	Chair.
19	And, as you aptly pointed out, there
20	are many voting system vendors out there and we
21	expect to hear from all of them during the
22	process of this comment period.

1	But for the purposes of this panel,
2	we applied several factors, one of which was the
3	types of voting systems that they manufacture:
4	to include optical scan; to include touch screen;
5	and to include full face DRE voting systems, as
6	well as components.
7	And the second set of factors would

8 be, of course, to be representative of those 9 vendors that are out there in the marketplace, 10 some large vendors, some small vendors. 11 CHAIR HILLMAN: Thank you. 12 Mr. Adler. 13 MR. ADLER: Thank you, Madam Chair, 14 Vice Chair DeGregorio, Commissioner Martinez. 15 Am I on? 16 THE CHAIR: Yes, 17 MR. ADLER: I am now. 18 THE CHAIR: Just move the mike 19 closer. 20 MR. ADLER: Mr. Wilkey, Ms. 21 Thompson.

Thank you for having me here today.

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1 My name is Jim Adler and I am President of Vote 2 Here, a company I founded in 1998 with a vision 3 to create for more transparent and auditable 4 elections. We provide independent verification 5 technology for both electronic and paper ballot 6 processing, to prove the voting machines, ballot 7 processing and back-end tabulation systems are 8 performing properly.

In the U.S. and abroad, our

10	technology has served more than 12 million
11	voters. I currently coach the IEEE Voter
12	Verifiable Standards Committee. I have
13	testified before the U.S. House Government Reform
14	Subcommittee or TGDC, your TDGC, the National
15	Institutes of Standards and Technology and many,
16	many, many State Legislatures
17	Since you will be hearing a lot
18	about what is wrong with these standards in the
19	coming months, I thought it might be a good
20	opportunity to tell you what's right about them.
21	After being involved with the IEEE
22	voting system standards for the better part of

1	two years, I understand what a daunting process
2	this really is. Given the time constraints and
3	contention around some of these topics, I think
4	getting this body of work completed on time is
5	really a huge accomplishment.
6	It is comprehensive, well-organized
7	and thorough. You, the TGDC, NIST should all be
8	commended on getting to this point. It's a great
9	accomplishment.
10	To respect the time constraints, I
11	won't make any detailed comments today. But as

12	many others have said, follow up.
13	I would like to touch on two broad
14	topics, primarily with regard to the issue of
15	independent verification, one on classifying what
16	you are calling independent dual verification
17	solutions, and the other on component
18	certification. So let me deal with those in
19	turn.
20	In the April 2005 Voluntary Voting
21	System Guideline submittal to EAC, NIST and TGDC
22	widely settled on defining independent dual
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1	verification - and I will use the acronym IDV for
	·
2	that - as a new class of voting system component.
3	In the original submittal to EAC,
4	TGDC defined independent verification, even set
5	requirements for all IDV systems. And then in
6	subsequent sections they defined requirements for
7	a split process IDV systems, witness IDV systems
8	and cryptographic IDV systems and VVPAT IDV
9	systems.
10	In the introduction to the VVPAT
11	requirements, the original TGDC standards say,
12	"VVPAT is a form of independent verification

system." This was an excellent classification.

14	It defined a variety of safety
15	equipment, if you will, for voting systems, just
16	like Federal standards define automotive safety
17	equipment - like seat belts, airbag, windshield
18	safety glass, and other safety innovations that
19	improve passenger safety.
20	Specifically, in the IDV sections,
21	in this instance the TGDC did a great job of even
22	establishing detailed requirements on IDV

1	alternatives.
2	This classification was consistent
3	with public comments by the EAC Commissioners,
4	previously and today, on the availability of
5	other IDV methods to accomplish the goals of
6	election, confidence and audit.
7	However, in the proposed VVSG, the
8	classification has been lost. In Section 6 the
9	VVSG now sets VVPAT requirements in a vacuum.
10	The other IDV alternatives available
11	today are put in an appendix in the back of the
12	bus, and the VVPAT standards are provided outside
13	this appendix with no context.
14	The VVSG doesn't say what the VVPAT
15	is or what it intends to accomplish. It just

says that the requirements are provided for
system certification, testing for those states
that have decided to include VVPAT.

Understandably, this is a nod to the
political activism that has gripped many State
Legislatures on this issue, but the standard is
needlessly silent on the context.

1	And there is a larger issue here.
2	As we talked about today, these
3	standards will establish guidance now and policy
4	for years to come. Several states are now
5	recognizing the need for IDV but are savvy enough
6	to perceive the unintended consequences of VVPAT.
7	Specifically, they see the erosion
8	of voter privacy through the current reel-to-reel
9	VVPAT designs, the lack of an accessible VVPAT
10	for disabled voters, the dilemma faced when VVPAT
11	ballots are mishandled and don't match the
12	election results, and even question the
13	effectiveness of VVPAT in bolstering voter
14	confidence when in early tests voters are not
15	even checking the VVPAT printout or voters want a
16	receipt they can take home, just like at the ATM.
17	My point is not that VVPAT is all

bad. But the harmful thing about recent activism
and legislation is that these issues of efficacy,
privacy and accessibility have not been carefully
considered, which means that VVPAT may very well
undermine the same confidence its supporters have

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1	aimed to bolster.
2	Any election solution, especially an
3	IDV solution, should be required to demonstrate
4	real measurable effectiveness before it is
5	legislated or established as a standard that
6	stands alone without equal.
7	So I would urge you to revert back
8	to the classification that the technical experts
9	at NIST and the TGDC recommended in their
10	original submission last April. This will allow
11	for best solutions that meet these efficacy,
12	privacy and accessibility requirements needed for
13	all voters, as well as will minimize the costs
14	and administrative burden.
15	Of course the objective that is
16	often raised is that other methods of IDV are far
17	into the future and have not yet been Federally
18	qualified, certified.

Well, the fact is, IDV approaches

20	have been researched for the last 25 years and
21	have been put into products over the last seven.
22	The real problem is that IDV
	112
1	solutions can't get independently certified,
2	which brings me to my next comment.
3	The VVSG establishes IDV standards.
4	But current NASED polcy and VVSG Volume II don't
5	allow for certification of independent
6	components.
7	This policy allows for a complete
8	voting system to be certified. And I would ask
9	that you reconsider this policy as Federal
10	testing is transferred to the EAC.
11	The effect of this current
12	system-only certification policy is that
13	components like IDV components can only be
14	certified within an entire voting system, a
15	policy that leads to a classic Catch 22
16	conundrum.
17	With the current policy, voting
18	system vendors won't integrate and certify best
19	of DRE components unless customers demand them.
20	But jurisdictional customers are
21	reluctant to demand them or statutorily can't

demand them unless they are Federally certified.

1	The dynamic is especially accute in
2	several states right now that want IDV choices
3	but can't get them because the current process
4	does not allow for component level certification.
5	I think Carolyn Coggins talked about
6	the paralysis that is out there on this issue.
7	This is one of them.
8	So I would like to make a modest
9	proposal for component level Federal testing to
10	help rectify the situation and allow market entry
11	for best-of-breed specialties.
12	Component level Federal testing
13	would be in two phases. The first phase would be
14	component level certification testing, which
15	would require component vendors to deliver a
16	technical data package and a test harness. The
17	test harness would be used to test the component
18	against the component vendor's TDP and the
19	applicable EAC standard. When successful, a
20	component level certification number would be
21	given.
22	The second phase would test the

1	integrated voting system with the pre-certified
2	component. This would test for a successful
3	integration of the certified component into the
4	voting system.
5	And when successful, the voting
6	system would be given a certification number that
7	included the certified component.
8	Assemblance of this process already
9	does exist today when a vendor of a certified
10	voting system submits, say, an audio component
11	for Federal certification. That component is
12	evaluated on its own merits at the component
13	level and then as part of the entire voting
14	system at the system level.
15	The new policy would remove the
16	current barriers to innovation by allowing
17	Federal certification of components and allow
18	interested states and counties to escape their
19	Catch 22 deadlock. It provides jurisdictions
20	choice and assurance that components meet Federal
21	standards, while getting the bulk of Federal
22	testing done early.

1	As you know, jurisdictions face
2	looming immovable deadlines. I know, I guess
3	it's a requirement that every panelist must say
4	that.
5	So anything to expedite testing
6	would help.
7	So in conclusion, I would like to
8	make a comment about the use of technology in
9	elections. Frankly, there is a distinct
10	anti-technology movement that has gripped
11	election reform. Given the current polarized
12	political climate and general technology fatigue,
13	the backlash is understandable.
14	However, in my home state of
15	Washington, we all witnessed the recent
16	Governor's race that dragged on for six months.
17	An election where 90 percent plus of
18	the ballots were cast on paper, it is often said
19	by voting critics that a voting system must prove
20	to the loser that they lost.
21	Well, the paper trail, as tested in
22	Washington, did not meet that standard.

1	After watching this, it is clear
2	that election officials simply just don't have
3	the technological tools to deal with the
4	increasingly close races and heated scrutiny and
5	heightened public attention.
6	It's like we are asking them to
7	accurately weigh a flea on a bathroom scale.
8	It's just not a fair position to put them in.
9	The current VVSG IDV standards are a
10	step toward providing these tools. But
11	expediency is key.
12	In many ways Federal agencies are
13	not geared to build airplanes while they fly
14	them, but this is the unenviable position you
15	find yourselves in.
16	Delays like the 90 day comment
17	period and the 24 month effectivity date are
18	necessary and unavoidable.
19	The comments I have made today will
20	help immediately by providing guidance to
21	jurisdictions that are currently looking for more
22	effective IDV, and by providing a Federal testing

1 policy that can expediently and responsibly

2	certify them.
3	As you deliberate on the testimony
4	you hear today, it is important to keep in mind
5	that your policies will have one of two possible
6	outcomes, especially in the area of independent
7	dual verification.
8	Either IDV competition will be
9	discouraged with jurisdictions being locked into
10	VVPAT, or jurisdications will have choice in
11	their IDV solutions, fostering a climate of
12	innovation.
13	The VVPAT movement, I am afraid, has
14	largely ignored the competing requirements of
15	privacy, accessibility and voter confidence.
16	A climate for innovative IDV
17	solutions just won't be able to get away with
18	ignoring these competing requirements because the
19	competitive market pressures just won't allow it.
20	So, again, I thank you for the
21	opportunity to speak to you today. I certainly
22	will be following up with more detailed comments

- 1 and, of course, happy to answer any questions.
- 2 CHAIR HILLMAN: Thank you.
- 3 Mr. Charles.

4	MR. CHARLES: Good afternoon, Chair
5	and Commissioners.
6	Sequoia Voting Systems has a 100
7	year history of providing election equipment,
8	supplies and support for state and local
9	officials.
10	We print ballots, manufacture
11	optical ballot readers and provide two different
12	types of direct recording electronic voting
13	systems.
14	During the 2004 Presidential
15	election, Sequoia was the largest provider of
16	electronic voting machines in the nation. And we
17	were the first national company to provide a
18	voter verifiable paper record on electronic
19	voting equipment in a major election.
20	We appreciate the opportunity to
21	participate in this hearing today and commend the
22	EAC, the TGDC and NIST on moving quickly under
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1	under tight timetables to assemble the latest
2	draft of the amended Voluntary Voting System
3	Guidelines.
4	My comments today will focus on the

following key areas: first - the content of the

6	guidelines generally; second - the timeline
7	required for compliance with the guidelines and
8	the expectations of the marketplace; the
9	effective date of the regulations; the Federal
10	testing and certification process; the state
11	testing and certification process; and, finally,
12	the need to evaluate and revise the guidelines
13	over time.
14	While we will reserve detailed
15	comment on the specific components of the
16	guidelines for our written submission, we believe
17	that by and large the draft addresses the types
18	of issues that needed refinement from the 2002
19	standards, particularly in the development of the
20	optional requirements for voter verifiable paper
21	records in the inclusion of human factors and
22	security criteria.

1	We will, however, provide the
2	Commission with a lengthy set of written comments
3	that address areas that we believe warrant
4	correction, clarification or revisions.
5	Our primary concern regarding this
5	draft of the guidelines is the inclusion of
7	requirements that are not necessarily testable by

8	the voting system testing labs because they are
9	either ambiguously worded or because they rely on
10	the manner in which the system is implemented, by
11	local administrators, rather than a design of a
12	system itself.
13	These standards and the systems that
14	result from them are but one piece of the
15	successful conduct of elections. The policies,
16	procedures and people that conduct elections are
17	of equal importance. But to the extent possible,
18	that document should address technology
19	requirements and leave the proper implementation
20	of the system to state and local statutes,
21	procedures and best practices.
22	Our written remarks will attempt to
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1	point out those areas which we believe are better
2	suited for best practices guides and local
3	procedure than inclusion in these technology
4	guidelines.

Through no fault of the Commission,

10 the statutory mandates of HAVA. 11 With the 2006 deadline for 12 compliance rapidly approaching, it is important 13 now more than ever for the Commission to help 14 election officials realize that these standards 15 will not be in place and operational prior to the 16 date that equipment purchase decisions will have 17 to be made for compliance with HAVA. 18 Once the guidelines are finalized 19 and ready to be approved later this year, 20 technology providers will develop and implement 21 any required revisions to hardware and software, 22 the testing authorities will need to be certified 122 1 to test against the new criteria, and the EAC 2 will need to finalize its process for managing 3 certification requests and interpreting the 4 guidelines as testing gets under way. 5

12 need to be educated about the changes. 13 There simply isn't enough time for 14 that all to happen prior to the 2006 primary 15 elections in many cases. 16 The last time standards were 17 modified, it was a full three years before 18 equipment tested to the new standards was 19 available in the marketplace. While many of the 20 new features and requirements in this draft are 21 already incorporated into many systems, testing 22 against these standards will not be possible for 123 1 some time. 2 Fortunately for election 3 administrators, time required to meet these new 4 standards should not be confused as an impediment 5 to state or county compliance with HAVA mandates

for 2006. There are a large number of voting

systems available in the market today, both with

and without voter verifiable paper records, that

have been tested under both the 1990 on 2002

standards and will allow election officials to

meet the demands of Section 301 of HAVA.

facing the Commission will be selecting the

One of the most important decisions

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14	appropriate timelines and details associated with
15	the implementing of the new guidelines.
16	The draft discusses a 24 month
17	period after adoption before the guidelines will
18	be in full effect.
19	But it is unclear if that will
20	result in the decertification of all non-
21	compliant systems that have been successfully
22	tested to earlier standards, or if the

1	implementation date will simply prevent future
2	certification of non-compliant systems.
3	The ramifications of the way the
4	effective date is implemented warrant
5	considerable review and discussion with state and
6	local officials.
7	Continued ongoing changes to
8	standards may be important and useful, but they
9	will also require continued funding to modernize
10	equipment at the local level. It's funding that
11	isn't currently contemplated at the Federal level
12	and I don't think most states and counties have
13	anticipated funding on an ongoing basis.
14	The EAC should consider the
15	reasonable likelihood of Federal funding before

et cetera.

determining the manner in which this and future
standards will need to be implemented.

Voting systems are comprised of a
series of components that can be tested against
existing standards. Components can include the
voting machines, the software, ballot activators,

1	When qualified components are
2	combined to create a system, the entire
3	end-to-end system is tested before a Federal
4	qualification number is assigned. When any
5	aspect of a component is revised, that component
6	in the entire system must be tested together.
7	If components have been tested to
8	different sets of standards, the complete system
9	is only qualified to a particular version of
10	standards when every component of that system has
11	been tested to that same level.
12	For example, the complete system is
13	only certified to the 2002 standards after all
14	components are qualified to the 2002 standards.
15	If one out of 10 components is qualified to the
16	1990 standards, then that standard still carries
17	the 1990 qualification number

18 If in setting the effective date of
19 these guidelines the EAC no longer allows
20 modifications to the older systems in use today
21 without bringing out pieces of hardware and
22 software up to new standards, local officials who

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1 have a 1990 or 2002 system could be significantly 2 affected when local/state law changes occur. 3 If a county needs to modify one 4 component of their system to comply with the new 5 state law, it could be faced with a possible 6 replacement of an entire voting system that would 7 otherwise be perfectly functional and compliant 8 with prior standards, state needs and HAVA 9 mandates. 10 However, if provisions to individual 11 components can be tested to the latest standards 12 while the complete system retains a certification 13 number reflecting the standards against which it 14 was originally qualified, there shouldn't be any 15 significant fiscal burden imposed on local 16 officials. State law changes will be able to be 17 accommodated more readily. 18 Some states accept Federal 19 guidelines for certification; other states

conduct their own testing process; still others
 combine Federal testing with state reviews. The
 multiple layers of often duplicative review are

1	costly, time consuming and delay the latest
2	innovations from getting into the market.
3	In developing test policies, we
4	encourage the EAC to invite states to provide
5	Federal testing authorities with a checklist of
6	local requirements so that duplicative
7	examinations can be streamlined and state
8	resources can be saved through concurrent state
9	and Federal testing.
10	Once the guidelines and testing
11	procedures are in place, the EAC will need to
12	evaluate them over time to identify and correct
13	potential weaknesses. We suggest this review
14	should not begin until after the newly qualified
15	systems are deployed and in use for at least two
16	elections.
17	One of the greatest mistakes this
18	Commission could make would be to revise
19	standards too frequently without providing ample
20	time for a particular version of the standards to
21	be put in place and studied.

Many election officials will to	III te	WIII	lS	ziai	110	OH	ection		Many	2	22
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1	you that it takes at least two elections to work
2	through all of the logistical and procedural
3	issues that come with the transition to a new
4	voting system.
5	The quidelines before you today are
6	the result of work that started before even one
7	major election was subjected under the 2002
8	standards.
9	We recognize that with the passage
10	of HAVA, Congress charged you with the duty to
11	provide for the certification and decertification
12	of voting systems and that state policy decisions
13	created a need for VVPAT guidance.
14	But we strongly suggest that once
15	these standards are adopted, they are given time
16	to be tested in the field before a new batch of
17	requirements are developed.
18	The rapidly changing standards
19	process has required companies in our industry to
20	spend an inordinate amount of time revising
21	technology to meet changing guidelines, when that
22	time could have well been spent adding the

1	features and benefits, like VVPAT, that have been
2	demanded by the market in many places.
3	Sequoia Voting Systems believes that
4	when completed, the voluntary systems guidelines
5	will continue to ensure that voting technology is
6	reliable, secure and accurate.
7	To assist the EAC to make the most
8	of this project, we respectfully offer the
9	following recommendations:
10	First, as you are doing today and as
11	you have done throughout the policy decisions
12	this Board has made, solicit comprehensive verbal
13	and written comments from all stakeholders;
14	Second, provide a detailed public
15	timeline to help local officials understand how
16	we get from the draft regulation phase of this
17	process to the evenutal use of VVSG compliant
18	equipment at the polls;
19	Third, rather than waiting 24 months
20	to implement the proposal, allow the regulations
21	to take effect immediately upon adoption or as
22	soon as testing authorities are able to review

1	the systems, provided, however, that individual
2	components in the systems may still be qualified
3	against prior versions of standards, as long as
4	they are appropriately noted as such on testing
5	reports and on published lists of certified
6	equipment;
7	Fourth, facilitate concurrent
8	Federal and state testing through the development
9	of a checklist of state-specific criteria which
10	can be tested by the federally approved
11	laboratories, as necessary, to help streamline
12	the state certification process;
13	Fifth, allow equipment tested under
14	these regulations to be deployed and monitored
15	for at least two elections before initiating a
16	new set of Federal criteria.
17	We appreciate the invitation to
18	provide our thoughts to this hearing and welcome
19	the opportunity to continue to work with the
20	Commission on this project and we plan to submit
21	our detailed written comments on a line-by-line
22	basis within the next couple of weeks.

1	Thank you.
2	CHAIR HILLMAN: Thank you very much.
3	Mr. Vadura, we are at somewhat of a
4	little handicap here because we don't have copies
5	of your
6	MR. VADURA: I understand.
7	CHAIR HILLMAN: So if you would just
8	be so kind in making your presentation to bear
9	that in mind.
10	I mean, like he speaks fast but I
11	can read fast, so I was able to keep up with him.
12	So just bear with us as we take notes from your
13	presentation.
14	MR. VADURA: That's fine. Can
15	everybody hear me?
16	Flight schedules last night
17	prevented me from printing them, so I will
18	provide copies to the staff.
19	Good afternoon, Madam Chair and
20	Commissioners. My name is Dennis Vadura. I am
21	co-founder and chairman of AccuPoll and AccuPoll
22	Holdings. We are the only public company in the

1 space that is dedicated solely to voting.

2	And I would like to thank the EAC
3	for inviting AccuPoll and myself to participate
4	in this panel.
5	AccuPoll has been promoting a voter
5	solution that includes a voter verified paper
7	audit trail, or what's now called VVPAT, since
3	AccuPoll's inception.
9	Our view is that VVPAT is to
10	electronic voting what stairs are to tall
11	buildings. It is the essential safety net that
12	allows for emergency action in the event of a
13	disaster.
14	The key to a legitimate democratic
15	government is a trusted election process.
16	America works hard to promote democratic ideals
17	all over the world and with HAVA we are making
18	sure that we provide trusted and private
19	elections for all of our citizens.
20	AccuPoll is all about promoting
21	trust, accessibility and practicality in the
22	voting process.

1	In this regard we welcome the
2	updated standards for voting systems and would
3	like to offer the following comments with respect

4	to these new proposed standards.
5	We believe that it is possible to
6	create a VVPAT that is both accessible and
7	private. The disability community has fought
8	hard for HAVA and have gained the right under
9	HAVA to vote unassisted and in private. We see
10	no reason that a voter verified paper trail needs
11	to be engineered such that it removes any of
12	these rights. We welcome the inclusion of these
13	HAVA requirements in the revised standards.
14	AccuPoll has recently made changes
15	to its voting system such that we can demonstrate
16	today a practical VVPAT solution that is both
17	accessible, private and, based on our current
18	understanding of the standards, essentially
19	compliant with the proposed standards.
20	We will be demonstrating our
21	solution at the upcoming NASS conference and
22	encourage all that are interested to come and

2	The key features of our approach is
3	audio feedback of the VVPAT for every voter,
4	whether they are sighted or not, provisions for

view our approach.

5 privacy of the voting process and of the VVPAT

5	for the voters that require additional assistance
7	as they complete the voting process, and still
3	maintain their privacy.
9	AccuPoll essentially agrees with the
10	disability community that optical scan ballot
11	marking systems are not accessible voting systems
12	and are, therefore, not complaint with HAVA
13	accessibility requirements.
14	Optical scan systems on their own do
15	nothing to help a disabled voter vote in private
16	and provide no easy and accessible confirmation
17	that a voter's intent was correctly read or
18	recorded.
19	Ballot marking systems that
20	complete an optical scan ballot for a disabled
21	voter do nothing to assist a voter that is not
22	able to handle a paper ballot on their own and,
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1	the market and the continue of
1	therefore, may create a privacy issue for a
<i>L</i>	disabled voter.

therefore, may create a privacy issue for a
disabled voter.

AccuPoll does, however, have issues
with certain aspects of the proposed voting
system standards. Given the recent update, like
our colleagues here, we will be providing a
detailed set of comments regarding specific

21

22

05 Hearing		
8	issues that we see with the current draft of the	
9	standards.	
10	Most notably, we see some possible	
11	ambiguities and a need for additional clarity	
12	with respect to certain certification issues and	
13	limits as were discussed by Carolyn earlier.	
14	In keeping with the practice of the	
15	Federal Voting System Standards that set	
16	requirements and not implementation choices, the	
17	current standards for voting systems must set	
18	requirements rather than mandate engineering	
19	solutions. In this way the standards would allow	

the marketplace to develop the most cost

effective and practical solution while ensuring

compliance with the standards and with HAVA.

1	We are also concerned with too many
2	changes or evolution cycles and amendments to the
3	standards.
4	While it may take the ITA's a short
5	period of time to ramp up and test against new
6	standards, it takes at least six months for
7	vendors to update and certify their systems to be
8	compliant, after which there are renewed state
9	certification requirements before the revised

10 changes can be made available to customers. 11 The state certification process may 12 take in excess of an additional six months. 13 We, therefore, suggest that the 14 revised standards be finalized, issued and not 15 altered for at least two years. This excludes 16 interpretation bulletins that would clarify an 17 interpretation of the requirement, rather than 18 modify or add new requirements. 19 We owe it to our customers and to 20 the ITA's to maintain stability in the 21 requirements so that products can be engineered 22 and marketed on reasonable timelines and costs in 137 1 what really is anything but a traditional 2 marketplace. 3 In our view, it is better to wait 4 six months and issue a document that is well 5 thought out, rather than issue early and amend 6 later. Thank you. 7 CHAIR HILLMAN: Thank you very much. 8 Commissioners, we are running a 9 little bit late on this panel. So what I propose 10 we do is to make up our time into our break

period.

12	We will still plan to have the third
13	panel start its presentation at 3 o'clock and we
14	will need a few minutes to just set the table up
15	for the third panel and that would give us the
16	ten minutes per Commissioner questioning, that
17	will allow you time to engage with the panelists.
18	So, if that works, Commissioner
19	Martinez.
20	COMMISSIONER MARTINEZ: Thank you
21	Madam Chair.
22	My thanks to all of you for making

1	the time and the effort to be here and to testify
2	and certainly I look forward to receiving more
3	comprehensive, as I know you all will provide,
4	written testimony during the 90 day comment
5	period on the proposed VVSG.
6	John, let me start, if I could, from
7	your perspective. I think one of the things that
8	you have identified is the difficulty in the
9	language in the current draft of the VVSG, which
10	would require randomization of the VVPAT paper,
11	as opposed to, I guess, the current technology of
12	reel-to-reel.
13	Just, if you can talk a little bit

14 on that from your perspective, why that is 15 such a significant change from the vendors' 16 perspective. 17 MR. GROH: Well, again, I will speak 18 for to us and not try and speak for others. But, 19 you know, all of us see each other's technology. 20 And as we approach this and try to 21 target getting a solution out there as we 22 anticipated this coming, we all looked at what

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1 would be a best practice from the standpoint of 2 making it easy for the poll worker to use, very 3 easy for the voter to interface with and look at 4 and understand that there were limitations with 5 how to interface with our technology. 6 One of the major concerns we had is 7 how do you handle this at a precinct when you run 8 out of paper or have a paper jam. So I think all 9 of us chose to use a reel type of voting system 10 where paper is going to roll up in a rolling 11 process. 12 If we are required to shuffle it, we 13 will have to basically scrap that and start with 14 something else that will be much different than 15 what we initially perceived and that will take --

16 that takes some time and a lot of expense to it. 17 COMMISSIONER MARTINEZ: Is the 18 difficulty that you perceive one of technological 19 feasibility or is it more that you designed it in 20 a way that you thought would be more poll worker 21 friendly, if you will? 22 MR. GROH: As Mr. Adler has talked 140 1 about, there are other methodologies of doing 2 this. So this is one. And understanding we do 3 not adhere to this as the only prescriptive way 4 to do it, but if you are going to offer it as one 5 of the solutions, you also must recognize that 6 poll workers and election administrators need to 7 manage this and handle it. 8 And, as we know, loose pieces of 9 paper have a tendency to get lost. 10 Paper rolls then that are going to 11 have to be cut and also be kept for cancellation 12 on ballots if somebody wants to cancel that 13 ballot or that record on there, when you start 14 having them now cut and commingle, we just saw 15 the inevitable problems with those. 16 COMMISSIONER MARTINEZ: I appreciate 17 that, John.

18	Anybody else on the panel would like
19	to comment?
20	Mr. Adler.
21	MR. ADLER: I think that every
22	election system has to meet simultaneous
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1	requirements of privacy and accessibility and
2	effectiveness and election administration.
3	And if you relax any of those
4	requirements, you run into problems.
5	I mean, one of the objectives we had
6	was to simultaneously solve all of these issues.
7	And if you start to relax them, you start to
8	either infringe on people's civil rights or their
9	expectation of privacy or you start to create a
10	system that can't be administered.
11	And, hence the plea for a climate of
12	innovation.
13	COMMISSIONER MARTINEZ: Mr. Charles.
14	MR. CHARLES: We deployed a system
15	in Nevada that had reel-to-reel design. And what
16	we found was that it was much easier for poll
17	workers to administer that approach and more
18	prone to successful use throughout the day.
19	I think that the language in the

20	existing draft is permissive. It may permit you
21	to or It doesn't state that you have to cut
22	those ballots and shuffle them.
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1	But I think if you added language to
2	it that permitted administrative procedures to
3	ensure the protection of the anonymity of those
4	ballots, that would go a long way to resolving
5	that concern.
6	Because what we see is a
7	self-randomization of those records. When the
8	voter comes into the polls, the voter can use any
9	machine in the polling place.
10	When those records come back, they
11	are sealed and stored and not accessible to the
12	people who may have seen how someone voted.
13	So if you can incorporate
14	administrative procedures into that or at least
15	allow the use of administrative procedures to
16	help assure that randomonization and privacy, I
17	think you accomplish two goals.
18	One, you allow the most funcational
19	and reliable technology to be used. But you also
20	solve the concerns about voter privacy.

COMMISSIONER MARTINEZ: Mr. Vadura,

any comment?

1	MR. VADURA: Our current solution
2	doesn't use a reel-to-reel, but still maintains
3	the voter privacy issues.
4	And I think the particular
5	requirement requiring the shuffling of the pieces
6	of paper is both probably unnecessary and
7	overburdensome and also probably too costly.
8	There are cheaper solutions to get that done.
9	So, administratively, in the polling
10	place, I believe in another section of the
11	standards it says that you can't, polling
12	officials can't have access to that paper trail
13	during the election day.
14	But if you have a paper jam, you
15	have to have a practical way to clear that paper
16	jam in that kind of scenario. So I think there
17	are some issues with the standards with respect
18	to that particular requirement.
19	MR. GROH: Commissioner Martinez,
20	this morning I want to answer a question that
21	you asked this morning and make sure all of us
22	would respond to it.

L	Tou had asked in the responses, will
2	you make recommendations. From our perspective,
3	as a developer, we will make recommendations in
1	ours for language. So we will try and give you
5	some words or language around that that will help
5	you get your arms around it.
7	COMMISSIONER MARTINEZ: Thank you
3	The next question, I want to go back
)	to something that I was talking about this
10	morning with the testing labs. And I don't know
11	if everybody, if all four of you were in the
12	audience. I think Jim and John, I think you were
13	both here, so you all heard the exchange.
14	The topic that I brought up was the
15	issue of a Version II, which our Chair talked
16	about a little earlier.
17	And I just want to get - because
18	actually the response from the system, from the
19	testing labs was - it really doesn't impact us
20	greatly. But they thought certainly the vendor
21	perspective and perhaps even the state and local
22	election administrators, et cetera, that it could

1	have a greater impact.
2	Just a quick comment or two about
3	the issue of Because I know I am having to
4	contemplate what happens next.
5	Already we are thinking about, all
5	right, so if we go through the next 90 days and
7	we end up with the final product that we adopt as
8	the next iteration or the latest voting system
9	guidelines, then what happens?
10	Obviously, the Help America Vote Act
11	creates this umbrella organization - the
12	Technical Guidelines Development Committee -
13	which I think has brought tremendous expertise to
14	the table.
15	The question becomes how do we
16	utilize that, as well as our partnership with
17	NIST? And what happens next? Do we begin
18	working right away on a full blown version or
19	full blown revision, if you will, of what we have
20	just adopted in final form? Or do we
21	That's why I was trying to get
22	myself educated to the current process, and that

1	is, that when we find deficiencies in the current
2	product, that we address them to an amendment
3	process, for example. And is that perhaps easier
4	to deal with from every perspective - vendor,
5	election administrator, et cetera?
6	Any comments?
7	Mr. Charles, you have heard the
8	exchange. Any comments about that whole topic?
9	MR. CHARLES: I think it's important
10	to distinguish between the ease of the testing
11	laboratories in testing the equipment and the
12	difficulty it takes for us to make the
13	modifications and submit them to the test.
14	So there is a much lengthier time
15	for to us to do the work we need to do before we
16	get it to them.
17	I think the first step ought to be,
18	develop a way to judge any gaps in these
19	standards by observing the elections after these
20	standards are adopted in the field.
21	I think develop a criteria for
22	reviewing what happens in elections, determine if

1 there are pieces of these regulations that are

2	overly burdensome or areas that are missing and
3	develop that framework so you can study.
4	And then once you have studied them
5	in practice in an election, then you can apply
6	that to the next round.
7	But I think revising them before we
8	see them in the field is working more on theory
9	than on practical application. And that may not
10	be the best use of the time.
11	COMMISSIONER MARTINEZ: Mr. Groh
12	any comment on that?
13	MR. GROH: Well, the competitive
14	nature of this market means that many of us are
15	already working on these.
16	But, again - and somebody used the
17	analogy of, we are trying to build a plane while
18	it's running down a runway.
19	And for us, as a vendor community,
20	there is one component I want to remind
21	everybody. We are going to run, from our
22	company's perspective, about 5000 elections

- 1 between now and next November. And that also
- 2 keeps us very busy.
- 3 So running these parallel paths, I

4	don't have the luxury of stopping, working on the
5	elections, fixing small things that are changes
6	in election rules.
7	So we are aggressively pursuing
8	them, but it will take us time.
9	I agree with Ms. Coggins's comment
10	this morning, that the vendors that have gone
11	through this numerous times are at a great
12	advantage because we understand it.
13	But I can tell you the difficulty
14	that we have of submitting something that we feel
15	fits and meets what the requirements are and then
16	when it is tested there are things that are found
17	that we hadn't thought of. And that's part of
18	the process that you go through to flush those
19	out.
20	But that's what takes the 18 months,
21	the 16 months to do, it's the back and forth.
22	And we can't just stop and say let's hold
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1	elections for four years, get all this done, and
2	get a final product out there.
3	We are at the same time trying to
4	supply the election sites.

COMMISSIONER MARTINEZ: Mr. Adler,

5	Mr. Vadura, any comments?.
7	MR. ADLER: I think there is two
3	buckets here. There is quite a bit of election
9	technology that is well understood and is going
10	to change in a much less frequent rate than say
11	the side of business that, where you are focused,
12	which is on voter verified paper audit trails and
13	independent verification systems, where things
14	are theoretical right now, quite frankly.
15	And these devices are just starting
16	to move into the market and having a mechanism to
17	be able to adjust, where in many respects the
18	states are now laboratories in this field, in
19	this area. And being able to have guidance and
20	being able to draw on NIST experts and your own
21	experience to help states navigate that and have
22	a real mechanism to help the certification
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1	process would be very valuable.
)	COMMISSIONER MARTINEZ: Mr. Vadura,
3	any comment?
<i>-</i> 1	MR. VADURA: Yes. I will speak for
5	us. We just completed our 2002 certification on
	· ·
5	our complete system with, including a VVPAT. And

we got through the Federal certification process,

6

8	that took some amount of time.
9	We then have to now go through state
10	certifications in various other states, which is
11	fine; that's the way the business works.
12	But the issue is if you make too
13	many changes too frequently, we are in a constant
14	state of certification somewhere at that point.
15	And I don't think that benefits anybody.
16	It doesn't benefit the customers; it
17	doesn't benefit the vendors.
18	COMMISSIONER MARTINEZ: My final
19	question, then, again going back to something I
20	brought up this morning, and that is - maybe it
21	will be more in the form of a comment.
22	If somebody wants to jump in, you
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1	can do so very quickly.
2	But the whole notion, there is
3	clearly a gap here. I just want to make sure
4	that you all don't disagree with the exchange
5	that we had this morning that I had with the test
6	labs, and that is, the gap is that the current
7	voting system standards that we operate under -
8	the 2002 VSS - were developed before HAVA was
9	even close to being in its final form. So we all

10 agree with that. 11 To get a system through the testing 12 process and to say we are certified to the 2002 13 VSS does not necessarily mean that you are HAVA 14 compliant, because the 2002 VSS does not test to 15 the language of Section 301 in HAVA. 16 Now I understand that many vendors 17 will take a look at, obviously, what is in 18 Section 301 and build a system to be, from their 19 perspective, compliant with HAVA. But, in fact, 20 there are no voting system standards currently 21 that test to the language of Section 301, 22 specifically to the language of Section 301(a)(3) 152 1 dealing with accessibility. 2 Any comment about that? And I think 3 my time is out, so any quick comment about that. 4 MR. CHARLES: I think, very quickly, 5 there are systems that meet the plain language of 6 HAVA without being tested as a standard. You can 7 look at those and determine that they are 8 accessible, they do those things, that you can 9 check and change your ballot, all those pieces, 10 under the 1990 standards as well as the 2002.

But, you are right, there is not a

12	HAVA certification of a system.
13	MR. GROH: I would concur with that.
14	COMMISSIONER MARTINEZ: Thank you
15	all very, very much.
16	Thank you, Madam Chair.
17	CHAIR HILLMAN: Thank you.
18	Mr. Vice Chairman.
19	VICE CHAIR DeGREGORIO: Thank you,
20	Madam Chair.
21	Actually, to follow up on what
22	Commissioner Martinez just brought up, and Mr.
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1	Groh, you specifically, in one of your
2	recommendations, your first one here, you talked
3	about the EAC should clarify through a safe
4	harbor statement that states and localities that
5	want and need to make purchase decisions today to
6	comply with HAVA can do so under today's
7	standards and that systems purchased today will
8	not have to be replaced in the future.
9	Are you suggesting, through some
10	kind of statement that we would issue, some kind
11	of safe harbor statement, that these systems
12	would not have to be compliant with 301(a)?

MR. GROH: No, not at all.

14	But, again, we are in that gray area
15	which Commissioner Martinez just pointed out: we
16	are not testing to that.
17	But I think a common sense
18	approach - and there has been a DOJ opinion that
19	goes back to, I think, 2003, on DRE with the
20	VVPAT, of providing and meeting the level of
21	compliance that 301 requires. And I think that
22	that is do-able, but it hasn't been tested to it.

1	VICE CHAIR DeGREGORIO: And I
2	recognize there is no guidelines for this because
3	it is new to HAVA.
4	But I don't see 301(a)(3) as a gray
5	area. It is in the statute and states have to
6	comply with this.
7	MR. GROH: And the gray area to me
8	is it hasn't been tested under the 2002. But it
9	doesn't mean that some of the systems don't have
10	the elements in it that if there were a test, it
11	would pass it.
12	VICE CHAIR DeGREGORIO: Mr. Adler,
13	could you just tell us, your IDV system, your
14	independent dual verification system, how does
15	that work?

16 MR. ADLER: It's a unit that is
17 connected to an electronic voting system and it
18 gives, when the voter votes, the voter goes
19 through their confirmation process and then once
20 they confirm their vote, that vote goes into the
21 unit, and as the VVSG talks to, maintains a
22 separate copy of the vote.

1	The voter then has an opportunity to
2	get a receipt, to probe that ballot to make sure
3	that it did, in fact, reflect their intent. And
4	then they could actually, if the jurisdiction so
5	desires, give them an opportunity to use that
6	receipt to make sure the vote is actually in the
7	count.
8	So the model is very similar to an
9	ATM transaction. You get a receipt. You take
10	out your \$20; you make sure the receipt matches
11	the \$20. And then you take that receipt and
12	clear it against your statement at the end of the
13	month.
14	The statement at the end of the
15	month in the election context is the transcript
16	that the results are certified against.
17	So it actually provides the ability

18 for the voter to do that. 19 There is also the ability for the 20 election officials to gather these receipts and 21 verify that, in fact, the confidence in the 22 election results are there. 156 1 And this really goes back to what we 2 discussed at the NIST symposium back in December 3 2003, I believe, where, talking about trust and 4 confidence in election systems, where you can 5 actually prove that the voting system - either on 6 the back end - tabulation data base - or the 7 voting machine itself is not making mistakes. 8 You can prove it. You don't need to 9 assert it; you can actually prove it. 10 VICE CHAIR DeGREGORIO: Is your 11 system a standalone system or meant to be used 12 with another system? 13 MR. ADLER: It's meant to be used 14 with an electronic voting system, a minimal level 15 of interaction. 16 VICE CHAIR DeGREGORIO: Just wanted

to make sure I understood how it worked. Because

you make great reference to it in your comments

here regarding the guidelines that the TGDC came

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17

18

20	up with.
21	And I want to make sure I understand
22	exactly how you envision this working.

1	MR. ADLER: The appendix, talking
2	about end-to-end cryptographic verification,
3	actually has a comprehensive set of detailed
4	requirements that goes through how the system
5	like this one works.
6	VICE CHAIR DeGREGORIO: Mr. Charles,
7	you, in your comments, talk about recommending to
8	us that instead of waiting 24 months to implement
9	this, that we should do it immediately upon
10	adoption or as soon as testing authorities are
11	able to review the system. But you still want
12	individual components to be qualified under the
13	2002 standards.
14	Are you suggesting that instead of
15	testing a whole system, that a system, part of
16	the system was qualified under 2002 and tested by
17	and ITA to be qualified, if something was added
18	to it, just that component should be tested
19	against these guidelines and that's something
20	that could be done right away instead of waiting
21	the 24 months?

22	MR. CHARLES: It would be faster and
	THE CIT HELDS. IT WOULD BE INSIGN AND

1	less expensive, especially if it relates to older
2	systems where a county or state may have a 1990
3	model system, a 1990 standard system, and they
4	want to add a printer to it.
5	Some of that hardware may not be
6	economically upgradable to the 2005 or 2002
7	standards. But you could add a printer to it and
8	it's functioning for some time and be able to
9	test.
10	Right now you can't test a component
11	and add it to a 1990 system to help a state meet
12	state law without putting the entire system up to
13	2002.
14	That places a pretty significant
15	burden on states or counties that may have a
16	statewide 1990 system and cannot afford to
17	implement the hardware at the necessary level.
18	It's really not just for this
19	version but, in going forward, I don't think that
20	there is a reason, that the different versions of
21	standards cannot co-exist, as long as when you
22	are testing things, you are trying to test them

1	to bring them up and you qualify - and the
2	certification numbers or components of systems -
3	what level that system has passed so that
4	purchasers of equipment will know what level.
5	But that way, if possible, it would
6	be nice to help states avoid replacing entire
7	systems of hardware because the standards may
8	change in the future.
9	VICE CHAIR DeGREGORIO: But when you
10	add new components like that, even if it's just a
11	printer, sometimes doesn't that affect the whole
12	system or could affect the whole system?
13	Sometimes you add a new printer and
14	it's the wrong driver because the driver is ten
15	years old with the old system. And you are
16	getting in there and you are changing the driver
17	on the software on a system that has been
18	certified.
19	MR. CHARLES: But you still test
20	that system end-to-end. So you would confirm
21	that that 2002 standard printer matches up with
22	the 1990 equipment and you could do an end-to-end

l	test from software to election setup to election
2	operations to printer, you can confirm that that
3	works properly within that system.
4	And that's how we moved from the
5	1990 to the 2000 standards, each piece or each
5	component would get upgraded, but they would be
7	tested as a complete system. So as long as you
3	do that complete system test, you would be able
9	to ensure the reliability and durability of that
10	component.
11	VICE CHAIR DeGREGORIO: I know that
12	the three of you provided us with written
13	testimony - and Mr. Vadura you are going to
14	provide us with yours - and I appreciate your
15	testimony.
16	I have been in this business a long
17	time and know many of you for many years because
18	I was a Director of Elections in St. Louis County
19	and have been coming to IAKVIAC (ph) meetings
20	since 1986 and going to the vendors' show and
21	seeing all the new and innovative equipment and
22	meeting new people in the last few years through

1	my work that I did with IFIS (ph) internationally
2	and then in this job.
3	And I have to say, I am amazed every
1	year - and especially in the last two years - to
5	see the new products on display and how you are
5	trying to respond to the marketplace.
7	And, you know, the fact of the
3	matter is that from 2000 to 2004, 25% of the
)	country saw new equipment.
10	From 2004 to 2006 we have this
11	challenge that 30% of the country, though, is
12	using lever machines and punch cards,
13	particularly, are going to be changing over into
14	new systems, so it brings new challenge. These
15	guidelines bring a challenge to you.
16	But the Federal Government, for the
17	first time, is providingly \$3 billion to get part
18	of this, part of the equipment part of it done.
19	Are you all up to the challenge and
20	your colleagues - because you work with your
21	colleagues I know. You are friendly - you are
22	competitors but you are friendly competitors. I

1	always felt so.
2	Are you up to this challenge, do you
3	think? Is there enough vendors in the
1	marketplace to meet this demand and to serve not
5	only the needs of election officials - but, let's
5	face it - we are serving the needs of the public
7	out there, and a skeptical public - there is a
3	chunk of them.
)	And the survey data, Commissioner
10	Martinez talked about it this morning, of about
11	one-quarter of the voters that don't quite trust
12	the systems. And there is that skepticism out
13	there.
14	Are you all meeting that challenge
15	and is there anything that in these guidelines
16	that we can add, in addition to what you said
17	here, that might be helpful to you in helping you
18	to meet the challenge?
19	We will start here with Dennis and
20	go this way (indicating).
21	MR. VADURA: I think we are all
22	working really hard to meet those challenges.

1	Having a staple set of standards
2	helps to meet those challenges because you can
3	predict what needs to be done to get it certified
4	in time.
5	There is an effective barrier
6	to entry for new vendors coming into this
7	marketplace, as of today, which is certification.
8	I don't believe anybody can come
9	into this marketplace starting today and get up
10	to speed to deliver anything by 2006. So I think
11	everybody else here would agree with that.
12	So, is there enough vendors? We
13	will find out. I hope so.
14	MR. CHARLES: I think there is. I
15	think that we are not going to sleep much in the
16	next 24 months. I think we are all going to -
17	every county election official, every state
18	official and every company - will be pretty
19	heavily taxed on this. But we have been
20	preparing for it for some time, not just on the
21	manufacturing side, but making sure that there
22	are enough people trained to support the local

- 1 elections.
- 2 My biggest concern is for small

3	rural jurisdictions that really haven't invested
4	a lot of time and may not command the market size
5	to get the level of support that they may need.
6	I hope that every election official out there
7	realizes that time is of the essence. The sooner
8	they can make decisions and start, the better
9	they will be and the better that we as an
10	industry will be able to support them and adjust
11	resources accordingly so that they get the
12	support they need.
13	MR. ADLER: I think there is a level
14	of passion for elections on no matter what side
15	of this table you are on.
16	And that translates over to a level
17	of engagement with the public and putting in the
18	sleepless nights, not because you have to, it's
19	in your blood. You just want to and are driven
20	to deliver and make sure every vote counts.
21	And engage the skeptics, quite
22	frankly. I know that we have been very open to

doing that, during this more difficult period.
So I think the process is
invigorating. I think it stresses all of us out,
we all know that. But it's also, we are doing

5	good work here.
6	And this is not a This is a
7	contentious process. I think that's not all a
8	bad thing. But we just have to be honest,
9	respectful and engaged.
10	The work load over the next 24
11	months is going to be horrendous - I will tell
12	you that - no matter where you are.
13	But I think that's not surprising.
14	I am certain it's not a surprise to you, Paul, or
15	anybody else, having done elections for so many
16	years.
17	Having 30% of the country change
18	election equipment is going to be tough. And I
19	agree with Alfie here, for small jurisdictions
20	it's going to be especially difficult.
21	MR. GROH: We look at this from many
22	perspectives. And, again, this is not just a
	166
1	single thread where if we deliver the hardware,
2	that solves the situation. From my company's
3	standpoint, we know we can deliver the technology
4	and get it there

But what we are concerned about is

can the election administrators and the poll

5

7	workers and the voters feasibly take this
8	dramatic change that's going to happen very
9	quickly? And it is not equal across the United
10	States.
11	We have election laws that are
12	different in different places that put an added
13	burden.
14	We heard New York City, one of the
15	election administrators this morning, talk about
16	that, of trying to phase this in.
17	So our concern as a company is we
18	can deliver the best technology. But if we
19	haven't done the next step, which is really
20	shared by us, by the election administrator, it
21	can look like a failure, because it doesn't work
22	on Election Day and it's an administrative or a
	167
1	mall vyamkan an a vyatan isaya
	poll worker or a voter issue.
2	But the first finger that will be
3	pointed will go back to us as the election
4	supplier. So we work very hard on the

implementation.

So we can do it. We will put in a

tremendous number of hours into accomplishing

this. I do not see us having a constraint in

5

6

7

9	that we couldn't deliver all that we could get
10	orders for.
11	But it's the project management
12	piece of it.
13	So the other component that you are
14	addressing in HAVA is that voter education, a new
15	way of looking at poll workers that need to be
16	brought on through your college program and that
17	you have that.
18	We applaud all of those, because
19	that's what is going to be required.
20	And then I think that there is a
21	common sense or a reasonable man approach to ask
22	the question, if we deliver all this at one big
	168
1	time and cause a major change-over, can we
2	swallow that.
3	And I guess the analogy I would give
4	is, we all know we can start on an exercise
5	program, but that first day I don't do 50 sit-ups
6	because I won't do a sit-up for about another
7	week.
8	We can't go into this on day one
9	thinking, I am going to enter the exercise
10	program full bore. I have to work my way up into

it.

12	VICE CHAIR DeGREGORIO: Thank you
13	all very much.
14	CHAIR HILLMAN: Thank you.
15	In the remaining few minutes, let me
16	just ask a question and then I will give a nod to
17	my colleague, Mr. Wilkey, if he has a question.
18	I have a specific question for you,
19	Mr. Groh. No, maybe it wasn't your question. I
20	think it was for Sequoia.
21	Somebody indicated, made a general
22	reference to - it was Sequoia - ambiguously
	169
1	worded and without any specific reference.
2	And could I just ask, not for you to
3	comment here, but in your follow-up submission,
4	if you would be as specific as possible, because
5	I don't know what to respond to with that.
6	You were all in business and had
7	systems in the market in 2000; is that correct?
8	Did you have something in the
9	market?
10	MR. ADLER: No.
11	CHAIR HILLMAN: You started in '98,
12	but you certainly were in the field in 2000.

13	MR. ADLER: That's right.
14	CHAIR HILLMAN: And, therefore, were
15	following the year's, following the 2000
16	Presidential election, I'm sure, with great
17	interest with respect to the discussions about
18	various voting systems.
19	So I would ask you, it's sort of a
20	two part question. But it's the second part of
21	my question that's probably where you should
22	emphasize.

1	One would be what your companies
1	One would be what your companies
2	have done to address some of the deficiencies
3	that are now, that we are trying to address in
4	the guidelines.
5	But the other part of that question
6	is, is there anything in here that's a big
7	surprise to you, given what you have heard and
8	what you have been engaged in over the past four
9	five years? Is there anything in here that
10	surprises you that you don't think you are ready
11	for or that your company wasn't expecting or
12	preparing for?
13	MR. GROH: I will go ahead and jump
14	into this.

15	No, it hasn't been. And part of why
16	it's not a major surprise to us is because we
17	have been involved throughout the process.
18	Are there little unique things in
19	there? Yes, they are. But they don't rise to
20	the level that I am surprised or that it knocks
21	me out of my chair.
22	All of us that I think have been in

1	this have been trying to work on it before we
2	actually could see the target. We knew there was
3	going to be a target around the corner. I may be
4	off a few degrees and that's going to cause me to
5	have to recheck it.
6	I think our concern, from Election
7	Systems & Software, is that we not be so
8	prescriptive or come up with a specific
9	methodology to solve something that could have
10	other means of solving. Allow us, as the
11	developers of techonology, to provide those.
12	That's been one of the challenges,
13	that ES&S has done as an innovator, we have had
14	our customer base say I want a paper verifiable
15	audit trail.

We have attempted to do that in a

17	format that we think is usable and we want to
18	introduce that and have that be tested.
19	We have had our customer base say we
20	want to stay with paper base. Can you provide us
21	with a solution that will allow us to meet 301
22	and allow accessibility but still maintain and

1	utilize a paper base system. We have made that
2	effort to do that.
3	And we are learning and are trying
4	to make adjustments to that. But we are driven,
5	all of us are driven, by the competitive nature
6	of what our customers will pay for, buy and want.
7	CHAIR HILLMAN: Any comments, Mr.
8	Adler?
9	MR. ADLER: I would agree with Mr.
10	Groh, that the process has been collaborative and
11	open and has built upon the work done previously
12	in a very professional way. So there were no
13	surprises really, other than those few degrees
14	that we are addressing through this comment
15	period.
16	With respect to what we have been
17	doing since 2000, I think we are in a paradigm
18	shift in elections. I think that's what

19 generated HAVA, in many respects, and we are 20 grappling with that tectonic shift. 21 And you are leading this industry 22 through that tectonic shift. And those shifts 173 1 are not often pretty. 2 But there has been a tremendous 3 amount of innovation. There will continue to be. 4 And what I would hope and what I see is that 5 there is a real penchant for encouraging 6 innovation as we move forward. 7 We know this is not the last set of 8 election systems jurisdictions procured and there 9 will be no changes going forward. We know there 10 will be. And this is a roadmap to take us there. 11 MR. CHARLES: Just briefly, I think 12 there isn't anything in this document that is a 13 tremendous surprise and I think that the credit 14 for that goes to the TGDC and NIST in having 15 experts on there that really understand the 16 elections process and the work that they put in. 17 I know that the hours they put in 18 were incredible under a tight timeline. 19 If there was one recommendation that 20 I would have for the next version of this, it

21	would be to invite representatives of the vendor
22	community to participate on the TGDC so that
	174
1	there will be somebody in addition to the testing
2	authorities and the election officials, the
3	designers of the equipment, so that we can have a
4	more direct involvement in the discussions that
5	take place.
6	But even without that, I think they
7	did an excellent job in keeping this to something
8	that was relatively expected by the industry.
9	MR. VADURA: I would argue with
10	that. There is no real surprises in this other
11	than, I think on the next round, I agree with Mr.
12	Charles, let us contribute. Because I think some
13	practicality can be brought to the process from a
14	manufacturing and design standpoint.
15	It will make a better document and
16	something that we can all live with and, frankly,
17	jurisdictions can procure at a cheaper price.
18	MR. GROH: I would like to make one
19	additional point so we can get this on the
20	record.
21	All of us need to remember and
22	recognize that when HAVA was being worked out on

1	the legislative format and it was being costed
2	out or priced out, it was based on the technology
3	that existed then.
4	This technology we have now has made
5	a leap forward, which is positive.
6	But at the time that they scaled
7	this and scoped it, it was not in today's terms.
8	It was in 2002 technology terms.
9	CHAIR HILLMAN: Thank you.
10	EXECUTIVE DIRECTOR WILKEY: I think
11	this is working.
12	Just shifting gears on a subject for
13	one minute.
14	Anyone who has heard me speak over
15	the last twenty years since we started the
16	development of the 1990 standard, I hate to admit
17	I have been around even longer than that, has
18	heard me say on more than one occasion that it's
19	great that we have these standards for hardware
20	and software testing.
21	But what we need to have is the
22	second half of that. That is 50% of the hattle

1	The other 50% is the management
2	guidelines. And I have talked about that until I
3	am blue in the face, as blue as that cap is on
4	that bottle of water.
5	Hopefully during this coming year we
5	will begin a venture with the National
7	Association of the State Election Directors to
3	finally get that moving. And we have set aside
9	some money out of our budget to begin that
10	process,
11	I would like your reaction of how
12	that fits into your plans and how you can help us
13	make that document the best that it can be.
14	MR. VADURA: I think we all have to
15	have operational guidelines as part of our
16	certification documents. And some of what's in
17	there is good stuff and can contribute to this
18	process.
19	And I think any set of formal
20	management guidelines can only help us because it
21	will help to mold further the shape of the
22	system, how it works from an operational

1	standpoint, not just a technology standpoint.
2	MR. CHARLES: I think it's an
3	excellent idea. It's, as you know, a very
4	difficult task to integrate requirements that
5	address multiple types of systems, multiple
5	vendors of those types of systems, as well as the
7	different state laws and requirements.
3	So it's not an easy task, but an
)	important one. And I think we can assist in that
10	process by offering our expertise as project
11	management and people with experience across
12	state lines. So we can help refine those and
13	develop them as they go forward.
14	But it would be very helpful - as
15	with the hardware and software, it would be
16	helpful to have state specific requirements that
17	could be tested so there is a one-stop-shop for
18	approval of voting technology.
19	MR. ADLER: I think that, too, this
20	issue of managing for change, being able to
21	implement new systems and dealing with the real
22	management challenge of conducting elections with

1 temporary workers and under tough scrutiny, that

3	So anything that could enhance the
4	leadership and management tools that our election
5	directors/election officials have, is a huge,
6	huge benefit to the public.
7	MR. GROH: Election systems and
8	software, if you approach this like you did with
9	TGDC and NIST, we would be more than happy to
10	participate. Because, again, this is that
11	missing link that I explained earlier.
12	I can deliver excellent hardware.
13	Now I am beholden upon the best management
14	practices of the election administrator. And
15	when that fails, I have then failed by virtue of
16	the public exposure to that. And I don't want
17	that.
18	So we are working hard. But as you
19	have eloquently explained, Tom, when this has not
20	be broadly embraced and there is not something
21	that is there that uniformly lays this out so
22	best practices methodology procedures can be held
	179

to by County Commissioners holding their election

administrators to this, you don't have a way to

takes real leadership at multiple levels.

measure it.

1

2

4	The Election Center I know would be
5	a wonderful partner in this, along with the
6	vendor community.
7	We know what it takes to run our
8	technology and what it takes to run and manage it
9	well. So let us at least advise in that.
10	We will come behind it and do the
11	training in that. But it's difficult to do
12	training for people who don't want to be trained.
13	I know so many people that want to
14	go out and pick up a golf club and start hitting
15	a golf ball before they have had any lessons and
16	it just doesn't work.
17	EXECUTIVE DIRECTOR WILKEY: Thank
18	you very much.
19	CHAIR HILLMAN: Thank you very much
20	to the panelists.
21	We are not going to take a break. I
22	am just going to ask the EAC staff to move
	180
1	quickly to reset the table and escort our third
2	set of panelists up to the table.
3	Thank you very much.
3	Thank you very much.
5	
J	

6	* * * * *
7	
8	
9	PERSPECTIVES ON PROPOSED
10	VVPAT TESTING GUIDELINES
11	
12	CHAIR HILLMAN: If we could get
13	reassembled, please. I just need to get
14	everybody.
15	I will remind everybody to make sure
16	that their cell phones, pages and other
17	electronic devices are silenced. We would
18	appreciate that.
19	Our fourth panelist is here and he
20	will be joining us, running a few minutes late.
21	And I don't want to cut into the end of the day
22	by short cutting anybody else's time for
	181
1	presentation.
2	This is our third panel. It is
3	Perspectives on Proposed Voter Verifiable Audit
4	Trail Testing Guidelines.
5	Presenting this afternoon will be
	C .
6	Peter Kosinski, Chief State Election Official
7	from the State of New York - welcome: Harvard

8	Lomax, Clark County Registrar of Voters from
9	Nevada - welcome, thank you for traveling; Jim
10	Dickson, who will be joining us in just a few
11	minutes; and Avi Rubin, who is a Professor at
12	Johns Hopkins University in Baltimore.
13	Thank you all very much.
14	It will be, I think, okay. I know
15	that Jim Dickson will be interested in what the
16	other panelists have to say. But Mr. Kosinski,
17	if you would be so kind as to get started with
18	us.
19	And I don't believe we have any
20	written remarks.
21	MR. KOSINSKI: No.
22	CHAIR HILLMAN: I know we invited

1	you very late so this is not
2	MR. KOSINSKI: Quite all right.
3	CHAIR HILLMAN: I just want to make
4	sure I'm not missing anything.
5	MR. KOSINSKI: You are not missing a
6	thing.
7	CHAIR HILLMAN: But ask if you would
8	also indulge us to speak slowly so we can take
9	notes.

10	MR. KOSINSKI: I will do my best.
11	If I am speaking too quickly, let me know.
12	CHAIR HILLMAN: And I would ask that
13	people please summarize, particularly if you have
14	submitted written statements, so that we might
15	have ample time for questions.
16	Thank you.
17	MR. KOSINSKI: Thank you,
18	Commissioner. I will try to summarize, even
19	without my written statement, to move the program
20	along.
21	First of all, I'd like to thank you
22	for inviting me today and I'd like to welcome
	183
1	everyone to New York.
2	I know my friend John Ravitz was
3	here this morning to welcome everyone. But I
4	would also like to welcome you on behalf of New
5	York and hope that you can take advantage of some
6	of what we have to offer in the City.
7	I'd also like to congratulate the
8	Commission on their wise choice of their
9	Executive Director.
10	And I certainly would like to note
11	that Tom Wilkey used to be the Director of our

12 State Board of Elections and we feel you made an 13 excellent choice in picking Tom as the Executive 14 Director. 15 And, of course, we worked closely 16 with Tom. I personally worked closely with Tom 17 for many, many years and he is excellent in his 18 job and we have a great deal of faith in his 19 ability to carry forward on this. 20 I'll just spend a couple of minutes 21 speaking a little bit from the administrative 22 standpoint, I think, on how the voter verified 184

1	receipt affects us, I believe, and a couple of
2	comments regarding this.
3	The State of New York I think
4	decided early on in this process that they would
5	enact and require, as part of any voting system
6	in New York that would be part of the HAVA
7	project, would have a voter verified receipt
8	attached to it.
9	Our legislation, as I am sure you
10	are aware, has just recently passed our State
11	Legislature. But in the very first drafts of the
12	legislation that was proposed in New York, way
13	back two years ago, the voter verified receipt

14 was part of those pieces of legislation in both 15 House of our State Legislature. 16 And I don't think there was a great 17 deal of discussion or certainly dissension 18 regarding that as being a component of any new 19 voting system in New York. And, in fact, the 20 final version of the legislation that was adopted 21 by our State Legislature - and while it hasn't 22 been signed by our Governor, we are hopeful that

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1 it will be in the very near future - that that is 2 a part of our legislation. 3 Now, what it does not do, as you 4 might imagine, is give a great deal of detail as 5 to exactly how that is to work. And that is why 6 we are paying such close attention to these 7 guidelines as you are issuing them. 8 We think this is a very, very 9 important component, of course, of any voting 10 system. It does create some issues, though, as 11 we go through the voting process. 12 New York is a state, as I am sure 13 you know, that has had lever machines for its 14 entire voting history. And because of that, 15

paper ballots have been a very small part of

voting in New York State.
Up until the changes that we are
anticipating, the only paper ballots that were

really available in New York were absentee voting, the provisional ballot voting, military

voting. That kind of voting was all done on

paper. But other than that, it was all done on

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1	lever machines.
2	And at the end of an election cycle,
3	there would be very, very little paper; maybe 8%
4	of our total votes would be cast on paper. The
5	remaining 92% were cast on the lever machines.
6	And there was no paper that was at issue
7	regarding that particular election, at least as
8	far as the votes cast at the precincts.
9	With the new system, needless to
9	With the new system, needless to say, this will change. And having the voter
	•
10	say, this will change. And having the voter
10 11	say, this will change. And having the voter verified receipt as part of that system, it will
10 11 12	say, this will change. And having the voter verified receipt as part of that system, it will now greatly increase the amount of paper that the
10 11 12 13	say, this will change. And having the voter verified receipt as part of that system, it will now greatly increase the amount of paper that the state will be dealing with.

voter actually does verify the votes that are

18 being cast.

19 And I think that, as I read through
20 the standards that are being put out, that it is
21 important to try to build in to any system that
22 would be engaged by the voter, that not only we

1	create the voter verified system, but that we
2	also try as best we can to ensure that that voter
3	actually verifies that ballot.
4	Because we realize that at the end
5	of the process, the official ballot - if there
6	becomes a dispute in an election - will be the
7	paper ballot. And so it needs to have some
8	component that, at the end of the vote, when the
9	voter - prior to leaving that voting booth - is
10	asked to verify that particular ballot, that in
11	fact that voter does that.
12	So that we have some comfort level
13	that, in fact, that voter has looked at that
14	piece of paper, has verified that piece of paper
15	as their actual votes. So if those votes are
16	contested, that we are counting the actual votes
17	of that particular voter.
18	The other issue that, of course,
19	comes up, which I think was touched on - and I

think Tom, in fact, touched on it as well - is
the management of the system. And the management
of the system will largely come about not only

1	during the election itself, but post election.
2	So once you have created this piece
3	of paper in New York State - we can have upwards
4	of seven million to eight million votes in a
5	particular election - when you are creating that
6	kind of paper, that there be a system in place
7	that will allow for the protection of that paper,
8	that will allow for the careful counting of that
9	paper, if that becomes necessary, and that much
10	of New York City's law, in fact, is devoted to
11	that.
12	For example, the amount of audit
13	that must be done to verify that the votes cast
14	on the electronic machine are matching up with
15	the votes to the verified pieces of paper. And
16	that is a very important component of the system,
17	that not only are you creating this piece of
18	paper, not only are you verifying this piece of
19	paper, but that you also have a system in place
20	for ensuring that these pieces of paper are
21	protected and they are also being utilized in a

22 way to make the public aware that the system is

1	being monitored and that the integrity of the
2	system is not being compromised.
3	We would certainly hope, and would
4	anticipate, that any system that would be created
5	would be accessible to the disabled. We know
6	that that's a very, very important concept. That
7	really was a lot of what drove HAVA. It was, I
8	think, a critical element in the development of
9	HAVA itself.
10	And we think it's very, very
11	important that as we create these systems, that
12	we keep that in mind.
13	And while the voter verified
14	receipt, I believe, was a component of this, that
15	really emerged following the enactment of HAVA,
16	it was not necessarily anticipated during the
17	discussions in Washington of the HAVA legislation
18	itself that since this has emerged as such an
19	important part of this particular process, that
20	we make sure that the disabled community is
21	protected; that we do not in any way compromise
22	these systems, so that they are fully accessible

1	to the disabled.
2	Other than that, I think that the
3	creation of this system is something that as we
4	work through it - it will take some time - I know
5	that that's something that has been spoken of
6	earlier here today - that as we work with these
7	systems and see how they are being utilized by
8	the people who are actually in charge of
9	utilizing them - our election inspectors, as well
10	as our voters - we can maybe fine tune these, to
11	make sure that they are accomplishing the goals
12	that we have set out for these particular
13	systems.
14	And we know that that's important,
15	that we get some opportunity to use the system
16	before we make necessarily final adjustments to
17	that system to make sure that it is being
18	adequately monitored and adequately utilized.
19	Other than that, I will just accept
20	questions.
21	CHAIR HILLMAN: Thank you very much
22.	We will hear next from Mr. Lomax

1	And then following Mr. Lomax we will
2	hear from Jim Dickson, who is Vice President for
3	Governmental Affairs with the American
4	Association for People with Disabilities, and
5	then from Professor Rubin.
6	Mr. Lomax.
7	MR. LOMAX: I go by Larry, so I am
8	Larry Lomax from Clark County, Nevada.
9	And I was asked here because we are
10	one of the few counties that has actually used
11	the VVPAT. We used it for the 2004 primary and
12	general and then for our 2005 municipal
13	elections, primary and general elections.
14	So we do have experience. And I'd
15	like to talk about some of that experience
16	first-hand because, again, that's why you
17	actually asked me, and compare it to the
18	standards as I read them.
19	And I will point out, as I
20	understand, what's important is that the vendors
21	and the technical people understand these
22	standards, not so much that I do. But I see some

1	potential problems, anyway, that I think need to
2	be addressed.
3	First, as a user, I think it's very
4	important that we don't ever forget that the
5	standards have to be practical. And I think
6	there is some ideals that we would all like to
7	attain, but I'm not sure in some cases that the
8	ideals are realistic, or at least they may be
9	overly burdensome upon those of us that have to
10	use the voting machines and implement these
11	things.
12	Second of all, and I just point this
13	out, that Volume I, the very beginning of it
14	says, its purpose is to describe the requirements
15	for electronic components of voting systems.
16	And there's a lot of standards in
17	here that really go way beyond that into the
18	administrative procedures, especially, I saw in
19	the area of security. What they are really
20	requiring is us to perform certain administrative
21	functions that have little to do with electronic
22	components.

Third - and I think this has already

2	come up today in two preceding panels - I don't
3	think the standards are sufficiently clear in
4	several cases. And I will identify a few here.
5	And a good example that has already
6	come up, the gentleman from ES&S apparently
7	interprets the standard to mean that the paper
8	trail printer cannot be a spool-to-spool or reel
9	to reel printer, or it must somehow chop the
10	ballots at the end of that.
11	I talked to Alfie from Sequoia. He
12	believes just the opposite, that that is allowed
13	under these standards.
14	So these things have to be clear
15	enough so we all understand exactly what they
16	mean.
17	The standards is guidance. We don't
18	want to have to create guidance to clarify the
19	guidance because that's kind of where we are
20	after HAVA. HAVA was in there; now we are trying
21	to figure out exactly what that meant.
22	Another example I can give you is

- 1 there is a standard that says the paper record
- 2 shall be sturdy, clean and of sufficient
- durability to be used for clarification and other

4	things.
5	Well, I had my staff read these
6	standards and they immediately came to me on that
7	issue because we use thermal paper, which is
8	sufficient for what we need this paper for. But
9	then is it really very durable? But, again, what
10	does a standard such as this mean?
11	So I don't want to find us in a
12	position later on of not being sure exactly what
13	is required and what isn't.
14	A few examples - again, looking at
15	it from the practical level, somebody who has to
16	administer these things - font size, one of the
17	first things mentioned in there. It's not
18	realistic to ask for large font size, I don't
19	believe, anyway. The bigger the font size, the
20	more paper each ballot uses up, the larger the
21	printer is going to have to be, the more
22	difficult the logistical problems are for those
	195
1	of us that have to deal with it. And also the
2	greater the expense.

I think the goal would be, at least

from my perspective, is a printer where the paper

did not have to be replaced on the date of the

3

4

6	elections, that has sufficient capacity to deal
7	with all the voters who are going to use that
8	machine. And that means relatively small print.
9	We used a printer that printed in 10
10	point font; that's small. However, the secret to
11	this problem is magnification. We also had a
12	magnifier at every machine. So that somebody who
13	had difficulty reading 10 point font could hold a
14	magnifier up and it would bring it up to 20 point
15	font, which is pretty large.
16	I could honestly say we have had now
17	approximately a half a million voters vote in
18	Clark County using the paper trail printers and
19	this has not been an issue. People comment that
20	it's small, the print is small, but that's it. I
21	haven't had a single person complain or make an
22	issue of the fact that 10 point font is what we
	196
1	are using.
2	Now, these standards require 3
3	millimeters I think, just to make it tough on me.

We measured that and that apparently is 12 point

But the standards also talk about,

you should have two choices of font there for the

font, which is a little bigger and that's fine.

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6

8	voter. And I'm not sure in standards what
9	'should' means. I'm not sure what the vendors
10	then have to do.
11	If it says 'should', maybe that's an
12	atta boy. But it seems to me you ought to just
13	set what the minimum requirements are.
14	It looked to me that 6.3 millimeter
15	font in height is 28 point font, and that would
16	require paper this size (indicating), which is
17	out of the question.
18	There is a section in the standards
19	that talk about approve or spoil the paper record
20	and then it talks to having the ability to match
21	the spoiled paper records with the spoiled
22	electronic ballot. There are no spoiled
	197
1	electronic ballots.
1	
2	One of the beauties of electronic
3	voting is, the voter goes through the machine.
4	At any time he or she wants, they can change;
5	correct any mistakes they have made.

After they have made all their

selections, they get to a review screen, which

shows them the selections they have made and

shows them all the contests in which they made no

6

7

8

10 selection. They can immediately go back and 11 correct those. 12 There is even a warning notice that 13 comes up at the end that says, you didn't make a 14 choice at every place you could have. And they 15 have to go through all of that before they get to 16 the point where they print their paper record. 17 They print their paper record and 18 and then they review that. They can either 19 accept it or reject it. 20 There is three reasons they might 21 reject it. 22 First, we made a mistake programming 198 the machine. And there we got a disaster and that would be brought to our attention very early

1 2 3 election morning and we would have big trouble. 4 But that would be a programming error on our 5 part. And if we have done our job, that's not 6 going to happen. 7 The second reason is, despite all 8 those advantages or opportunities to correct a 9 choice, they didn't catch it until they saw the 10 paper record, in which case, they can reject the 11 paper record. And remember, the electronic

12 record hasn't been recorded get. 13 They can go back and correct the 14 electronic record again, print the paper record 15 again and say okay, it's okay now, and then print 16 and finalize and cast their ballot. 17 The third reason, and this was the 18 most common in my opinion in Clark County, they 19 just want to see what happens if they hit the 20 reject button and see what the printer will do. 21 And in our case it would print VOID 22 and then they could go back and print it again. 199

1	As I've said, we have had about half
2	a million people vote and very, very, very few
3	people ever void a ballot.
4	Because the thing you have to
5	understand is the printed record will always
6	match what they picked on the voting machine, if
7	we have done our job right. It always matches.
8	I have a lot of people call me up
9	and ask what was the match, how many mistakes
10	were there? There are no mistakes; it always
11	matches. It always matches.
12	So most of the time when they are
13	doing this, they are just playing around.

14 Preserve voter privacy and 15 anonymity, another issue here. Reel to reel 16 printers, from a practical standpoint, in my 17 opinion, are the only reasonable way to go here. 18 In a county my size which is about, 19 we have about 750,000 active registered voters -20 and we have a two week early voting period - an 21 election will generate in the vicinity of 8000 22 tapes. Now, these aren't the ballots chopped up;

1	these are tapes.
2	Each tape has to be maintained and
3	catalogued in a manner so that we could find any
4	tape for any given machine on any given day if we
5	needed to audit it against electronic results,
6	because in Nevada we are using an auditing
7	process for the tapes, a randomly selected
8	auditing process.
9	If you chop those tapes into little
10	five or six inch strips of ballots that will then
11	curl up because they came off a reel, and I have
12	got a half a million of those I have to track and
13	account for and catalogue in some manner so that
14	I can get them, either to audit, or if a state
15	was using them as ballots, they would have to

maintain those, you are really creating some
administrative challenges, which are going to
lead to problems if you chop those things up.
It would also, if you chop them up as far as I can imagine, anyway - it would
require you to manually do any recounts of those
things. If you are just dealing with these

1	little curlied up pieces of paper, someone is
2	going to have to hold each one up to do a manual
3	recount.
4	At least with a reel-to-reel, there
5	is a possibility, using bar codes below the
6	ballots, of an entirely independent system going
7	through and reading, doing your recount on a
8	reel-to-reel printer.
9	So I could go into this more, but I
10	really recommend that you make your printers
11	large enough to hold everybody that is going to
12	vote on one day. And that's the way we do it
13	now.
14	They can be sealed up so that
15	workers have no access to them. They attach them
16	to the machines at the beginning of the day; they
17	just take them apart, take them off at the end of

the day and they bring them in. But they don't
have to mess with that paper; you don't have to
worry about storing votes at the voting place.
And just, administratively, I think
that's really key in my opinion.

1	There is a couple other areas in the
2	area of anonymity which I just think reflect a
3	misunderstanding, again.
4	There's a discussion about
5	protecting the privacy of people who use
6	alternative languages. In the discussion it
7	suggests that we have at least five people who
8	vote in another language on a machine.
9	We have no idea what language they
10	are going to pick when they go into a machine and
11	we certainly are not going to ask them what
12	language they plan on voting.
13	Their identity is protected
14	administratively in the same manner we protect
15	everyone else's.
16	It always amazes me, I hear a lot of
17	concern, for instance, on a reel-to-reel printer,
18	protecting the voter's privacy. And yet no one
19	ever brings up a concern that on an election in

20	Clark County we will get about 60,000 absentee
21	ballots, and those ballots will be recived in an
22	envelope with the voter's name right on it.
	203
1	In fact, the voter has to sign and
2	we make sure that that was the right voter.
3	And, yet, no one is worried about
4	the voter's privacy then. And they don't need to
5	be. We have administrative procedures to make
6	sure those ballots are separated and nobody knows
7	who they are.
8	But we maintain administrative
9	procedures in the county to be sure that we
10	protect the electronic voter's privacy also, by
11	the way in which we do not record the order in
12	which they sign in in a roster book.
13	We have multiple machines in our
14	polling places and the voter picks where they are
15	going go and nobody knows where they are going to
16	go or tracks where they go. So there is no way
17	to go back and reconstruct who used what machine
18	or what order they voted on.
19	I mean, it's very easy to do and
20	everybody's privacy is protected.

I will just point out a few

additional things because I don't want to take up

1	too much more time.
2	Just an administrative thing. In
3	Section 2.2.7, it does say that if a state is
4	planning to use the paper record as the official
5	ballot, then they have to be sure that a visually
6	impaired person or any other disabled person
7	would be able to review the paper record as the
8	same manner that a somewhat sighted person would
9	be able to do.
10	And on that, that same language
11	should be brought back to the VVPAT Section,
12	because right now it isn't in here. It's only up
13	in front.
14	Another example of something - I
15	guess this is almost laughable in a sense. It
16	says the voting station should be physically
17	secure from intentional damage. Good luck.
18	I don't know what that means or how
19	you would ever enforce that. But if someone is
20	going to come in with a hammer and wants to smash
21	our machine, they are going to be able to do it.
22	So I'm not sure what that standard means.

l	There is another requirement in
2	there - and these are just examples of things I
3	just don't quite understand or if they have been
4	thought through - that says we are supposed to
5	put a seal to seal the connection between the
5	printer and the voting machine.
7	All right, if I have 5000 voting
3	machines that means I got to have - remember,
9	where a printer fits in, in most cases it's just
10	a plug with the two little screws that are
11	screwed in there - you know, the little twisty
12	things like on your own computer at home -
13	Why am I sealing it?
14	First I have got to buy all those
15	seals and then when they install it they have go
16	to seal it and they have got to track it and
17	somehow log it.
18	If the printer becomes disconnected,
19	the voting machine will lock up. And that's one
20	of the standards it requires. It says the voting
21	machine has to alert you if the printer is
22	disconnected.

1	I don't see any - there is no logic,
2	that I can think of, as to why you are wasting
3	your time sealing it. It's an administrative
4	requirement that sounds good, but I'm not sure
5	there is a reason behind it that I could figure
6	out.
7	I'll wrap it up.
8	But, in general, I do think that
9	there is more clarity required in these so that
10	we really understand why these procedures have
11	been developed.
12	And I do think that much of the
13	security, as Mr. Wilkey pointed out, much of the
14	security in an election, in the privacy and
15	anonymity, is a result of administrative
16	procedures and oversight at the polling place.
17	And we have accepted that for years
18	with paper ballots and we seem to have forgotten
19	that.
20	And with the electronic, it is also
21	true. And I think that's an important thing to
22	keep in mind. Thanks.

1	CHAIR HILLMAN: Thank you very much.
2	Mr. Dickson.
3	MR. DICKSON: How much time do I
4	have?
5	CHAIR HILLMAN: Ten minutes.
6	MR. DICKSON: Thank you, Madam
7	Chair, Mr. Commissioners for inviting me to
8	come.
9	You don't have my paper testimony
10	because my paper testimony is in my suitcase
11	which is somewhere lost in Delta Airlines.
12	We will be submitting this short
13	version, plus additional comments.
14	I first want to talk about the
15	context in which Congress passed and the
16	President signed the law that says people with
17	disabilities have the right to vote.
18	CHAIR HILLMAN: Get closer to the
19	mike.
20	MR. DICKSON: I want to put into the
21	context, I want to discuss the context out of
22	which Congress passed a law and the President

1 signed, that says voters with disabilities have

2	the right to vote privately and independently.
3	Twenty-one years ago Congress passed
4	a law that said polling places should be
5	accessible to people in wheelchairs, 21 years
6	ago.
7	As best we can tell, somewhere
8	around 65% of the nation's polling places are not
9	accessible to people in wheelchairs - 21 years,
10	more than half.
11	Missouri just finished - and good
12	for Missouri - a survey to see how many of their
13	polling places were not accessible. The survey
14	reports it's 71%. There is no plan in Missouri
15	for how they are going to fix them, when they are
16	going to fix them by. What good is the report?
17	And this phenomena in Missouri
18	repeats the phenomena of 18 years ago when
19	reports were sent in to the Federal Election
20	Commission that said these are the places that
21	aren't accessible.
22	Twelve years ago Congress recognized

- that people with disabilities are registered to
 vote at a rate considerably below the rest of the
- 3 public. Congress also recognized when it passed

OJ IICa	ing
4	motor voter, of the National Voter Registration
5	Act, that many people with disabilities have
6	I'm not going to go to the Department of Motor
7	Vehicles. I have no reason.
8	Many of us can't even get there.
9	Many of us don't have the money to pay for the
10	license if we could get there.
11	We are sitting here in New York and
12	the NVRA said twelve years ago that community
13	agencies that offer services to people with
14	disabilities need to do the same thing that motor
15	vehicles do. Twelve years ago.
16	One state - thank God for Kentucky -
17	is obeying the law. One state, it's twelve
18	years.
19	We are sitting here in New York City
20	in New York State, and I think these numbers are
21	right. In New York City, about 56% - I'll get
22	the precise numbers if my memory is off - of
	210
1	people do not have driver's licenses.
1	people do not have driver 5 necesses.

	1 1
2	In upstate New York, well over 90%
3	have driver's licenses.
4	The agencies that conduct services
5	to disabilities in the city, and upstate -

6	particularly state Medicaid - are not obeying the
7	law.
8	So we come to a law now that says we
9	have the right to vote privately and
10	independently. Now, that ought to be pretty
11	here, I least I thought it was clear when
12	Congress voted on it.
13	Yesterday I was at a County Council
14	meeting in Valusha County, Florida. The
15	president of Verified Voting for Valusha, County
16	said on the record, people with disabilities have
17	75% privacy and 75% secrecy. What more do we
18	want?
19	I was not able to ask her what is
20	75% privacy. I wasn't able to ask her what is
21	75% percent of secrecy at this.
22	But that statement reflects an
	211
1	wind that there Edwall bear have wind a
1	attitude that three Federal laws have tried to
2	remedy, that we are treated like 75% of a
3	citizen. And this is going to stop.
4	And HAVA gives us the tools to stop

I want to commend the Commission

because this version of the standards is

it.

5

6

8	considerably improved. But there are still some
9	things that need to be done.
10	In the standard there is I think a
11	structural problem with how you have handled
12	disability that in 28 years of disability policy
13	I have never seen anything structured like this.
14	Usually the disability sections are
15	in one place. Makes it clear; it makes it fair;
16	it's easy for industry.
17	In this version of the standards, we
18	are scattered all over creation and gone.
19	And one result of that is that the
20	standard says that a voter who is blind shall
21	have a right to vote privately and independently.
22	In another section it says that a voter who is
	212
1	paralyzed descrit have that come right
1	paralyzed doesn't have that same right.
2	Now, I hope that that was just a

Now, I hope that that was just a

piece of confusion.

The ADA makes it crystal clear that

when we are talking about disabilities, we are

talking about all disabilities. HAVA makes it

crystal clear that it's the ADA that defines what

disability is.

And we cannot have standards for

10 voting systems that allow one group of disabled 11 citizens to vote privately and independently and 12 another group not to do that. 13 It's interesting to me that we just 14 had two examples of this voter verified paper 15 trail Neanderthal nonsense, and it is nonsense. 16 I understand that state legislatures 17 have passed laws. We are comfortable with what 18 Nevada has done, because in Nevada the piece of 19 paper is not the ballot. 20 We got real problems with New York 21 because the piece of paper is the ballot and I 22 know of no way that you are going to make that

213

1 piece of paper accessible with current 2 technology. 3 I'm going to say something that has 4 been on my mind for a long time that I have not 5 said before. 6 We have got this paper trail thing 7 because there is this small segment of the 8 computer world that's attitude is, you can't 9 trust computers to do anything. I think of them 10 as the cunieform school of computer science.

They cooked up an idea of a voter

12 verified paper trail without testing it, without 13 measuring it, without seeing if it will work. 14 It's supposed to give the voter verification that 15 the vote was casted right. That's great. That's 16 a good idea. 17 But let's put something in the 18 polling place that actually will do that. 19 Professor Selker (ph) at MIT just 20 did a study, a scientific test, the first one, 21 that took computers and did this fearmongering 22 nonsense of the ballot is going to change from 214 1 the machine to the paper. So he had MIT graduate 2 students and ungraduate students vote. 3 And the computer did eat their vote. 4 This isn't real. And the paper printed an error.

Okay. So the fearmongers, this is the theory

the error on the paper - 7%. When he was there.

And these are MIT graduate and undergraduate

Now, how effective a form of

verification is that going to be for the public

that the fearmongers have said is going to

7% of the voters in the test found

students.

happen.

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14 at large? 15 Professor Selker also used audio 16 verification for the same voters. Same thing 17 happened, computer ate the vote, the paper 18 printed something different. 85% found the error 19 when it was audio. 20 Now I am tickled with that. I am 21 blind. I live by audio. 22 I am not going out saying we need to 215 1 pass a law that says let's put audio into the 2 polling place. 3 I think the Commission could do the 4 nation a service, a great service, by making 5 clear that we need standards that are based on 6 science and data, not on theory that generates 7 contracts. 8 HAVA is very clear - private and 9 independent by 2006. And the reason for 2006 10 it's 21 years and we do not have wheelchair 11 accessibility, it's 12 years and we are not being 12 registered to vote under law. 13 There are some -- If a place wants 14 to have the verified piece of paper on the side

of the machine, that's fine, as long as it's not

16	the ballot.
17	When it becomes the ballot, it is
18	not accessible. It does not meet HAVA's
19	criteria. It does not meet the ADA. You can't
20	spend Federal money on it.
21	And I hope the Commission will make
22	that clear.
	216
1	Thank you very much.
2	CHAIR HILLMAN: Thank you, Mr.
3	Dickson.
4	And we will now have Dr. Rubin.
5	DR. RUBIN: Thank you, Madam Chair
6	and Commissioners. Good afternoon.
7	My name is Avi Rubin and I am a
8	computer science professor at Johns Hopkins
9	University. My area of expertise is computer
10	security. And I have been doing research in
11	industry and in academia on computer security for
12	14 years now.
13	Since 1997 I have been applying
14	computer security towards studying voting systems
15	in elections and in 2004 I became a poll worker

working as an election judge in Baltimore County

in the primary and the general election.

16

18	Election security is part of
19	national security. We look around the world and
20	we see just how important and sensitive the
21	ability to vote with integrity is.
22	And I believe that many states have
	217
1	come a long way since the Presidential election
2	in improving of the security of the voting
3	process. But I also think a lot of work remains
4	to be done.
5	
	As somebody who specializes in
6	security, I view the world through a special lens
7	of being interested in security. And I imagine
8	the reason I'm here today to talk to you is to
9	talk about security issues, that is what I do.
10	Reading through the proposed
11	guidelines, I have several comments about them
12	and most of them are very detailed and somewhat
13	technical and I'll be putting them in writing and
14	giving them to you.
15	I only had a chance in the last few
16	days to read them very thoroughly and I have
17	about four or five pages of notes to give you on
18	those, which I want to clean up.

But I think several important things

should come out now. And one of them is a
distinction that I would like to make, which is,
to distinguish between a voter verified paper

1	audit trail, VVPAT, which is discussed in the
2	guidelines, and a voter verified paper ballot.
3	These things, when we distinguish
4	them, both of them can be viewed as a voter
5	verified paper record, which is something that
6	can be used to audit an election.
7	But paper ballots are very, very
8	different from paper audit trails. And I think
9	if that distinction were made explicit rather
10	than implicit - clearly everyone understands that
11	there is a distinction - but if it were made
12	explicit, it might make the standards read a
13	little more cleanly.
14	And, in particular, I am concerned
15	about the possibility that a voter verified paper
16	ballot, which I view as a more secure system,
17	might not meet the standard because of the
18	wording specifying a voter verified paper audit
19	trail.
20	And so I think looking at the
21	standards again with an eye towards separating

out those two terms would be a useful thing to

1	do.
2	I am in the class of computer
3	scientists who believe that a fully electronic
4	system that's made up of software can be made to
5	do whatever the programmer does.
6	I have conducted many experiments
7	with my graduate students; I have written a lot
8	of software myself. And I know that when you
9	program a machine, that machine will do whatever
10	you program it to, with a caveat - a big caveat -
11	that there will always be a lot of bugs that you
12	didn't intend, no matter how good a programmer
13	you are.
14	Microsoft is a very well resourced
15	company, puts a lot of effort into making
16	software and they do a great job. But they
17	release security updates once a month, if not
18	more often, because it's impossible to write
19	software without having bugs in it; that's just a
20	fact of life.
21	So, as a result, many - especially
22	computer scientists - but many other individuals

1	as wen, have mought about what can we do about
2	the fact that one of the tools that we have at
3	our disposal, which is electronics and computers,
4	is not entirely reliable from a security point of
5	view.
6	We can still utilize it. Computers
7	are great. I use them every chance I get for
8	everything that I can think of. But I know their
9	limitations.
10	And one of their limitations is that
11	it's very, very difficult for an outside auditor
12	or inspector to look at a large software package
13	and know everything about what it does. And it's
14	very, very easy for someone to program some other
15	functionality.
16	I have papers and experiments that I
17	have done to demonstrate that.
18	So what do we do? We say let's come
19	up with this independent dual verification.
20	When I read this proposed guidelines
21	I loved that section. I think that's the right
22	idea, let's come up with totally independent dual

1	verification.
2	My feeling is that the best one of
3	those options is paper, but not necessarily the
4	reel-to-reel variety.
5	Let me outline some of what I view
6	as the disadvantages of the reel-to-reel VVPAT
7	over the verified paper ballots, which are
8	another form of paper.
9	I think that we have to always keep
10	in mind what the purpose of the paper was. The
11	purpose of the paper is that we don't necessarily
12	trust these machines, so we want to do manual
13	audits.
14	It's important that we not only do
15	manual audits, but random audits.
16	If we do that and they match, we can
17	have confidence that wholesale fraud is not
18	likely to have taken place. With that in mind, I
19	think that the reel-to-reel systems place a
20	tremendous burden on election officials and
21	voters who have to perform those manual counts.
22	That's because I also don't believe

1	that there should be anything that's not humanly
2	readable on the ballot. I don't like bar codes
3	and that's a controversial statement. Even
4	within the verified voting community, there is
5	not uniform agreement.
6	The simple reason that I feel that
7	way is that as a voter I am a plain and simple
8	person and I see a mark that I can't read on my
9	ballot, if I'm suspicious, how do I know that's
10	not my name? It's probably not, right. But we
11	should have a voting system that is completely
12	transparent to the average citizen.
13	If you think about an oppressive
14	government that is out to get you - which is kind
15	of the point of a democracy is to avoid that
16	being possible - then we don't want to have a
17	marking on the ballot that citizens don't know
18	what it is.
19	And if we don't put bar codes and
20	other markings on the ballots in a reel-to-reel
21	system, they are very, very difficult to count
22	manually, as was stated earlier.

That's why I think that what we

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2	really want to have are voter verified paper
3	ballot systems where the ballot itself is
4	something like what we might find in an absentee
5	ballot, something that can be marked with a
6	machine with accessibility features, can be
7	verified with machines with accessibility
8	features, or visually or through audio.
9	But what I worry about with the
10	reel-to-reel systems is that the path of least
11	resistance for an election worker in a busy
12	hectic election is not going to be to do the
13	manual recount; they'll skimp on it. And I think
14	we should design voting systems where the path of
15	least resistance is the best possible path.
16	Not saying that poll workers won't
17	do it. I'm saying we should make it as easy as
18	possible.
19	I disagree with my fellow panelists
20	about the importance of the privacy in the
21	reel-to-reel. I don't believe in reel-to-reel
22	systems that are chopped up because of the

- 1 reasons that were mentioned. But I also don't
- 2 like the idea of the reel keeping the order,
- 3 preserving the order.

4	If we are suspicious of the
5	government - in the poll site where I worked, we
6	assigned people to the stations - so I think
7	voters would accept a situation, even if it
8	wasn't the right procedure, where poll workers
9	assigned them to the machines. And at that point
10	we have got a list of how those people voted in
11	that paper trail.
12	I believe that reel-to-reel VVPAT on
13	DRE's are the unfortunate product of a
14	misunderstanding of the arguments against
15	paperless voting. But I do believe with a lot of
16	effort and vigilance they can produce a more
17	secure election than without a paper trail at
18	all.
19	I would like to give some guidelines
20	for maximizing the security and auditability of
21	elections regardless of what kind of paper trials
22	that are used.

1	Random audits have to take place
2	where the tallies are compared to electronic
3	totals. These have to be like truly random. I
4	am thinking like ping pong balls coming out of a
5	machine like you have in the lottery that nobody

6	could have known in advance which sites would be
7	picked.
8	If somebody could know in advance
9	which sites will be picked for the audit, that
10	manual recount is losing most of its value.
11	I think that the manual audits
12	should be done by hand, where possible.
13	And the most important point that I
14	can make about this is that we have to have pre-
15	established, in advance, before the election,
16	procedures for what to do in a discrepancy.
17	If it's the case that we get a
18	different tally on the paper than we have in the
19	electronic machine, what to do.
20	And you have to keep in mind that it
21	may be the case that the paper ballots show
22	something that's statistically ridiculous
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1	
1	compared to the expectation and the electronic
2	tally matches the expectation.
3	If that were to happen, there has to

be a procedure.

Also it may be the case that the

all for one candidate, which is impossible.

paper matches the expectation and the election is

4

5

6

8	Whatever it is that we do, it has to
9	be established in advance what the procedure is
10	for handling it.
11	I think it's important to have
12	comprehensive security reviews of the system in
13	addition to guidance or standard compliance
14	testing. If the ITA's are simply looking at the
15	standards or guidelines document that you
16	produced and matching it up with that system, say
17	yes it meets those, that's not enough. I think
18	you want to have a red team or a security review
19	that's required to go in and do a risk assessment
20	of the system in the face of various different
21	kinds of attacks. And I think that that should
22	be mandated.

1	I know that I am using up a lot of
2	time and you already have my written comments
3	So I think that I will just wrap up
4	with a couple of things.
5	Let me say that the properties that
6	I would like to see a voting system that utilizes
7	paper have are that it should maximize the
8	probability that the voters will actually verify
9	their vote. And one way to do that is to have

10 them use a marking system that produces a piece 11 of paper that they then have to scan. 12 It's important that the order of the 13 votes in the paper trail be randomized. And the 14 procedures in place for what to do in the case of 15 a discrepancy, as I just said. 16 It's important that every step of 17 the way be accessible to disabled voters, such as 18 blind voters and deaf voters. 19 And, in my opinion, the paper record 20 should be the authoritative vote. 21 Now, let me just talk about two or 22 three things that I found in the standards 228 1 themselves. 2 One of them that troubled me the 3 most was the requirement that there be real time 4 clocks in the machines. Maybe there is a benefit to audit,

12	The other thing is that I read in
13	there that there should be a time stamp on every
14	record in the machine. Well, that is now an
15	electronic version of the reel-to-reel that
16	preserves the order in which people voted. And I
17	think that needs to be weighed against the
18	possible benefit of the audit.
19	There were other technical things
20	that I found that I didn't think were actually
21	enforceable, like the requirement to know what
22	the values and the registers and the various

1	variables are at setup time. I'm not sure
2	technically how that would be accomplished.
3	And I agree with the statement that
4	five people in the language minimum doesn't do
5	much if you only have three people in a precinct
6	that vote in a particular language. What do you
7	do?
8	So, I will write up all of my
9	specific comments for you that I had mostly with
10	respect to security. And I'll wrap it up with
11	that.
12	CHAIR HILLMAN: Thank you so much.
13	Okay. In keeping with our schedule

14	for today, we will begin the public comment
15	period at 4:30. However, once again, we are not
16	likely to take a break between this panel and the
17	public comment period.
18	So, Commissioners, in keeping with
19	that, we will have to stick to our ten minute
20	allocation of time so that we can do justice to
21	both this panel and those individuals who are
22	signed up for the public comment period.

1	And I am going to give myself a
2	treat and start with the line of questioning so I
3	can get all of mine in this time.
4	Professor Rubin, when I first became
5	aware of the Election Assistance Commission
6	having been organized under the Help America Vote
7	Act, I did not hear much, a little bit of
8	conversation about paper trails. And even then,
9	I'm not so sure the term V V P A T had been
10	codified.
11	I think people were sort of
12	struggling with what to call it. Different
13	things mean different things.
14	And I really appreciate in your
15	testimony the way you have sort of identified

three different terms for verified paper.

What has evolved in the past two

years around this discussion, this discussion

being verified paper, and what of that has

surprised you, the change in the conversation

from where we were at this time 2003 to where we

are today?

1	DR. RUBIN: You know, it's true.
2	When I started working in elections, I was
3	working with the country of Costa Rica. They
4	asked us to help them design an electronic voting
5	system.
6	And I came to the problem initially
7	from the point of view, well, that's a great
8	application, we can use our computer security
9	knowledge to do that.
10	And every time when you do security
11	work, you always do it in the face of a
12	particular adversary. So let's say the average
13	adversary does this or does that.
14	And every time we tried to design a
15	system that would be fully electronic and secure,
16	we hit a wall. Because we just couldn't figure
17	out what to do if the people who programmed the

18 computers themselves were the adversaries. 19 The idea of a paper trial came along 20 because it's something that's not part of the 21 electronic system. 22 So in order to cheat, it would 232 1 require much, much, much more effort and what I 2 think is a retail level of fraud, than it would 3 in an electronic system. 4 What I have seen involved is I have 5 seen conferences and workshops - many of which I 6 have attended in the computer science community -7 where people have tried to come up with solutions 8 that wouldn't require paper. And some of them 9 are very novel - the cryptographic schemes. And 10 I'm a big fan of those schemes. 11 However, along with all the other 12 requirements of accessibility, security, 13 auditability, is one of transparency. And I 14 think that's where some of these schemes fall a 15 little short. 16 What I think has evolved is the 17 understanding that we need to move with the 18 speed - not move too quickly before we understand

how to assess the risks that we have.

20	The reason I really enjoyed the dual
21	verification section here is that I think it's
22	exactly the right idea. That if we had

1	The more independent ways we have of
2	recording and storing the votes and truly
3	independent - meaning you don't take it into the
4	computer and then store it in audio and then
5	store it in hard drive somewhere - you actually
6	have to capture them separately, like the camera
7	idea does.
8	I think the more we open our minds
9	and look to ways of doing this, the more hope
10	there is to have good auditable elections.
11	I think that paper is the one that
12	we understand the best and the one that average
13	citizens understand the best.
14	If you have got a camera taking a
15	picture of the screen, of your confirmation
16	screen, one, was that camera controlled by the
17	software that's the software that you are worried
18	about or is it control by something else?
19	How do you store these; how do you
20	do the manual recounts?
21	These are all things that need to be

22 explored, not to mention the possible reflection

1	of the voter off of the screen and people's
2	paranoia about having a camera in the voting
3	booth.
4	But when I read that section, I
5	think, now people are thinking about this the
6	right way: how do you verify an audit
7	independently from the electronic tally.
8	CHAIR HILLMAN: Thank you. And I
9	have to say that you must be a pure scientist at
10	heart, because nobody else said that they have
11	enjoyed reading any section of this document.
12	So for you to say you enjoyed the
13	section, makes me feel quite giddy. Thank you
14	very much.
15	Mr. Lomax, how many times has Nevada
16	used its new system with the verified paper?
17	MR. LOMAX: We have used it for four
18	elections, it would be the primary and the
19	general election in 2004 and then we used it for
20	the primary and general municipal elections in
21	2005.
22	CHAIR HILLMAN: And you were the

1	administrator over all four elections, were you?
2	MR. LOMAX: Yes, I was.
3	CHAIR HILLMAN: Of the errors that
4	occurred, what percentage of those would be
5	assigned to human error?
6	MR. LOMAX: I'm not sure what you
7	mean by errors that occurred.
8	CHAIR HILLMAN: Whether, you know,
9	we are talking about jammed paper, something not
10	quite
11	MR. LOMAX: Errors related to the
12	printer, is that what we are talking about?
13	CHAIR HILLMAN: Yes, yes.
14	MR. LOMAXL There were no errors in
15	the sense that the paper record did not reflect
16	what the electronic record did, either as
17	presented to us by some voter complaining or when
18	we did our random audits. It always matches.
19	Out of the half a million
20	essentially records that were or ballots were
21	cast and then records that were created, there
22	were less than 25 instances where there was a

l	paper jam in which some portion of that paper
2	record was unreadable because of the way it got
3	caught up. We didn't lose the whole ballot but
4	we lost some portion of it.
5	So that comes out to one in every
5	20,000.
7	And that also was almost always as a
3	result of human error in the sense of the way the
9	people that threaded the paper in the printer.
10	The printer is unbelievably reliable, what we are
11	using. I mean, it works. But you do have to
12	thread the paper in there correctly.
13	So what we found when we had paper
14	problems - and they were very rare to begin
15	with - but they were generally training problems
16	because the paper hadn't been put in there
17	correctly. So it is all human error is what is
18	comes down to.
19	CHAIR HILLMAN: Okay, thank you.
20	Mr. Kosinski, I believe you said
21	that the State of New York has always used a
22	lever machine pretty much. There may be some

1	areas using a paper ballot, but punch cards or
2	optical scans have you used?
3	MR. KOSINSKI: We have used punch
4	cards and optical scans for absentee voting,
5	central count voting only.
6	CHAIR HILLMAN: So for the voters of
7	New York, an experience with either an optical
8	scan or a touch screen with verified paper would
9	be a first time experience that they would be
10	voting on something at a polling place in a
11	voting booth that would produce a piece of paper,
12	whether marking a ballot or an optical scan or
13	verification on an electronic machine; is that
14	correct?
15	MR. KOSINSKI: Yes, yes, that's
16	correct.
17	CHAIR HILLMAN: Have the draft
18	guidelines that you have seen and today's
19	discussion helped you in your thinking about what
20	New York is going to be confronting with the
21	transition?
22	And I'm not going to talk about the

delays or 2006 or '07, or just whatever length of

2	time it takes for New York to get to the point
3	where it replaces the lever machine.
4	MR. KOSINSKI: I think it helps. I
5	think, however, a lot of what we are faced with
6	in New York is what you have probably identified,
7	which is this is something new to our voters; it
8	is also something new to our election workers,
9	you know.
10	So that without having any
11	experience in this area, it's very hard to know
12	really how these guidelines will help us until we
13	actually start to use it and see how people react
14	to it.
15	The guidelines may assist us in
16	developing a system that will work, technically
17	work. But I think then you are faced with a
18	system that has to work with the people that you
19	are going to use it on.
20	And whether that is inspectors that
21	have to use it or it's voters that have to use it
22	for the very first time, that's obviously an

- 1 unknown factor.
- 2 And I think that the primary thing
- 3 that we are looking at in that area is the

4	training and the education of the voters prior to
5	the systems being introduced into our state.
6	CHAIR HILLMAN: Thank you.
7	Mr. Dickson, you will indulge me. I
8	really don't have any questions for you.
9	I had the opportunity to hear your
10	presentations and, as usual, you are clear and
11	right to the point. And there is not much
12	confusion in my mind over what you had to say.
13	Thank you.
14	Mr. Vice Chairman.
15	VICE CHAIR DeGREGORIO: Thank you,
16	Madam Chair. I think we have a very diverse
17	group of folks in front of us. We have Mr.
18	Kosinski, who is going to be new to VVPAT and his
19	state hasn't used it yet; Larry Lomax has had
20	half a million voters use it; we have Mr. Rubin
21	who advocates for it; and Mr. Dickson who is
22	opposed to it.

1	So we have had a very diverse group
2	of opinions.
3	Let me ask Mr. Lomax, though, some
4	technical questions about this and about your
5	system

6	First let's talk about the font
7	size, because you suggest that a 10 point font
8	size - using Times New Roman as the font, I
9	assume - your statement here is in 12, I'm pretty
10	sure it's 12. If I have to look at a 10 I have
11	to make sure that I've got these on and the
12	bottom part of my glasses on. It still seems
13	pretty small to me.
14	Is there any evidence, when you have
15	such a small font size, that people will just
16	ignore the VVPAT and not even look at it because
17	it's too small, whereas if the font size was
18	larger, if it was 15 or 20, then they might even
19	look at this and pay attention to it and compare,
20	whereas if it's a small font size, they might
21	Is there any evidence or anything
22	that you have looked at

1	MR. LOMAX: I have no data that
2	would reflect that.
3	I do know that in Clark County it
4	had been advertised, so to speak, that the voters
5	did not look at the paper trail.
6	There was a CD made - after we
7	caught somebody filming up there for a couple of

	······g
3	hours and they got thrown out - they did their
9	own analysis and that was their determination.
10	But I would point out that in Clark
11	County we have been doing DRE voting since 1996
12	So adding the paper trail to the touch screen
13	machine was not nearly as revolutionary as it's
14	going to be, for instance, in New York, when they
15	go from a paper system to this whole setup, the
16	electronic voting and the printer.
17	So our voters were very comfortable
18	with the electronic machines to begin with. This
19	paper trail issue was not a big deal in Clark
20	County.
21	So I think a lot of the voters, in
22	fact, in a lot of polling places we had a lot of

1	our older machines without the printer and our
2	new ones with the printer, the majority of voters
3	chose to use the old machine, just because they
4	were comfortable with that and they didn't have
5	the printer.
6	They had their choice which machine
7	they wanted to use.
8	So I think we had a comfort level
9	that makes us, perhaps, a bad example to relate

10 to how many people look at the printer. 11 I don't doubt, though, that the 12 smaller font might discourage some people from 13 looking. 14 VICE CHAIR DeGREGORIO: Because I 15 was in your warehouse in February '04 and saw 16 your two different systems. And what you just 17 said here confirmed what I thought, you have two 18 systems there and voters were given a choice, if 19 they wanted to use the one with the verification 20 of the paper and ones that did not have that. 21 What percent used the verification? 22 MR. LOMAX: As I said before, we do 243 1 early voting for two weeks. During the early 2 voting period we only use the machines that have 3 the paper trail printer. 4 So during that time period 271,000 5 people voted using the printer. 6 On Election Day we had at least two 7 of the paper trail machines in every polling 8 places. And in some polling places we had two of 9 those and 20 of the others. 10 But on Election Day, about 70,000

people chose to use the paper trail machine and

12	that makes about 150,000 that chose to use the
13	other one.
14	VICE CHAIR DeGREGORIO: You allow
15	observers in your polling stations, party
16	observers or somebody who can sit there all day?
17	MR. LOMAX: In the Presidential
18	election, we had up to 14 poll watchers from the
19	various parties.
20	VICE CHAIR DeGREGORIO: So someone
21	could come in and make a record of every single
22	person who voted and the time they voted and
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1	the
2	MR. LOMAX: You can say that's true,
3	but that's absolutely not true.
4	First of all, if you come into one
5	of our polling places, you don't know who the
6	people are as they go up.
7	We vote multiple precincts in a
8	polling place. Just because you are standing in
9	there doesn't mean you have the foggiest idea who
10	all these people are going off to vote. They are
11	going off to all the different voting machines on
12	their own.
13	VICE CHAIR DeGREGORIO: Well, some

states have the requirement that the political 14 15 party observers or the candidate observers can 16 sit behind the poll workers and actually have to be told the name of the person that is coming to 17 18 vote. 19 It may not be true in your state, 20 but some states have that requirement. 21 I just wanted to see if Nevada had that requirement. 22

1	Let make get to a couple of things.
2	You make a very good suggestion here
3	on this reel-to-reel issue where you have two in
4	one polling place and people go use either one
5	and there is no way to track the sequence of
6	voting and who voted.
7	And that is, you know, a reasonable
8	solution to allow a reel-to-reel that prevents
9	anyone from - and allows, I think, the privacy of
10	the voter - that you can't determine someone's
11	vote by looking at these pieces of paper
12	afterwards because you have two and you are using
13	both of them.
14	It seems like a very reasonable
15	accommodation

16	But if you did have one, just one at
17	a polling station, and it was reel-to-reel and it
18	was a state that required or allowed some
19	observer or someone to sit there and take a name
20	of the person and then in some kind of a
21	discovery in a recount or election contest, we
22	can actually go in then and determine who voted

1	for whom.
2	MR. LOMAX: I would never argue
3	that.
4	VICE CHAIR DeGREGORIO: That could
5	be problematic.
6	MR. LOMAX: I mean, you have to have
7	appropriate administrative procedures.
8	As I said before with the absentee
9	ballots, the ballot comes with the voter's name
10	on it.
11	You have to have procedures that you
12	break it apart so you can't track it.
13	You can overcome any of these
14	systems, depending on what you want to do.
15	VICE CHAIR DeGREGORIO: Thank you.
16	Let me ask the Professor here, who
17	does not believe in a reel-to-reel system - has

18 made that clear - but believes in paper. 19 And I appreciate your discussion 20 here about trying to make a distinction between 21 the VVPAT and what is a ballot and what is a 22 non-ballot, and that is helpful. 247 1 Are you suggesting here, Dr. Rubin, 2 though, an optical scan type of system would fit 3 the definition of the VVPB, the voter verified 4 paper ballot, marked by the voter, so that 5 definition would - an optical scan system would 6 qualify to that? 7 DR. RUBIN: That's right. However, 8 it doesn't mean that the optical scan ballot is 9 necessarily filled out by hand. 10 VICE CHAIR DeGREGORIO: Right. 11 DR. RUBIN: But the nice thing is 12 that whatever machine is used isn't part of the 13 trusted computing base of the system, so it 14 doesn't have to be trusted. 15 VICE CHAIR DeGREGORIO: Do you have 16 any comments on font sizes that's in these 17 guidelines when it comes to the paper trail? 18 Have you looked at this issue? Have your

students done any studies or anything like that?

20	DR. RUBIN: No, we have not looked
21	at that issue and the human factors.
22	VICE CHAIR DeGREGORIO: Jim, I want
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1	to second our Chairle comments. Voy one a years
1	to second our Chair's comments. You are a very
2	articulate advocate, spokesperson.
3	MR. DICKSON: I want to, if I
4	could
5	CHAIR HILLMAN: He wants us to ask
6	him a question, so, Jim, please.
7	VICE CHAIR DeGREGORIO: I am going
8	to allow you the opportunity to comment on that.
9	MR. DICKSON: I really appreciate
10	the effort that Larry and his colleague took with
11	the magnifying glass and I'm sure that was
12	helpful for some.
13	But, again, we have got to really
14	look at fact and reality. The reality is that
15	sight loss and those that use/need magnification,
16	there isn't a single magnifying glass that's
17	going to work for everybody. There are too many
18	variables about the light, where the damage in
19	the eye is.
20	So it is great to have it there, but
21	we need to really understand that it will fit a

few, but it's not going to fit most.

I	And in terms of the size of the
2	population that we are talking about, for every
3	one person who you can tell is blind because we
4	use dogs or canes or are essentially totally
5	blind, there are nine whose vision is such that
6	they can't read print. So it's a lot of people.
7	CHAIR HILLMAN: Thank you.
8	Commissioner Martinez.
9	COMMISSIONER MARTINEZ: Thank you,
10	Madam Chair.
11	I will be brief in my questions.
12	I guess I want to start by
13	reiterating, at least for the purpose of
14	discussion, just what this panel is not.
15	This panel is not a discussion about
16	the security or lack thereof of DRE systems. I
17	think that discussion has to continue. I have
18	certainly had discussions with Professor Avi
19	Rubin about continuing to engage - who is
20	actually, you have been, I think, very accessible
21	to the EAC in talking about that particular
22	issue.

1	but, again, we are not here to
2	discuss the security or lack thereof of
3	electronic voting systems.
4	We are not here, either, to discuss
5	the pro's and con's as to whether VVPAT is an
6	appropriate method to increase voter confidence
7	or to increase security.
8	The position that the EAC has taken
9	is that that is a decision left solely to the
10	discretion of state and local governments.
11	What we felt was appropriate was,
12	given the fact that at least 16 jurisdictions -
13	and I guess I am learning, Mr. Kosinski, that in
14	this legislation that is pending here in New
15	York - that perhaps 17 states now, will be
16	requiring - either through legislative action or
17	administrative rule - that those states use VVPAT
18	by a date certain, most of which are 1/1/06.
19	Though some states, like Colorado,
20	which recently passed a VVPAT requirement, says
21	they don't have to implement it until 1/1/08.
22	And so, from my perspective, that is

1	a decision appropriately left to state and local
2	jurisdictions. And they, in turn, will have to
3	be held accountable to the citizens that they
4	serve.
5	Having said that, having stated from
6	my perspective what this panel is not, I want to
7	start, if I could, Mr. Lomax, with just a general
8	perspective.
9	You are, among other things that you
10	do, you are obviously the administrator there in,
11	is it Clark County?
12	MR. LOMAX: Yes.
13	COMMISSIONER MARTINEZ: in
14	Nevada, of the elections.
15	And I wonder if you can give us the
16	perspective of before you had VVPAT and where you
17	stand now, in terms of just a personal
18	perspective about what purpose it serves for you
19	as a local election administrator.
20	MR. LOMAX: Prior to having the
21	VVPAT, every election there was a small - as it
22	is nationally - small but very vocal minority

1	that complained to us, sent me e-mails, telephone
2	calls about the lack or of a way to verify
3	electronic voting.
4	None of this occurred prior to
5	Florida, but a lot of it occurred after Florida.
6	Since we have the VVPAT, all of that
7	has gone away. I didn't have any complaints in
8	the last election.
9	So I would still suggest that the
10	great majority of people in Clark County really
11	didn't care one way or the other.
12	But for that small minority of
13	people who passionately did care, it's made a big
14	difference. They have been very comfortable and
15	we really had no issues related to voting
16	machines in the last election.
17	COMMISSIONER MARTINEZ: Is there a
18	state law in Nevada, a requirement that you audit
19	a certain number of the paper records to the
20	electronic ballot, because that's what it is, I
21	assume?
22	MR. LOMAX: The Secretary of State

1 has put out guidelines in what we call the

OJ IICa	mig
2	Administrative Code. And what he requires, that
3	1% of the machines after the election are
4	randomly selected. And what we do then is we had
5	teams of people manually recount the paper
6	records and we match those results against
7	electronically recorded results from those
8	selected machines.
9	COMMISSIONER MARTINEZ: Does the
10	paper that is produced with respect to the VVPAT
11	have any legal standing?
12	I know it's not the official ballot,
13	but is it the official record for recount
14	purposes in Nevada?
15	MR. LOMAX: No, it is not. Right
16	now our recount procedures are all based upon the
17	electronic results.
18	COMMISSIONER MARTINEZ: Professor
19	Rubin, the Vice Chair alluded to this a few
20	minutes ago, but Mr. Lomax has talked about some
21	of the administrative protocols that they
22	implement to ensure that the reel-to-reel aspect

- 1 of this VVPAT technology that they use in Clark
- 2 County accounts for trying to maintain the
- 3 privacy of the voter with the use of at least two

5	requirement; they don't keep a record of exactly
6	where each voter signed in, et cetera.
7	Does that help to alleviate, from
8	your perspective, some of your concerns about
9	reel-to-reel technology?
10	DR. RUBIN: To some degree. But I'm
11	still concerned about the possibility, not of
12	being able to match every voter with their vote,
13	but of being able to target a particular person.
14	If you are an observer and you want
15	to know how did that person vote and you get to
16	participate in a recount and you watch when they
17	came in and how many people went before them, you
18	will be able to tell how they voted.
19	I think the privacy you want is
20	having a sequential record of the order of which
21	people voted is a bad idea, because I think we
22	can have voting systems that are just as good in
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1	every possible way that don't do that.
2	COMMISSIONER MARTINEZ: Thank you.
3	Mr. Dickson, I do have a question

Mr. Dickson, I do have a question

for you, so you can have another shot at giving

us what I think is a very eloquent perspective.

machines. And I guess they don't have a sign-in

4

5	I guess, from my - and, Jim, you and
7	I have had many discussions over the course of my
3	short time on this Commission, and certainly over
)	the past few months - and I think that the
10	dilemma for me, obviously, is that I certainly do
11	recognize the language that has been written very
12	intentionally by Congress.
13	And we have to keep in mind that
14	HAVA was passed overwhelmingly in both Houses of
15	Congress and signed quickly by President Bush
16	back on October 29th of 2002.
17	There is language, clearly, that
18	represents significant civil rights strides with
19	persons with disabilities when it comes to being
20	able to vote.
21	So I certainly recognize and give
22	due credit to the eloquence that you bring to the

table at all times in reminding us of that
particular language.
I guess my question is also, it
plays along those lines. And that is, as
somebody who has to help determine an
interpretation of an important Federal statute,
like the Help America Vote Act, is it

8	appropriate, from your perspective, for us to
9	temper our decision or be influenced by the
10	technology, the capabilities that currently
11	exist, from a technology perspective?
12	MR. DICKSON: I think you have to.
13	We have a deadline that is the law and it was put
14	there consciously. We can't
15	There is a notion abroad in the land
16	that, well, we can just wait until something
17	better comes.
18	And I think it would be very helpful
19	if the Commission would say, very clearly, you
20	know, you got to buy it by the first of the year,
21	it has to be accessible. You can't wait for
22	something that's better.

1	I also think that there is an
2	underlying assumption by those who say we got
3	something better coming down the road, and that
4	is that there is going to be money to buy that
5	something better.
6	Well, I have been working for 25
7	years to try to get government to put more money
8	into elections. We have got one pot of money. I
9	hope there will be additional money coming. I

10 will certainly do - and the disability community 11 will do - everything we can to get the additional 12 money to election officials. 13 But you got to buy what's available 14 now is absolutely clear. And we can't be waiting 15 for something in the future. 16 David Dill (ph), he is the guy who 17 really lifted the paper trail up, big time. When 18 I first talked to him 2 1/2, a little, about, 19 over 2 1/2 years ago, he said that right around 20 the corner there was going to be something that 21 was going to make paper accessible. 2 1/2 years 22 have gone by and it's not here.

1	I have heard - and this is true for
2	most people with disabilities - I have heard
3	medical scientists say to me, right around the
4	corner is going to be a cure for blindness. I
5	have been listening to that for 35 years.
6	I not only can't see what's right
7	around the corner, I still can't see the corner.
8	COMMISSIONER MARTINEZ: I appreciate
9	that.
10	I guess two additional comments from
11	my perspective.

12	The first is that you had, Mr.
13	Dickson, talked about in your testimony the idea
14	of if VVPAT is required by jurisdiction, that,
15	for example, you complimented the Nevada
16	situation because it's not the official ballot.
17	And I do want to point out that we
18	did add language in the VVPAT requirement in the
19	proposed VVSG - and I'm sorry for all the
20	acronyms, but I think we by now are following
21	along - that says that in a jurisdiction where it
22	is being used as the official ballot, that full

1	accessibility shall be required.
2	And I am sure you are probably
3	familiar with that language.
4	MR. DICKSON: Yes.
5	COMMISSIONER MARTINEZ: And I guess
6	going back to the reason that I asked the
7	question about technology, because there is
8	this - I don't know what the right word is - this
9	dichotomy, I guess, if you will, between - in the
10	VVSG - between - there is, the way it was laid
11	out, the various disabilities are dealt with in
12	different sections, and I think you pointed that
13	out that it was in different places and not all

14 in one particular spot. 15 I think that, from my perspective, 16 what I have learned in going through the process and in sitting through the various meetings that 17 18 occurred by the TGDC - and I know that you were -19 if not physically, then certainly via the 20 Internet technology - a part of many of those 21 sessions - a realization, if you will, from the 22 TGDC - from the Technical Guidelines Development 260 1 Committee - and the various experts that they 2 drew from at NIST and other places, that 3 technology, perhaps, is not where it ought to be 4 when it comes to ensuring that we can meet what 5 is, I think, very important language of privacy 6 and independence, for all persons with 7 disabilities. 8 And, therefore, there was this 9 difference in language between those that had 10 visual impairment versus those that had other 11 disabilities, like limited dexterity. 12 I just, again, I just wonder from 13 your perspective the appropriateness of that type 14 of an analysis and whether the availability of

technology is an appropriate consideration, as we

16	make those types of tough choices.
17	MR. DICKSON: I think it's
18	inappropriate to have one standard for one type
19	of disability and another standard for another
20	type of disability, particularly when we are
21	talking about sizable populations.
22	The dexterity issue isn't just for
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1	people who are quadriplegic. We are talking
2	about voters who have Parkinsons and have such
3	tremor that they can't handle the paper - take it
4	out or put it into a slot.
5	We are talking about people who have
6	severe hand/eye coordination problems.
7	There are many people who have
8	perfectly good use of their arm, but their hand,
9	they can't pick up the paper. So I think it's
10	got to be consistent.
11	COMMISSIONER MARTINEZ: I appreciate
12	that.
13	Madam Chair, I apologize. I have
14	gone over my time. Thank you.
15	CHAIR HILLMAN: Thank you very much.
16	We are just about 4:30. But, Mr.
17	Wilkey, you had a quick question.

18	EXECUTIVE DIRECTOR WILKEY: No. I
19	am going to make this easy because two great
20	minds, the two questions and comments that I had,
21	Commissioner Martinez adequately covered both of
22	them.
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1	I'll just comment that as a HAVA
2	baby, so to speak, as someone who really believes
3	in what this law says and did, I understand, as
4	Commissioner Martinez so eloquently said, that
5	one of the most important aspects of this law is
6	to ensure that every voter gets to vote
7	independent and privately.
8	And we need to try to reach that
9	goal. That's it.
10	CHAIR HILLMAN: Thank you.
11	
12	* * * * *
13	
14	PUBLIC COMMENT PERIOD
15	
16	CHAIR HILLMAN: We have nine people
17	who have signed up for the public comment section
18	of our hearing.
19	I'll read those names and ask the

individuals to be prepared to come to the
microphone in the order that I'll read the name
and please let us know if you are here when I

1	read your name.
2	Bobbie Ann Brinegar?
3	MS. BRENEGAR: Here.
4	CHAIR HILLMAN: She is here, great.
5	Dan McCrea?
6	MR. McCREA: I'm here.
7	CHAIR HILLMAN: Rebecca Mercuri?
8	MS. MERCURI: Here.
9	CHAIR HILLMAN: Sanford Morganstein?
10	MR. MORGANSTEIN: Here.
11	CHAIR HILLMAN: Fernando Morales?
12	Mr. Morales, no? Okay.
13	If staff would let us know if he
14	comes in at any point during this 30 minutes, to
15	just let us know and we will make sure that he
16	gets added on.
17	Teresa Hommel?
18	MS. HOMMEL: Here.
19	CHAIR HILLMAN: Martha Mahoney?
20	MS. MAHONEY: Here.
21	CHAIR HILLMAN: And Sharon Shapiro.

MS. SHAPIRO: I'm here.

1	(inaudible)
2	CHAIR HILLMAN: Just one moment,
3	ma'am, and then we will call on you. I'm sorry,
4	I couldn't hear the request.
5	MR. CAMPBELL: Am I on the list?
6	CHAIR HILLMAN: I'm sorry. You are
7	on the list, Edmund Campbell.
8	We will start with
9	MS. SHAPIRO: I have to catch a bus.
10	So I don't have to go first, but I need to go
11	earlier.
12	CHAIR HILLMAN: She has a
13	transportation issue, so why don't we do this,
14	why don't we let you go first so that you don't
15	miss your transportation.
16	MS. SHAPIRO: Thank you.
17	Okay. What I am going to do is I am
18	going to have my colleague read my testimony so
19	that time is used wisely.
20	I do have some comments I would like
21	to make after it is read.
22	CHAIR HILLMAN: Okay. Who is

1	reading Ms. Shapiro's
2	MS. KAL HERSHAY (ph): I am. I am
3	Marjorie Kal Hershay and I am part of the
4	coalition of New York City/New York State HAVA
5	Coalition.
6	It is a group of organizations that
7	have been meeting over the last 2 1/2, 3 years.
8	And, thank you.
9	CHAIR HILLMAN: I'm sorry to
10	interrupt. But I did forget to state the rule
11	that each person has up to three minutes for the
12	presentation.
13	And so you will have to indulge me,
14	because of the number of people testifying, that
15	I will to keep strictly to the time frame.
16	MS. KAL HERSHAY: Sure. And you
17	have written copies of the testimony.
18	So let me just flick down through
19	the major points.
20	MS. SHAPIRO: Okay. I think I'll do
21	it since - okay.
22	My name is Sharon Shapiro and I am

1	disabled.
2	If I could go to the table, that
3	would be easier for me.
4	CHAIR HILLMAN: Sure.
5	Hello.
6	MS. SHAPIRO: I am the Director of
7	Advocacy of the Center for Independence of the
8	Disabled.
9	We have been involved in this issue
10	ever since and before the inception of HAVA.
11	We have met with New York State
12	officials. We have testified. We have written
13	papers about what people with disabilities need.
14	This morning, when the vendors were
15	giving their or saying dual comments, which I
16	found very interesting, they were saying that the
17	guidelines came or are too much too late. And
18	then later they said, oh, but we are prepared.
19	And I found that kind of
20	incongruent, because how can the guidelines be
21	too much too late and yet they are prepared? So
22	that I found somewhat incongurent.

1	I want to continue, though, by
2	saying that we are disappointed in New York State
3	in the joint bill that was presented to the
4	Governor.
5	The bill does not ensure large
6	print; it keeps the Full Faith Ballot Law, which
7	will restrict the machines that we can choose
8	from.
9	People with reach disabilities and
10	people who are using vision and hearing will have
11	trouble using the full faith ballot.
12	I also want to comment that in my
13	testimony, as you will see, I originally wrote
14	that I was disappointed that the Commission
15	didn't make access guidelines for voter
16	verification.
17	And the reason why I did that was
18	the access guidelines were in a different section
19	of the guidelines. So when I was looking up
20	voter verification access, I was looking under
21	the disability access regs and I completely
22	missed the voter verification.

So on one hand I'm very happy the

2	Commission has included it. On the other hand, I
3	recommend that you reference it in both places.
4	I just want to ask that New York
5	State and the Commission press upon New York
6	State to make these guidelines madatory. I fear
7	that since New York State will be having their
8	localities pick and choose machines, that they
9	won't go by the guidelines.
10	These guidelines need to be
11	mandatory now.
12	And the only other issue is the
13	voter paper trail. Right now there aren't any
14	extensive voter verified paper trails that have
15	been certified as being accessible.
16	What are we going to do?
17	And the state has, we have to get
18	machines in and yet we need access to paper
19	trails. We need to come up with a solution.
20	And I have more items, but I don't
21	want to I wanted to focus on the issues that
22	you are addressing today.

1	CHAIR HILLMAN: Thank you so much
2	We appreciate your comments.
3	MS. SHAPIRO: I have one more

4	comment.
5	My disability is cerebral palsy.
6	The dexterity issue that Mr. Dickson was
7	referring to would apply to someone like myself.
8	We need to be able to independently verify our
9	ballots.
10	CHAIR HILLMAN: Thank you very much.
11	Appreciate it.
12	Ms. Brinegar. I don't think I
13	pronounced your last name correctly.
14	MS. BRINEGAR: Brinegar.
15	CHAIR HILLMAN: And could we, just
16	to save on time, ask people to use the stand up
17	microphones. Stay where you are, but we will
18	just ask people
19	And, in fact, if you know you are
20	next, you can go up to the microphone to wait
21	your turn. It will help us move along.
22	MS. BRINEGAR: I am Bobbie Brinegar
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1	speaking for the Verified Voting Foundation.
2	And I am pleased to have the
3	opportunity to provide our initial feedback on
4	the Voluntary Voting System Guidelines released
5	for comment this past Friday.

6	Our staff has been reviewing the
7	hundreds of pages of guidelines and we will
8	provide thorough written comments prior to the 90
9	day deadline.
10	Verified Voting Foundation is a
11	non-partisan, non-profit organization championing
12	reliable and publicly verifiable election
13	systems, including voter verified paper ballots
14	which enable meaningful recounts and effective
15	random manual audits.
16	We are concerned about public
17	visibility into the acquisition, regulation and
18	operation of voting systems. For that reason, we
19	petitioned the EAC to upgrade the guidelines with
20	measures that will make the voting system
21	certification process transparent and encourage
22	public participation.

1	The guidelines should specify that a
2	broad spectrum of representatives from non-profit
3	election protection organizations, universities
1	and the public be able to review and provide
5	comment on test plans for voting systems.
5	The test plans and results should be
7	made public before certification of voting

3	systems. And comments from test observers should
9	be published along with the official test
10	reports.
11	As a best practice, we also
12	recommend that any jurisdiction considering
13	acquisition of a voting system establish a
14	citizens' advisory board for that purpose, as
15	already occurs in some jurisdictions across the
16	nation.
17	Voting technology vendors should not
18	be able to elect a test lab and/or pay that lab
19	for testing, as it creates a clear conflict of
20	interest.
21	The test lab is not then independent
22	and has little incentive to find problems when
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1	paid by the very voting technology vendors
2	seeking its approval for certification.
3	And test labs should conduct testing
4	using human beings in addition to automated
5	testing.
6	Additionally, Verified Voting
7	proposes a ban on wireless communication
8	capability in voting machines.
9	Our organization strongly suggests a

10	more complete treatment of ballot marking devices
11	within the guidelines, because many jurisdictions
12	are adopting this voting technology as the means
13	for providing the important disabled
14	accessibility for a verifiable precinct count
15	optical scan system based on paper ballots.
16	Finally, the Verified Voting
17	Foundation recommends the use of an accessible
18	voter verified paper ballot, which enables all
19	voters - including all disabled voters - to check
20	that their votes are recorded as intended and
21	makes it possible for election official to
22	perform meaningful recounts and effective random

1	manual audits.
2	Although clearly not the only
3	election reform needed, at this time electronic
4	voting systems cannot be secure, reliable and
5	verfiable without paper ballots.
6	Thank you for your dedication to
7	establishing superior voting systems guidelines.
8	CHAIR HILLMAN: Thank you.
9	Mr. McCrea.
10	MR. McCREA: Good afternoon. My
11	name is Dan McCrea. I am a Government Relations

12	Chair for the Miami-Dade Election Reform
13	Coalition. We are a non-partisan all volunteer
14	group advocating for all voters.
15	In my other life I am a general
16	contractor and a former elected City
17	Commissioner.
18	Much of what you are dealing with
19	today and the testimony that you have heard today
20	is hi tech. Let me return us to some low tech
21	best practice and suggest that it is essential
22	that the guidelines include it.

1	Our coalition undertook a study of
2	poll closing procedures in Miami-Dade County in
3	the November 2004 general election.
4	I have provided copies of the report
5	that we produced to your staff and we will
6	subsequently provide further written testimony to
7	you on it.
8	In that report we were In those
9	observations, we were particularly interested in
10	ballot accounting and electronic security.
11	Ballot accounting, when using
12	electric ballots, is particularly important
12	because there is not a fixed number of ballets

14	being issued.
15	The first step in establishing a
16	valid vote count in such elections is to know how
17	many ballots you are looking for, you are trying
18	to count.
19	Our study looked at poll workers
20	conduct of ballot accounting that is accurately
21	counting the number of voters who signed in to
22	vote and comparing that number, the total number,
	275
1	of ballots counted in the precinct. We exposed
2	serious weaknesses.
3	77% of precincts did not produce a
4	match. We found that some of the 23% that did
5	produce a match forced that match. It is late at
6	night, poll workers are tired, and they would
7	enter a number that matched the ballot count,
8	even if it was not the signature count.
9	And 14% did not even count the
10	signatures, to make that important ballot
11	accounting procedure.
12	Even small discrepancies matter and
13	can hide larger problems.
14	In one egregious case, in Precinct

816, the number of voters and the numbers of

16	ballots cast produced a discrepancy of only two.
17	Had it been properly investigated,
18	they would have found that votes from a
19	malfunctioning machine were uploaded into the
20	certified canvass three times, causing 171 errant
21	votes in a single precinct to enter the canvass.
22	I think Professor Mahoney from the
	276
1	Hairragita of Miamai is sains to talk many shout
1	University of Miamai is going to talk more about
2	that in a minute.
3	This amounted to electronic ballot
4	stuffing.
5	And while this case appeared to be
6	unintentional, what can happen unintentionally
7	can happen intentionally.
8	The ballot accounting problems that
9	were revealed are not unique to Miami or Florida.
10	We urge you to review our report for
11	its application nationally and to ensure the
12	guidelines outline sound ballot accounting
13	procedures and point out that they are
14	particularly important where electronic ballots
15	are used. Thank you.
16	CHAIR HILLMAN: Thank you very much.
17	Ms. Mercuri.

MS. MERCURI: I'd like to thank the
members of the United States Election Assistance
Commission for the opportunity to address you
today on the proposed voluntary voting system
guidelines, VVSG, recently posted on your web

1	site.
2	For those of you who do not know
3	me - I know many of you do already - I am a
4	computer scientist and engineer who has been
5	researching, writing, testifying and commenting
6	on voting systems for the last 16 years.
7	Much of this material is available
8	on my web sit at www.notablesoftware.com.
9	Currently, I am a Fellow of the
10	Radcliffe Institute for Advanced Study at Harvard
11	University, where my research has focused on the
12	concepts of transparency and trust and
13	computational systems.
14	I have been an active member of the
15	Institute of Electrical and Electronics Engineers
16	(IEEE) P1583 working group on voting system
17	standards, a portion of whose work product is
18	embodied in this VVSG that is being now
19	considered for adoption by the EAC.

20	I can tell you first-hand that it is
21	fairly certain that the VVSG document you have
22	release would not be accepted by the IEEE

1	Standards Association, nor its P1583 working
2	group, should it be sent through that channel.
3	And the reason that I can make such
4	a strong statement in this regard is that I can
5	point to many specific areas of grave concern in
6	your document that have been the focus of
7	hundreds of hours of debate among the engineers,
8	computer scientists, vendors, academics,
9	usability experts and election officials who
10	comprise the P1583 working group and its larger
11	overseeing standards association balloting group
12	known as SCC38.
13	These areas directly affect the
14	fundamental aspects of accuracy, integrity,
15	security and reliability of voting systems.
16	Some of this material represents
17	legacy text that was propagated, despite
18	strenuous objections, from the Federal Election
19	Commission's earlier 1990 and 2002 voting systems
20	standards.
21	That this wording and its

22 ramifications have continued to persist through

1	to this stage is, in large part, due to the fact
2	that the dissenting positions of esteemed
3	scientists numerous enough to have caused the
4	IEEE's proposed standard to fail to gain the
5	majority approval necessary for its adoption -
6	it's not just a few of us; there were quite a few
7	scientists and others as well - have not be
8	allowed, this position has not been allowed to be
9	represented in the overwhelming one-sided
10	appointments to the EAC's TGDC.
11	I strenuously object particularly to
12	the sections in the proposed VVSG that include
13	the allowance for the use of wireless and public
14	network technology that provides open
15	vulnerability of U.S. elections to terrorists
16	around the planet, the blanket exemption from
17	examination for commercial off-the-shelf hot
18	(COTS) products, many of which are known to have
19	exploitable security flaws, the inadequate Mean
20	Time Between Failures Rating that translate to a
21	9% Election Day equipment malfunction rate, the
22	lack of mandated security controls that are

1	commonly applied to computer systems used in
2	aviation, banking, health care and even lottery
3	and casino gaming, and the lack of any
1	requirement that voting systems be transparent to
5	and independently auditable by the election
5	officials who must certify the results that are
7	produced.
3	Objections to many of these items
)	were provided in the comment round held by NIST
10	during their work period on this document. But
11	these serious and very real concerns appear to
12	have been grossly ignored.
13	As a footnote, I would like to just
14	add that the HAVA money will all be spent before
15	any of the equipment pertinent to these
16	guidelines will be implemented or available for
17	sale using the EAC money.
18	This document, then, is the legacy
19	of the EAC because it will be used to influence
20	future equipment that will be purchased in later
21	years.
2.2.	Because of the limited time

1	constraints for today's presentation, I will
2	defer my comments on these highly flawed sections
3	of the VVSG to a very detailed memorandum that I
4	plan to deliver within the public comment period.
5	I hope that you will review my
5	submission closely and I urge to you communicate
7	with me in order to gain a more holistic
3	perspective of the nature of the comments that I
)	will be providing, along with the related
10	concerns. Thank you.
11	CHAIR HILLMAN: Thank you.
12	Mr. Morganstein.
13	MR. MORGANSTEIN: Thank you. Good
14	afternoon. I'm Sandy Morganstein, President and
15	founder of Populex Corporation, a vendor that has
16	a 2002 certified election system that produces a
17	voter verified paper ballot, which we think is
18	accessible.
19	It's certified 2002 and there may be
20	some objection to that. But I think when it
21	comes to the discussion of accessibility, there
22	is certain areas where we don't need to split

1	hairs.
2	For example, if a voter votes in
3	private but someone helps put the ballot in the
4	printer but privacy is maintained, we can have a
5	discussion whether or not that is still
6	accessible.
7	But I am here today to talk about
8	the challenge you have as you finish your work or
9	these guidelines.
10	I think it is pretty difficult
11	listening, as you pointed out, Commissioner
12	Martinez, and as others have pointed out, that
13	you have people on all sides of the spectrum,
14	telling you what they think you ought to do,
15	however you are the ones who have to do it.
16	The problem is that I think the
17	standards need some tweaking.
18	And I am encouraging you - as I am
19	sure you are having these hearings for this
20	purpose - to undertake that tweaking during the
21	comment period that you will have in these next
22	90 days.

For example, we heard a lot today

2	about the word 'verification'. If you look at
3	the standards, it is not defined.
4	Some people will consider a paper
5	ballot verifiable if it simply reports whether or
6	not you have over votes or under votes. In the
7	case of an optical scan, that's usually what
8	verification means.
9	In other cases verification means,
10	will a ballot be read the way I think I marked
11	it.
12	And there is a tweak, if you look in
13	the glossary again, verification is not defined.
14	A larger area where I think you need
15	a tweak has been mentioned. Professor Rubin has
16	talked about the difference between a voter
17	verified paper audit trail and a voter verified
18	paper ballot.
19	If you look at the glossary again
20	and the definitions, there is no definition -
21	believe it or not, despite all this discussion -
22	of a VVPAT. It is not defined.

1	Voter verified paper audit record is
2	defined. That goes on to talk about an auditable
3	record.

4	If you take the standards as they
5	are drafted today, there is a possibility that
6	systems that are being rapidly deployed today -
7	from my mouth to God's ears, maybe ours - or our
8	competitors, for example, the AutoMark - are
9	either in one case not going to be covered by the
10	standards at all, if it is considered a VVPAT
11	after all, it is a voter verified paper audit
12	trail of something that happens on a computer
13	system, either it's not covered - or worse yet,
14	it's against the rules and cannot be deployed.
15	We have provided to NIST and have
16	had discussions with NIST and to your web site
17	six or seven pages where we think these tweaks
18	need to be taking place.
19	We don't think there is any need for
20	any wholesale rewriting or any throwing out of
21	the great work that has been done.
22	We have talked to NIST about those

1	points already and they agree with us. And, in
2	fact, I am authorized to say - although I don't
3	speak for NIST - I am authorized to say that
4	following those discussions, they have asked that
5	you specifically call upon them again to provide

6	comments to you based on what's coming out of the
7	people who have now had a chance to review the
8	draft standards, particularly the people who have
9	been involved from NIST in writing the draft
10	standards.
11	They agree that these holes do exist
12	and perhaps they would be very easy to fill and
13	then the country will then have voting standards
14	that can last for some period of time.
15	Finally, you are up against
16	timelines, vendors are up against timelines. You
17	have talked about, Madam Chair, we are not doing
18	a Version I and we are not doing a Version II,
19	and others have said maybe we will come out with
20	clarification.
21	My recommendation to you is, if in
22	all your balancing, the time to get this done
	286

1	versus the time to get it as best as it possibly
2	can, to err on the side to getting it the best
3	you possibly can.
4	There is confusion, as you have
5	heard today, what should we buy, what can we buy,
6	is it going to be grandfathered in, are we going
7	to be found out of compliance by some new set of

8	standards.			
9	I encourage you, in that difficult			
10	balancing act you have got - I know 2006 is right			
11	upon us - to get it so the next set of changes -			
12	obviously, there has to be some - will be as few			
13	as possible. Thank you.			
14	CHAR HILLMAN: Thank you.			
15	Ms. Hommel.			
16	And I do need to ask - and I			
17	apologize for doing this - but the remaining			
18	presenters to please keep to the three minute			
19	time line. I really do hate to have to cut			
20	somebody off, but we are just about at 5 o'clock			
21	now.			
22	MS. HOMMEL: Thank you for the			
	287			
1	opportunity to speak before you today.			
2	My name is Teresa Hommel and I am			
3	Chairwoman of the Task Force on Election			
4	Integrity of Community Church of New York.			
5	I am also a computer professional			
6	and I have worked in the field for 38 years.			
7	My remarks concern the lack of			
8	standards in the proposed guidelines that would			

guarantee that no matter what kind of computer

10 technology is used in elections, that ordinary 11 non-technical citizens can appropriately witness 12 election procedures. 13 I believe that voters must be able 14 to witness that their own votes are correctly 15 recorded and cast and election observers must be 16 able to witness the storage, handling and 17 counting of votes. 18 The problem with computerized 19 voting, obviously, is that no one can witness the 20 electronic ballots or votes. 21 And the further problem is that if 22 election procedures are concealed, then an 288 1 election lacks legitimacy, the government lacks 2 legitimacy and there is no reason for the public 3 to have confidence in the integrity of the 4 announced election outcomes.

legitimacy and there is no reason for the public
to have confidence in the integrity of the
announced election outcomes.

For these reasons, the guidelines
should have standards to require computerized
voting and vote tabulating systems to be designed
to facilitate appropriate observation by
non-technical citizens.

The proper use of voter verified
ballot printout would solve this - and I didn't

12	put this in my written testimony, but I want to
13	make clear what I say, what I mean by the proper
14	use.
15	My understanding of the voter
16	verified paper printout is that the voter can see
17	their ballot and it is the ballot of record
18	legally. And then it is counted and people can
19	watch the counting and know that the count is
20	correct.
21	If the legal ballot is the
22	electronic ballot, then nobody can watch it being

1	recorded or cast or handled or stored or counted.
2	And I believe that that is totally contrary to
3	any democratic principles of any legitimate
4	democracy.
5	So I believe that these guidelines
6	need to have strong suggestions, since they are
7	long term guidelines, that the voter verified
8	paper printout, whatever you call it, should be
9	easy to verify, easy to handle, easy to count and
10	actually should be counted.
11	Elsewhere, as appropriate, I would
12	urge you to deal with the problem that even where
13	state laws require voter verified paper ballots

14 to be created, no law considers these ballots to be a valid record and no law requires all of them 15 16 to be counted. For example, you heard from Mr. 17 18 Kosinski earlier, our New York State proposed 19 law, which has not yet been signed by the Governor, requires only 3% of the voter verified 20 21 paper ballots to be counted and includes no 22 standards whatsoever as to when a larger count

1	should be done as a result of discrepancy between
2	the paper and electronic count.
3	Computerized votes and vote
4	tabulating systems also conceal election
5	procedures from our own election officials and
6	prevent them from complying with their
7	responsibilities to oversee our election.
8	For example, in HAVA, Section
9	301(a)(5), there is a requirement that equipment
10	that counts ballots should meet the FEC 2002
11	accuracy standards, which allow a maximum error
12	rate of one in 500,000 ballot positions. But
13	there is nothing in the guidelines to ensure that
14	election officials can determine what the
15	accuracy of their counting equipment is and

16	whether it is in compliance with HAVA or not.
17	CHAIR HILLMAN: Could I ask you to
18	summarize. We have got your written testimony
19	and you have passed three minutes already.
20	So if you could just summarize to
21	your conclusion and we will read your written
22	testimony.
	291
1	MS. HOMMEL: I also urge you to ban
2	any communication capability whatsoever in any
3	voting and vote tabulating systems.
4	I do not believe that it can ever be
5	handled securely.
6	Earlier this year my America Express
7	card was broken into. Last week we saw in The
8	New York Times that 40 million Master Card
9	accounts have been compromised.
10	And if the most secure computer
11	installations in our country, which are the
12	financial institutions, cannot control their
13	computers, what makes you think that your local
14	poll worker can.
15	In conclusion, I urge you, the
16	Commissioners, to set forth standards to

facilitate meaningful observations by

18	non-technical citizens and election professionals
19	of the entire recording, casting, storage
20	handling and counting of votes.
21	And I don't mean some bait and
22	switch piece of paper which is not the legal
	292
1	ballot, but the ballots themselves.
2	And I urge you to declare that if
3	this cannot be done, that computerized voting is
4	inappropriate technology for use in this country.
5	Thank you.
6	CHAIR HILLMAN: Thank you.
7	Ms. Mahoney.
8	MS. MAHONEY: Thank you. I am
9	Martha Mahoney. Can you hear me?
10	CHAIR HILLMAN: Yes.
11	MS. MAHONEY: Thank you. You have
12	been given a copy of the Miami-Dade Election
13	Reform Coalition's report on the 2004 election.
14	I want to talk to you about three
15	issues that were revealed there and their
16	implications for the system guidelines.
17	I will submit written comments in

much greater detail later.

There were three things that are

18

20	really notable from Precinct 816.
21	One was, there was a vote counting
22	problem in which the votes from a single machine
	293
1	added 85 ballots to the canvass three times
2	instead of once, so that 945 people signed in but
3	1116 ballots were certified in the final canvass.
4	Nobody noticed and the failure to
5	notice is one of the points that I am going to
6	draw to your attention.
7	There was an inaccurate total public
8	count that has not been addressed or explained
9	anywhere that was only possible because it wasn't
10	flagged.
11	It wasn't brought to the attention
12	of poll workers by the system and there were
13	discrepancies in machine memory that have only
14	been reviewed by the vendor without independent
15	experts or independent evidence of any sort.
16	First, in the IVOTRONIC (ph) that
17	was being used, there was a known security flaw
18	had been criticized in the compu-air (ph) study
19	that would allow votes to be added repeatedly to
20	the canvass from a single machine, without
21	notifying the poll workers this was happening.

22	We don't	know if	that flaw	caused

1	this or if there is an additional way to add
2	votes to the IVOTRONIC without notifying poll
3	workers.
4	At the bottom line, your Human
5	Factors need to address poll worker usability
6	more than they do.
7	I see the focus on voters. But poll
8	worker usability can be crucial to the integrity
9	of the canvass, as a system matter.
10	And I am calling on you to think
11	about these unflagged problems.
12	The guidelines emphasize recording
13	votes accurately and counting them, but they
14	don't emphasize preventing them from being
15	counted repeatedly by poll workers. This is a
16	gap.
17	Now the second problem I want to
18	draw to your attention is that there were 945
19	voters who signed in. And when you added the
20	individual public counts on the machines, they
21	should equal 945.
22	There was an ambiguous record that

1	showed one more ballot, so maybe it would have
2	reached 946.
3	But when you look at the results
4	tape at Tab 3a, you will see that the voting
5	system, not just that machine, reports a total
6	public count of 947.
7	When a machine can't add 12 numbers,
8	it should be like a student in the back of the
9	class. It should raise its hand and say,
10	teacher, I have a problem with my math.
11	We do not train human beings to
12	check the math of the machines. These machines
13	have to bring tabulation and other addition
14	errors to the attention of the poll workers or
15	the integrity of the system is at risk.
16	Finally, there were conflicting
17	records in the different memories on the machine
18	They went to ES&S and were studied.
19	The report was not released to the
20	state and county for six months until after it
21	came out in the paper.
22	My concern here is that the yander

1	did their evalation without independent expertise
2	or independent evidence. And we need to call for
3	procedures or to consider the roll of the
4	independent records in a way that will help solve
5	that gap.
6	Because when you have one record
7	that says 84 ballots and one that says 85 and
8	this is not - I am not right now judging the
9	ultimate conclusion of the report. I will put
10	that in writing - there has to be an incentive
11	for the vendor to reach one conclusion or
12	another.
13	The roll of independent evaluation
14	is extremely important.
15	If you get one conclusion you might
16	conclude the system worked better or some other
17	advantage happened.
18	We need to think further about this
19	problem.
20	I will submit written comments.
21	These were things I think that no
22	one envisioned: a tape that couldn't add 12

1	numbers; machines going in repeatedly.
2	Much of what I have said comes under
3	human factors. Please consider extending it
4	further. Thank you.
5	CHAIR HILLMAN: Thank you.
5	Mr. Campbell.
7	MR. CAMPBELL: Good evening. My
3	name is Edmund Campbell. I am a union activist
9	of the South Florida AFL-CIO Central Labor
10	Council and a member of the Miami-Dade Election
11	Reform Coalition.
12	I am here to bring to your attention
13	problems that I saw while I was doing some poll
14	closing at the 2004 November election in regards
15	to early voting throughout.
16	Election Day is a 12-hour day and at
17	the end of the day there was voting verification
18	and printing of results for the precinct.
19	Early voting, on other hand, is day
20	after day of an incomplete process, which ends
21	before Election Day with equipment being taken
22	away without any results being printed and posted

1 at the polling site.

2	DRE's are left powered up for the
3	duration of the election in public areas. Early
4	voting demands physical security over extended
5	time and incremental ballot counting every day.
6	We need appropriate procedures to
7	protect security and accuracy.
8	I even heard poll workers actually
9	say, close is good enough. So what if the count
10	is off.
11	The thing that is unique about early
12	voting is that it takes up to 18 days of
13	operating in a public place, while individual
14	election officials are making rules governing the
15	new trend in American voting reform, using
16	procedures that was not meant for more than a one
17	day election, when the poll opens early in the
18	morning and closes that night.
19	We have started the convenient era
20	with early voting.
21	If the EAC hopes to create
22	guidelines designed to protect the integrity of

our voting system, members need to address early voting separately from Election Day and call for early voting best practices and procedures that

4	will directly address this unique condition.	
5	Thank you.	
6	CHAIR HILLMAN: Thank you very much.	
7	That concludes our public comment	
8	presentation.	
9	Colleagues, as you can see, our	
10	guidelines affect many constituencies.	
11	And we encourage all of your	
12	comments to come in throughout the 90 day period	
13	so that we can be as informed as possible.	
14	Any closing comments?	
15	VICE CHAIR DeGEORGIO: No. I just	
16	wanted to compliment you, Madam Chair, on a job	
17	very well done.	
18	CHAIR HILLMAN: Thank you. I	
19	appreciate it all.	
20	If there is nothing further, then	
21	our hearing stands adjourned.	
22	(Thereupon, at approximately 5:10	
	300	
1		
1	o'clock, p.m., the above meeting	
2	was adjourned.)	
3	* * * * *	
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EAC July 30, 2005 Hearing			
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5	CERTIFICATE		

8	I, ELLEN REACH, a Stenotype Reporter
9	and Notary Public of the State of New York do
10	hereby certify that the within transcript is a
11	true and accurate record of the Public Meeting of
12	the U.S. Election Assistance Commission, held or
13	June 30, 2005.
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19	
20	ELLEN REACH
21	
22	