1	STATE OF NEW JERSEY
2	DIVISION OF ELECTIONS
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7	FORMAL HEARING
8	TRANSCRIPT OF PROCEEDINGS
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12	LOCATION: 125 West Stat Street
13	Trenton, New Jersey
14	DATE: Thursday, May 22, 2008
15	TIME: 10:27 a.m. to 1:02 p.m.
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20	GUY J. RENZI & ASSOCIATES
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1	COMMISSION MEMBERS:
2	
3	RICHARD WOODBRIDGE, Chair
4	JOHN FLEMING
5	ROBERT LESTER
6	
7	ALSO PRESENT:
8	SECRETARY OF STATE NINA MITCHELL WELLS
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1	CHAIRMAN WOODBRIDGE: Ladies and		
2	gentlemen, thank you for coming here today. This		
3	is a hearing under Title 19 to take a look at a		
4	voting machine, Sequoia, which will be explained		
5	to you later on.		
6	As you may know, this also is a		
7	transitional period where the responsibility for		
8	approving voting machines is moving from the		
9	Attorney General's Office back to the Secretary of		
10	State where it started when I first began this		
11	process in 1982, hard to believe.		
12	I would like to say also before we		
13	do that, that I want to really express my		
14	appreciation to the Attorney General's Office for		
15	all that they have done in supporting us, Donna		
16	and Deryl and Jason and everybody. I tell you,		
17	it's been wonderful. It's not an easy job. I'll		
18	explain a little bit more of it later on. But I		
19	think one of the things the State of New Jersey		
20	should be thankful for and probably doesn't		
21	express enough appreciation is how hard the AG's		

- 22 Office has worked in the background and how
- 23 fortunate the State is, I think, for not having
- 24 the kind of voting machine problems that other
- 25 states have had. So if there's some way that the

1	Committee could give you guys a medal, we would do
2	so. I would say we started with the Secretary of
3	State's Office, by the way, so this is a wonderful
4	return.
5	So without any further ado, I'm
6	going to ask Madam Secretary Nina Wells to give
7	you a welcome. And then we'll talk a little bit
8	about the procedure today.
9	SECRETARY WELLS: Thank you so much,
10	Mr. Chairman. I'm Nina Mitchell wells, as you
11	heard, Secretary of State for New Jersey. And
12	although the Division of Elections has been
13	transferred to the Secretary of State's Office,
14	the Attorney General's Office will continue to
15	provide us with ongoing counsel and litigation
16	support. So we will be working very closely with
17	them, and we'll have the benefit of all of their
18	expertise. So we're very pleased about that. And
19	I do agree that in the short time that I have been
20	here, I have been so, so pleased and impressed
21	with their expertise and their tremendous support.

- 22 So I'd like to say that.
- 23 And this is my first meeting with
- 24 the members of the State Voting Examination
- 25 Committee, and I'd like to start out by expressing

1	my appreciation to the Committee. Our Chairman,
2	Richard Woodbridge; Robert Lester from Mercer
3	County; and John Fleming with the Office of
4	Attorney General, Information and Technology
5	Section. So thank you so much for taking all of
6	your time today to be here with us to determine
7	whether the voter-verified paper trail record
8	meets State criteria.
9	As the State's Chief Election
10	Official which is my new title, which I'm very
11	pleased to have, very proud to have, very honored
12	to have the integrity of the State's voting
13	machine is one of highest priorities.
14	To further public confidence in our
15	electoral process, the Legislature and the
16	Governor are requiring that a voter-verified paper
17	trail record you'll hear us refer to it often
18	as VVPRS be implemented for the State's
19	machines by January 1st of '09, 2009. That's the
20	purpose of today's hearing.
21	Now, this is the second hearing

- 22 regarding the Sequoia Advantage, which is in 19 of
- 23 our 21 counties here in the State of New Jersey.
- 24 The Committee, after its last review of the
- 25 Sequoia Advantage, determined that it did not meet

1	all of the	State	criteria.	Seguoia	has had	the
-		~~~~	••••••		11000 11000	

- 2 opportunity to address those deficiencies and is
- 3 now back before the Committee to consider whether
- 4 Advantage now meets the State's criteria.
- 5 So again, I'd like to thank the
- 6 members of the public also for coming. Having
- 7 interested citizens is a very, very important part
- 8 of this process. So I want to thank you all very
- 9 much for being here today.
- 10 And now I'd like to defer to our
- 11 Chairman. Thank you so much.
- 12 CHAIRMAN WOODBRIDGE: Thank you,
- 13 Madam Secretary. Thank you for giving us an
- 14 opportunity to come back. It's always fun to be
- 15 here.
- 16 Just a little bit of additional
- 17 background. For those of you who aren't here
- 18 regularly -- looks like most regulars are here --
- 19 this Committee is structured under Title 19. It's
- 20 unusual in that it's the only committee I know of
- 21 that requires a patent attorney to be on the

- 22 committee, which happens to be me. I'm not sure
- 23 why that's the case, but patent attorneys tend to
- 24 have a technical background, as I do, mostly in
- 25 computers and communications, and a legal

1 background, too. The Committee has always been 2 composed of two other individuals who bring 3 special expertise to this Committee. And Madam 4 Secretary has introduced both Bob and John, who I'm pleased to have with me. Both have been on 5 this Committee before. John for quite some time 6 7 now. 8 The ground rules are I'd appreciate 9 it if people held their questions until the end. 10 There will be an opportunity for questions from 11 the public, input from the public, whatever. But 12 I think it's critical that we give the vendor an 13 opportunity to go through this procedure. 14 If you have cell phones, which I do, 15 turn them off. 16 The hearing that we had on July 17 24th, took a look at the Sequoia machine with the VVPAT attachment to it. The hearing, which was 18 19 held in hotter conditions than this, went through 20 the criteria that was put together for VVPATs. 21 Now, one of the issues that we've

- 22 run into is the Title 19, per se, when it was
- 23 drafted really didn't address VVPATs, much less
- 24 didn't address DREs. So we had criteria prepared
- 25 by the Attorney General's Office, I think, with

1	reference to other states and federal criteria
2	that we used to look at the DRE plus VVPAT
3	combination. And that was very helpful.
4	The machines, for the record, had
5	been reviewed extensively by NJIT prior to our
6	July 24th hearing. So we looked so they looked
7	at it. They provided us with a report that was a
8	very helpful report for us in terms of our asking,
9	I think, relevant questions about the
10	functionality of the machines, perhaps their
11	shortcomings. And we used that as a guideline. I
12	think it was inspired, I use the wording, in all
13	its best senses by the Attorney General's concern
14	that we needed to have independent technical
15	review of these devices, because even though we
16	collectively have some technical experience here,
17	having somebody really do thorough testing of it
18	is very, very useful.
19	As a result of that July 24th
20	hearing, we produced a report that we sent to the
21	Attorney General's Office outlining in it

- 22 roughly -- a number of concerns we had about
- 23 the -- 10 concerns we had about the machine in
- 24 particular. At that point, we were reluctant to
- 25 approve it until we had responses to those

1 concerns.

2	This hearing should, therefore, be
3	considered a continuation of our hearing on July
4	24th, because the July 24th hearing really wasn't
5	conclusive as such. So in that spirit, we have
6	sent our comments on to Attorney General's Office.
7	Those were transferred and sent to the vendor.
8	The vendor is here to respond to those concerns
9	today.
10	Because we have a fairly small group
11	here, I'm going ask the vendors here to introduce
12	themselves. And I'm also going to ask the
13	audience to introduce themselves for the record.
14	We're going to start with you.
15	MR. WYNHAM: Andy Wynham, sales
16	technique support, basically field support for
17	Sequoia Voting Systems.
18	MR. ALLEN: I'm Dave Allen. I'm VP
19	of Development of E Voting Solutions for Sequoia.
20	MR. CHAGARIS: I'm Arthur Chagaris,
21	with the firm of Beattie Padovano, Counsel for

- 22 Sequoia.
- 23 MS. VALERIANO: I'm Christine
- 24 Valeriano. I'm the sales executive for New
- 25 Jersey.

1	CHAIRMAN WOODBRIDGE: Glad to have
2	you here. And you all were here last time, as I
3	recall. Welcome back to New Jersey.
4	I'm going to ask the audience if
5	they wouldn't mind introducing themselves.
6	MR. POSTELNIK: Deputy Attorney
7	General Jason Postelnik.
8	MR. DEVLUGT: Louis DeVLugt. I'm
9	just a Jersey resident.
10	CHAIRMAN WOODBRIDGE: Jersey
11	resident, okay.
12	MS. HARRIS: Stephanie Harris,
13	Coalition for Peace Action.
14	CHAIRMAN WOODBRIDGE: Irene.
15	MS. GOLDMAN: Irene Goldman, Chair,
16	Coalition for Peace Action.
17	CHAIRMAN WOODBRIDGE: Yes, sir?
18	MR. APPEL: Andrew Appel.
19	CHAIRMAN WOODBRIDGE: Man in the
20	back.
21	MR. ZIMMERMAN: Justin Zimmerman,

- 22 Director of Legislative Affairs for the Department
- 23 of State.
- 24 CHAIRMAN WOODBRIDGE: And Donna.
- 25 MS. BARBARA: Donna Barbara,

1 Division of Elections.

2 CHAIRMAN WOODBRIDGE: Of course, we

- 3 have Donna Kelly over here.
- 4 MS. KELLY: Right. Assistant
- 5 Attorney General.
- 6 MS. WALCOTT-HENDERSON: Kay
- 7 Walcott-Henderson, Chief of Staff, Department of
- 8 State.
- 9 MR. GILES: Bob Giles, Director,
- 10 Division of Election.
- 11 CHAIRMAN WOODBRIDGE: And our good
- 12 Madam Secretary of State over there. Glad to have
- 13 you here.
- 14 So why don't we -- again, we
- 15 appreciate if you would hold the questions until
- 16 the end. I have asked the vendor to do a quick
- 17 refresher walkthrough of the machine.
- 18 So if you wouldn't mind, Andy, why
- 19 don't you do that. And if you can, if there are
- 20 any changes that are noticeable, then you can
- 21 point those out, too.

- 22 MR. WYNHAM: All right. Briefly, of
- 23 course, most everyone in the room has seen this
- 24 machine. Some of you who were at the July hearing
- 25 saw a slightly different version of this machine.

1	But I need to point out that since the version of
2	the machine that was reviewed by NJIT that is the
3	nature of the reports are going to be addressed
4	today, Mr. Allen will be going over the various
5	aspects with you. So the changes that we'll talk
6	about, some of them are physical in nature, some
7	of them are definitely functional, and I'll try to
8	go through the process of voting to make clear.
9	I do want to apologize. I know it's
10	been a long time since we were here. It's
11	important that you understand that the changes
12	requested from the July hearing that ultimately I
13	finalized with NJIT the week of Thanksgiving and
14	then they prepared their report it took that
15	much time they prompted the requirement the
16	machine have a federal review, otherwise, to make
17	the changes for New Jersey, change the machine for
18	federal review.
19	Now, what's happened at the federal
20	point is that we've made no further changes to the
21	machine that affected New Jersey. Once we get to

- 22 the federal review, we have to go back into the
- 23 environmental, the heat chambers, and the humidity
- 24 chambers, and those types of things. And that's
- 25 what we've been doing in the interim.

1	Anything that's happened to the
2	machine from NJIT to that point has been just to
3	satisfy federal requirements that are not
4	requirements or made no functional changes for the
5	use in New Jersey. So for all practical purposes,
6	this is the machine that we pulled out at NJIT,
7	actually, probably right at the beginning of the
8	year. So we've gotten finally here.
9	Now, what we did when we submitted
10	the machine, because of the July request, I'm
11	going to point out in a minute that we have a
12	slightly different printer on the side. Some of
13	you who remember the fanfold paper printer that we
14	demonstrated at the armory, this is a
15	CHAIRMAN WOODBRIDGE: If I can
16	interrupt you. Also, if any member of the public
17	wants to come up and take a closer look, that's
18	okay.
19	MR. WYNHAM: You'll see that we
20	moved to a large single roll format paper. It's a
21	huge quantity of paper that will almost completely

- 22 alleviate the necessity of changing paper on
- 23 election day. In the worst case scenario, if
- 24 everybody voted three times, I imagine you could
- 25 reach a paper change. Short of that, this roll is

1	very substantive. It's also much easier for a
2	master board worker or a board worker or a
3	technician to change. And we'll be happy to
4	demonstrate that at some point in the day. You
5	drop the roll in, you feed it to the throat and
6	it's done. So it's a very simple mechanism.
7	I also found in our internal testing
8	it to be much more robust and virtually free of
9	jamming conditions.
10	We made some mechanical changes to
11	the throat, to the drop, and to the ballot bag.
12	And again, these are things that you can't see
13	from where you're seated, but these were things
14	that were requested to be done and we submitted to
15	NJIT.
16	We were demonstrating back then both
17	the Edge and the Advantage. And I remember on one
18	of our products we had the complaint that on the
19	third report it didn't hesitate long enough. And,
20	of course, the machine now hesitates on the third
21	report to whatever amount of time the voter

- 22 requires to review their ballot. So they can take
- 23 all the time that you'll allow them to have and
- 24 review. That was an important change. And,
- 25 again, I'll go through a vote process and show you

- 2 machine to cast the ballot.
- 3 Other things that the voter will 4 never see that NJIT required that we do, give a certain shielding, to have all the cables in the 5 back shielded and collected; any junction points 6 for any of the connecters or power cables that not 7 be is he accessible to voters. That was kind of a 8 9 comment I think was made against all vendors. All 10 of those issues were addressed. 11 Again, I know you have the report, 12 and I think we'll leave that to Dave to go over 13 those item by item. But these are the types of 14 things that we got in back of the machine and 15 we've got to go around and see. 16 There was a lot of attention to 17 seals, security seals. The audio box in the back of the machine actually has a tamperproof seal to 18 19 validate the -- for whatever reason that the audio
- 20 box would never be removed from the machine. The
- 21 results cartridge port has a numbered seal, a

- 22 recorded numbered seal, that you will work into
- 23 your procedures in New Jersey to validate at the
- 24 time the machine is set and if that seal is broken
- 25 at the end of day to retrieve the cartridge.

1	Likewise, the ballot bag again, I
2	know this is hard for everyone to see, but we're
3	using the Rifkin clear lock. It's a reusable
4	locking mechanism with a mass printed seal. It's
5	a recordable number seal. It's very sturdy. It
6	actually secures the ballot bag. Of course, this
7	is done by the pole worker the morning when they
8	set up the voting machine shouldn't be broken
9	throughout election day.
10	Seal points, they wanted tamperproof
11	evidence seals on the cover of the roll of paper.
12	I think that might be, depending on how you look
13	at for some people, whether it's a requirement or
14	necessity, NJIT wanted us to have it on there. If
15	you remove the seal to change paper, it leaves
16	evidence of the fact that the paper compartment
17	has been accessed.
18	Again, we're no longer talking
19	reel-to-reel VPAT device. So even accessing the
20	paper gives you know access to actually cast
21	ballots. It's important to understand.

- 22 So to some degree, I think that's
- 23 kind of a holdover from the concepts and the
- 24 discussions of the reel-to-reel but, nonetheless,
- 25 it doesn't hurt to have another security point and

1	limited access. It's going to a rare occurrence
2	that you're going to have to change paper on
3	election day. If you do, you're going to have to
4	break the seal, change the paper roll, replace the
5	compartment, and reseal. And a supply of these
6	seals will be available. These seals the
7	companies that make these seals, they can
8	personalize it for the State, they can personalize
9	them to the County, they can come up with
10	numbering conventions that satisfy each and every
11	jurisdiction.
12	So you've got seals on the bag,
13	seals on the printers. You've got tamper-proof
14	seals on the CP component in the back. Both CPU
15	compartments have seal devises. We have sealed
16	this machine in every place that NJIT could think
17	to tell us to seal the machine.
18	So functionally now, let's just go
19	through the function. Of course, nothing has
20	changed. The operator panel is on the side.
21	There's the activate button. The pole workers are

- 22 trained to activate the machine by pressing the
- 23 activate button. There's a light that illuminates
- 24 there.
- 25 Somebody asked earlier about how we

1 handle fleeing voters. My answer is we handle fleeing voters the way we have for years. We 2 3 train poll workers to identify the activate status 4 of the machine and to not allow a voter to leave until that status indicator goes out. That will 5 6 stay on until the voter completes the process. 7 To demonstrate a voting machine, one 8 thing I want to point out -- and I'm just going to 9 vote one office -- whether I vote one office or I 10 vote every office, it utilizes the same amount of 11 paper, because it prints the space for the 12 candidate and the contest name each and every time 13 on each and every receipt that's printed. So 14 whether if I vote one or more, it doesn't matter. I make one choice, I depress the cast vote button. 15 In about three seconds, it will display the ballot 16 17 in the window. And, of course, that you can't see this. In this case, on this particular ballot --18 19 and this was the NJIT proscribed ballot -- the 20 entire ballot is now reviewed on one page. You can see your choices. It will indicate that there 21

- 22 are no selections made. It will indicate a
- 23 write-in choice if you made and it will indicate
- 24 every office that you selected.
- 25 Now, we have three options in New

1	Jersey to make changes actually, two options to
2	make changes: Your initial choice and two
3	changes. So if I want to change this ballot, I
4	have two ways. And one of the things of
5	course, we have work with voters in the future.
6	Voters are going to have to start noticing the LCD
7	window that's always been here, but prompts them,
8	cast this vote yes or no.
9	But I also want to point out in the
10	old process, if we made a selection that we didn't
11	mean to make, the way to cancel that selection was
12	to touch that selection again. That process
13	remains the same. And, in fact, touching that
14	selection voided that ballot. So in a sense, the
15	voter still uses the same process in the past that
16	they did to deselect an errant choice.
17	I deselected the first choice I
18	made. I can now make another choice. And I can
19	actually cast my ballot again. And that process
20	repeats itself. This is now my second receipt
21	that I review. It prints the receipt. I review

- 22 the receipt and I go, oh, again, I still made the
- 23 wrong choice. The process remains the same. I
- 24 touch the choice that I didn't mean to make, the X
- 25 will go off, and I can now make another choice.

1	The difference now is we do have an audio prompt
2	that says, this is your final choice. So on the
3	third time, the voter is
4	MR. APPEL: Audio? Did you say
5	audio prompt?
6	MR. WYNHAM: I'm sorry. Visual
7	prompt. Thank you. Someone's listening. Maybe
8	you all heard that.
9	We do have a visual prompt saying,
10	this is your final choice, this is the last chance
11	you have to make a change. The voter has to
12	indicate okay to that choice. And then they can
13	proceed to make the necessary changes.
14	As I pointed out before, when I cast
15	my ballot this time, the ballot doesn't simply
16	scan by slowly requiring that I review it in some
17	predetermined time frame. The ballot is produced.
18	I have all the time that I'm allowed to look at
19	it. And when I'm ready to leave the booth, I cast
20	the vote one final time. The ballot's accepted.
21	Those of you who have seen it, it prints a barcode

- 22 on the ballot, which is the identifying
- 23 information to allow a jurisdiction to scan their
- 24 own information for a rapid recount, if you will.
- 25 There are lots of uses for the barcode. And

1 that's the process.

2	Again, I think the most visible
3	change for you when you come to vote is the fact
4	that you do have the time to review that third
5	ballot, whatever amount of time that you want.
6	CHAIRMAN WOODBRIDGE: A couple
7	questions. The spoil ballots, how are they
8	identified or distinguished from the final
9	ballots?
10	MR. WYNHAM: Each time that I made a
11	alternate selection on the ballot, the ballot is
12	marked voided at the top. And there is a
13	numbering convention as well. So in the end, if
14	you're actually going to use these ballots to
15	recount, you will set aside every ballot strip
16	that has the word voided on it and you will only
17	acknowledge the ballots that are in conjunction
18	with the barcode. Or if in the case of a very
19	large ballot and there are two pages, there's a
20	number that links the two pages of that ballot.
21	CHAIRMAN WOODBRIDGE: And there's no

- 22 barcode on the voided ballot?
- 23 MR. WYNHAM: There's no barcode on
- the voided ballot.
- 25 CHAIRMAN WOODBRIDGE: Also, one

1	thing I was confused about. Again, when you went
2	back to NJIT in Thanksgiving and they reckoned you
3	to the federal criteria, does this meet federal
4	standards at this point?
5	MR. WYNHAM: Yes.
6	CHAIRMAN WOODBRIDGE: All federal
7	standards?
8	MR. ALLEN: 2002 standards, yes.
9	CHAIRMAN WOODBRIDGE: Okay.
10	I know there's some questions about
11	the machine. Does anybody in the audience want to
12	make comments or questions?
13	MS. GOLDMAN: Irene Goldman.
14	Is this the time for public comment?
15	CHAIRMAN WOODBRIDGE: Well, not so
16	much public comment, but specific questions
17	related to the function of the machine right now.
18	MS. GOLDMAN: Okay. I'd like to ask
19	further on your question of federal guidelines.
20	2002 is the guideline that this courts to. You
21	said that this is federal is being inspected by

- 22 the federal commission and --
- 23 MR. ALLEN: No, actually, I didn't.
- 24 I said it meets the guidelines set down in 2002.
- 25 MS. GOLDMAN: Right. You said that

- 1 it meets the 2002 guidelines.
- 2 MR. ALLEN: That's correct.
- 3 MS. GOLDMAN: So you -- pardon me, I
- 4 don't remember your last name.
- 5 MR. WYNHAM: Andy Wynham is my name.
- 6 MS. GOLDMAN: I'm sorry. Mr.
- 7 Wynham, you said that it was -- that that machine
- 8 is now being reviewed federally.
- 9 MR. WYNHAM: It has been reviewed by
- 10 a federal testing lab, Wyle Lab.
- 11 Dave would be better to address
- 12 this.
- 13 MR. ALLEN: We engaged at the
- 14 State's request Wyle Labs who are a federally
- 15 accredited VSTL. That's -- I can't remember what
- 16 it stands for. They change the name so often.
- 17 Basically, to review and test this machine to the
- 18 2002 standards, as proscribed by the Election
- 19 Assistance Commission.
- 20 I would like to say, one of the
- 21 things may have been noticed by some members of

- 22 the public is we first came back -- we first had
- 23 this meeting back in July 2007. It's been 10
- 24 months. That's rather a long time to do what
- 25 appears, from the report, to do a small number of

1 changes. The reason it's taking so long is that during that period, the EAC effectively reviewed 2 3 the 2002 standard. Although they didn't make any 4 changes to it, they changed their interpretation 5 of that standard. The result was a much more vigorous and strict testing process. Some of 6 7 things that they would -- in the old days, they would interpret in a slightly benign way, they 8 9 interpreted much more strictly. This resulted in 10 particular changes to get it to pass their new 11 interpretation of the ESD, electrostatic 12 discharge, and radio frequent interference tests, 13 and a number of other things as well. And that 14 process has taken a great deal of effort on our 15 part. 16 Effectively, what we've had to do is 17 take a machine that was designed quite sometime ago to accommodate the standards and 18 19 interpretation from that time period and bring it 20 up to standard so that it meets all the current interpretation of the guidelines. 21

- 22 So Wyle has completed that. They've
- 23 done the code reviews, they tested the hell out of
- 24 it, both hardware testing and the firmware
- 25 testing, the functionality testing, accuracy

2 been provided to the Attorney General's Office and

3 the Secretary of State.

4 MR. APPEL: Can you tell me the date

5 of the Wyle report?

6 MR. ALLEN: May 6, 2006.

7 CHAIRMAN WOODBRIDGE: For the

8 record, I believe everybody on the Committee, I

9 assume, have copies of the report that we got. It

10 is unusual, compared to other reports, in that it

11 goes into details we haven't seen before: Things

12 like temperature and RFI interference and stuff

13 like that. Wyle, as people may recall, has

14 probably been the major tester, especially on the

15 hardware side of the equation, for a number of

16 years. And I'm sure that report will be made

17 available to you if you want it.

18 Why don't we do this. Why don't --

19 if there are other questions afterwards -- yes,

20 ma'am?

21 MS. HARRIS: Can I ask a question?

22 CHAIRMAN WOODBRIDGE: As long as it

- 23 relates to machine itself.
- 24 MS. HARRIS. My name is Stephanie
- 25 Harris. I have read that it is possible for the

1 voter to be viewing a ballot which is not actually 2 the ballot which drops into the ballot box and 3 that the ballot that the viewer is looking at can 4 be generated by prior cast ballots and that what actually drops into the ballot box is a different 5 ballot that's printed all together. So could you 6 7 please explain how the information travels from this paper roll, what gets viewed in the screen, 8 9 and then what drops into the ballot box, and that 10 whole process, and respond to this problem? 11 MR. ALLEN: Well, actually, I find 12 this rather confusing. I certainly haven't heard 13 of that before, but I will explain the process. 14 Obviously, you vote. The selections are printed by the printer. The paper actually comes off the 15 roll, pass the print head, and gets displayed in 16 17 the window, which you see. If you cast a ballot -- let's take two examples. 18 19 A single-sheet ballot. If you cast 20 a ballot, it gets cocked and drops. Once it gets forced out, it drops into the barrel. That's it. 21

- 22 Somebody else can't come up and see how you voted.
- 23 It can't be a previous ballot.
- 24 If you void the ballot, it prints
- 25 "void," then it cuts it, and the process is

1 exactly the same.

2	I'm guessing that there's some
3	confusion about what happens when there's a
4	multipage ballot, it's longer. Obviously, if you
5	voided on the first page, it behaves in exactly
6	the same way. It voids and then it doesn't print
7	anything else. It waits for you to react again.
8	Let's assume that you voided on the
9	second page. The first page prints. The voter
10	looks at it, that looks okay, I'll accept that.
11	It cuts, drops. The second page gets printed
12	exactly the same way. The voter now looks at it
13	and decides, oh, dear, I've made the wrong choice
14	or I forgot to vote in something, I realize I
15	wanted to vote in that contest, I'll void it. Now
16	what happens is it prints "void" again.
17	As Andy pointed out, there's a
18	number, a unique print number which links the two.
19	It's printed on both so that you can link the two.
20	It cuts and drops. There's no way you can get a
21	situation where a vote comes to the machine and

- 22 the machine prints a previous ballot or there's a
- 23 ballot sitting there already.
- 24 MR. WYNHAM: Once the voters cast
- 25 their vote, there is no mechanism for the system

2 device.

3	MR. APPEL:	My name is	s Andrew	Appel.
-		J		F F · · ·

- 4 I asked you this question before, but I'll ask it
- 5 for the record. If election officials in the
- 6 State of New Jersey wanted to make a provision for
- 7 challengers and election workers at the beginning
- 8 of the day before the polls open to verify for
- 9 themselves that the ballot bag is empty, does the
- 10 physical setup you have permit that to be
- 11 implemented?
- 12 MR. ALLEN: Could you clarify
- 13 exactly what you mean?
- 14 MR. APPEL: In elections where
- 15 ordinary paper ballots are used in ballot boxes,
- 16 in some jurisdictions there's a procedure that the
- 17 poll watchers and challengers and witnesses can
- 18 see for themselves before the polls open that the
- 19 ballot box is actually empty and there aren't
- 20 paper ballots in it. And if election officials in
- 21 New Jersey wish to implement procedures by which

- 22 the challengers could satisfy themselves that the
- 23 ballot bag is empty before the polls open, does
- 24 the physical setup of your equipment permit --
- 25 MR. WYNHAM: The answer is yes. We

1	have keys to the bag. That's a procedure for New
2	Jersey to develop. If they want to give the keys
3	to the poll workers so they can validate the box
4	is empty in the morning, that's a choice that has
5	to developed in New Jersey.
6	MR. ALLEN: That really is a
7	question for the State rather than
8	MR. GILES: On that issue, it would
9	be similar to looking at zero and that's
10	something we would have to put in procedures to
11	say a challenger can view the bag to make sure
12	there's nothing in it.
13	MR. APPEL: It's for the State to
14	decide which procedure it wants to implement, but
15	it's useful to know whether the equipment permits
16	those alternatives.
17	MR. GILES: The bag comes out of the
18	back of the machine, so before it's mounted on the
19	machine, the challenger has the opportunity to
20	make sure there's nothing in the bag prior to the
21	start of the day.

- 22 MR. APPEL: That's a question I
- 23 have.
- 24 MS. KELLY: Maybe that's what the
- 25 problem was is that you've seen the machine set up

1	already with the bag in it, but that's not how
2	it's going to be in reality on election morning.
3	Maybe, Andy, you should have kind of
4	like backtrack a little bit more to explain where
5	the bag will be and how the board workers and
6	actually setting it up. That would be very
7	helpful.
8	MR. GILES: Do you have an empty
9	bag?
10	MR. WYNHAM: Yes, I do. This
11	particular bag, I don't have the access key to it.
12	That's why I've used this one over here. This bag
13	is folded and secured and in the back of the
14	machine when they open the machine in the morning.
15	It's the poll worker's responsibility to remove
16	the bag, set up the VPAT and mount bag and VPAT
17	and attach the security seal.
18	CHAIRMAN WOODBRIDGE: When they do
19	that, they can look in the bag; is that fair?
20	MR. WYNHAM: There's nothing
21	physically limiting that would prevent you from

- 22 looking in the bag. I mean, you have a flap on
- 23 the top. You can access the bag through the
- 24 throat. You also have access to the bag right
- 25 here. I have the keys for this bag. You can

1	unlock the bag, validate that it's zero, close the
2	bag, and I would imagine that you would develop
3	some procedure for re-securing the keys so it's
4	not accessible through the day.
5	MR. APPEL: I think what you
6	explained to me this morning is that one of very
7	reasonable set of procedures would not permit the
8	key to open the bag to actually be at the polling
9	place for security reasons.
10	MR. WYNHAM: I wouldn't use the word
11	reasonable. That wasn't my choice of words.
12	MR. ALLEN: That really is not
13	something for us to discuss. That's an issue for
14	the State to decide what procedure they want to
15	put in place in terms of security.
16	MR. APPEL: Absolutely. It's for
17	the State to decide what procedure they want, but
18	it's good to know which alternatives your
19	equipment permits the State. And so as Andy
20	explained to me this morning, one could very well
21	imagine a procedure by which a key to open the

- 22 ballot bag is not actually ever physically present
- 23 in the polling place. So therefore, the option of
- 24 verifying that it's empty by opening it up before
- 25 the poll is open is not available.

1	The other option that he showed me
2	was looking through the slot at the top, which is
3	not impossible
4	MR. GILES: To move the hearing
5	along, that's a process we'll work out with the
6	State. It's available that you can look in the
7	bag, that functionally it has the ability to check
8	that, but for the purposes for moving the hearing
9	along today, I think that the
10	CHAIRMAN WOODBRIDGE: We're drifting
11	away from what I hoped was going to concentrate on
12	these things right now. We can come back to all
13	this later. I want to give the public and anybody
14	else an opportunity to see how the machine works.
15	Why don't reconvene. Let's go
16	through the issues that we had, see what kind of
17	responses we get. And when it's all over, then
18	we'll open up for some more questions from the
19	public.
20	So you've seen the machine. And
21	we'll have an opportunity to go back as much as

- 22 people desire after the formal part of the hearing
- 23 is closed. Incidentally, we don't really make our
- 24 decision during the hearing itself.
- 25 MS. GOLDMAN: Mr. Woodbridge, I

1 don't think your microphone is on.

2 CHAIRMAN WOODBRIDGE: Can you hear

3 me? Can you hear me now?

- 4 Sorry about that.
- 5 We're going to pick up sort of where
- 6 we left off. This has been very helpful to know
- 7 what's happened, because it's been a long period
- 8 of time since the last time we got together and
- 9 saw this. And if people have copies of our report
- 10 from the meeting of July 24th of last summer, what
- 11 I'm going to do is I'm going to read the 10 issues
- 12 we had and I'm going to ask for the vendor to
- 13 respond.
- 14 Also, I do note that in addition to
- 15 the Wyle report that was referred to, we had a
- 16 little sheet giving us a summary of what's
- 17 happened. Some of these things go a little bit
- 18 beyond the July 24th concerns, so I may ask you to
- 19 elaborate on those. I'm assuming you have that,
- 20 too.
- 21 So I'm going to start in the very

- 22 beginning. And although, it's a little bit
- 23 laborious, I think it's probably the most thorough
- 24 way to do it. And starting on Page 4 of the
- 25 report, walk through our comments and ask, David,

1 if you and Andy would respond to that.

2 The first concern we had, No. 1 was3 the inability of the voter to verify his or her

4 third paper ballot.

	1 1
5	And our particular comments were,
6	"When the voter casts his or her third and final
7	ballot, the paper ballot portion is presented only
8	momentarily and the voter is not given enough time
9	to verify that the paper ballot is consistent with
10	the electronic vote. The voter needs to be able
11	to review and made to hit the button cast vote
12	again so that the State knows what the voter's
13	real intention is. This will make sure that
14	there's no question as to accuracy and intent of
15	the voter's choices. The vendor indicated that
16	this error could be and would be corrected with
17	firmware way in the near future."
18	Mr. Wynham, I believe you did
19	address that a little bit. Would you care to
20	respond to the specifics, though?

21 MR. WYNHAM: Yes. I think I was

- 22 able to demonstrate this in individual
- 23 demonstrations this morning so people got to see
- 24 it for themselves. When you reach that third
- 25 choice, that ballot will stay there as long as you

1	need to read it. So the only limiting fact are
2	the procedures in the State of New Jersey. You
3	are required to hit the cast vote button one
4	additional time in order to cast that ballot. It
5	creates an extra step for the voter, but it does
6	give that voter the opportunity to take whatever
7	amount of time they have to review.
8	CHAIRMAN WOODBRIDGE: Thank you very
9	much.
10	Any questions on the Panel on that
11	issue?
12	I know, John, you had a specific
13	concern.
14	Issue No. 2, "NJIT pointed out with
15	regard to a sight-impaired voter that the 'voter
16	is prompted to print next page after first page on
17	the write-in LCD screen rather through audio
18	message."
19	And the comment under that was, "The
20	vender said that this would be corrected also."
21	MR. ALLEN: That has been. The

- 22 audio message now gets played.
- 23 AUDIENCE MEMBER: Louder, please.
- 24 MR. ALLEN: That has been corrected.
- 25 The sight-impaired voter now gets an audio message

1	telling them exactly what to do, to press the
2	button for the next page.
3	CHAIRMAN WOODBRIDGE: Perhaps that's
4	something we may want to demonstrate once we get
5	through this walkthrough just make sure that's the
6	case.
7	Issue No. 3, "The printer needs to
8	be sealed by seals and locking mechanisms."
9	The comment was, "The vendor
10	demonstrated that the clear plastic paper cover
11	could be locked or sealed even though it was not
12	tested in such a state. In addition, the printer
13	paper did not appear to be secured during the
14	election testing. It is recommended that either
15	seals or mechanical locks be used to prevent
16	unauthorized individuals from tampering with the
17	paper during the election process."
18	I believe you did show us some seals
19	on this machine. And I understand you've gone
20	from the accordion fold to a paper roll; is that
21	correct?

- 22 MR. WYNHAM: Yes, sir. And we took
- 23 that literally. The recommendation was either
- 24 mechanical or tamper-proof seals, and we submitted
- 25 to NJIT with tamper-proof seals --

1	MR. ALLEN: Tamper-evident seals.
2	MR. WYNHAM: Tamper-evident seals.
3	Excuse me. That will reveal when the cover has
4	been removed from the printer.
5	CHAIRMAN WOODBRIDGE: Do you have
6	any idea how many votes on a typical vote you can
7	accommodate on a single roll like that?
8	MR. ALLEN: It really does depend on
9	the size of the ballot, obviously, and how many
10	voters. But it should easily be able to
11	accommodate anywhere between 2 and 400, just
12	depending on the size of the ballot.
13	CHAIRMAN WOODBRIDGE: Just one
14	question. One of the concerns I know that
15	California had a year ago was the issue of having
16	paper ballot lengths. They were quite long. I
17	think one example was a 39-inch paper ballot. I
18	think that's because they reprint some of the
19	questions in total. But what's the typical length
20	of a ballot in this case?
21	MR. ALLEN: I'm sorry. Could you

22 repeat that?

23 CHAIRMAN WOODBRIDGE: What's a

- 24 typical length of a cast ballot, do you know?
- 25 MR. WYNHAM: This ballot is 14

1	inches. You can do the math yourself. This
2	ballot is 14 inches. It's a 800-foot roll.
3	CHAIRMAN WOODBRIDGE: So each
4	ballot, every time it casts a ballot it's 14
5	inches, not plus or minus of that, correct?
6	MR. WYNHAM: There is a plus or
7	minus because if you said what if it was two-page
8	ballot. The second page will only use the amount
9	of print area required. So you can have 14-inch
10	and then a 2-inch. On this particular ballot,
11	which is indicative of about 75 or 80 percent of
12	the ballots in New Jersey in terms of length
13	one of the things in your last comment about the
14	next prompt, the audio for a second page, one of
15	the things you'll also notice, this is the very
16	same configuration machine at the last hearing
17	produced two pages of receipt. One of the things
18	that's been done is that they're brought down to a
19	single page to accommodate the majority of the
20	ballots on a single page. Single page is about 14
21	inch. You've 800-foot roll of paper right there.

- 22 You get a low paper warning when you get down to
- 23 about 750 feet. In which time then you would
- 24 prompt someone to come and change the paper roll.
- 25 And of course, the reality is,

1	though we have 750 voter language out there, we
2	seldom put through more than about 500 voters on
3	an Advantage without VPAT in New Jersey.
4	MR. ALLEN: Basically, a paper roll,
5	a 800-foot paper roll can support a minimum of 680
6	ballots, pages. So obviously, if it's going to be
7	three pages, it's going to be less complete
8	ballots than that. So it really does depends on
9	the complexity and length of the ballot. But an
10	assumption that on an average election, maybe it
11	goes on to the second page and uses half of that,
12	half the space. Then an assumption that you can
13	get around 400 complete ballots on a printout is a
14	reasonable one.
15	MS. GOLDMAN: Unless a voter comes
16	in and votes three times.
17	MR. ALLEN: Of course.
18	MS. GOLDMAN: And you have to count
19	on that.
20	CHAIRMAN WOODBRIDGE: Out of
21	curiosity, in real life experience, how many

- 22 people cast more than one vote.
- 23 MS. GOLDMAN: It hasn't been used
- enough to know it.
- 25 MR. ALLEN: I'm not sure. I don't

1 know.

2	CHAIRMAN WOODBRIDGE: Does the Panel
3	have any other questions on this third issue?
4	Issue No. 4, "The paper trail
5	ballots need to identify the particular election
6	by name (e.g. Primary or General.)
7	"The Committee examined some of the
8	paper ballots and indeed they did not include the
9	proper election designation. The vendor indicated
10	that this would be corrected in the next round of
11	software enhancements."
12	MR. ALLEN: That's been corrected.
13	The election name, if it's programmed into the
14	election definition, that information is printed
15	on the ballot now.
16	CHAIRMAN WOODBRIDGE: When we were
17	here last time, I believe you furnished us with
18	copies of some of the sample ballots cast. Can
19	you give the Committee some samples showing that
20	you know it's Primary or General or what-have-you?
21	MR. WYNHAM: We don't have any

- 22 available, but we'll vote a few times today and
- 23 give you copies of the ballots that came out.
- 24 And as Dave pointed out, there are
- 25 four lines of text available that the counties in

1	the State can decide what data you put in those
2	four lines. But all four of those lines appear at
3	the top of every ballot cast.
4	CHAIRMAN WOODBRIDGE: We'd like to
5	in our files, if we could, copies of those ballots
6	showing that they do indeed comply with Issue
7	No. 4, okay? If you can do that.
8	Issue No. 5, "The Committee agrees
9	that there should be a digital signature on each
10	digital record."
11	And the comment is "The vendor
12	indicated that this would be corrected."
13	MR. ALLEN: That is correct. Each
14	electronic digital what we call a ballot image
15	record now has its own signature. We also
16	increased the strength of that signature so it now
17	conforms to the HSA 256 standard. So it's much
18	stronger now. And when the polls are closed, we
19	also generate a digital signature on the complete
20	set of ballots and its records as well.

21 CHAIRMAN WOODBRIDGE: Just to

- 22 refresh my memory, on the image records, are these
- 23 like PDF records? Or what kind of --
- 24 MR. ALLEN: No, no. This is the
- 25 actual ballot data, the electronic ballot data.

1	CHAIRMAN WOODBRIDGE: And how is		
2	that data captured? In what form is that?		
3	MR. ALLEN: In binary form.		
4	CHAIRMAN WOODBRIDGE: In binary		
5	form, okay. So it's not a digital picture, so to		
6	speak.		
7	MR. ALLEN: Oh, no.		
8	CHAIRMAN WOODBRIDGE: And you say		
9	you provide each one of those with some sort of		
10	digital unique digital identifier; is that		
11	correct?		
12	MR. ALLEN: That's correct.		
13	CHAIRMAN WOODBRIDGE: Does that		
14	correspond to the number on printed ballot?		
15	MR. ALLEN: No.		
16	CHAIRMAN WOODBRIDGE: Is there any		
17	cross-correspondence between those data?		
18	MR. ALLEN: What happens is the		
19	printed record has its own hash value calculated		
20	on it as part of the barcode. That is not the		
21	same. The reason for that is if we were to		

- 22 implement that, then we would be forced to
- 23 potentially infringe a patent case that's
- 24 currently in court. Obviously, I'm quite sure the
- 25 State wouldn't want us to -- to try to force us to

1	infringe a patent. Until that case is resolved,
2	maybe if the Court decides we deliberately
3	avoided infringing that patent. There are some
4	other companies out there that are contesting
5	that. They do potentially infringe that patent if
6	that patent is upheld. At such time that that
7	case is resolved, if that restriction is removed,
8	we can I'm not saying we will, but we can
9	consider doing things like including the
10	individual digital signatures in the barcode as
11	well. But at this point, we can't.
12	CHAIRMAN WOODBRIDGE: I'd like hold
13	the questions, if I could. We can come back to
14	you on this. Again, I see there were some
15	questions in the audience. Again, we'll come back
16	to all this and sort it out.
17	MR. ALLEN: We believe that we've
18	complied with NJIT's requirements. They asked us
19	to add a digital signature to each electronic
20	ballot image; and that, we have done.
21	CHAIRMAN WOODBRIDGE: Issue No. 6,

- 22 "If a mechanical error occurs, the machine needs
- 23 to better differentiate between problems, e.g.
- 24 paper jam and the like."
- 25 The comment was, "Presently the

1	machine only presents two different error
2	messages, neither of which are sufficient to
3	differentiate between the types of mechanical
4	errors that typically occur, e.g., how do you tell
5	when the paper jams? The vendor indicated this
6	could be and would be corrected in the next
7	version of the software."
8	In other words, the messages that we
9	got really weren't sufficient to tell us precisely
10	what the problem was.
11	MR. ALLEN: We now produce seven
12	different error messages which give you a much
13	better as to where the problem is.
14	CHAIRMAN WOODBRIDGE: What kind of
15	messages are those?
16	MR. ALLEN: Things like there's
17	also a general printer error as a default.
18	There's printer offline, out of pain, paper near
19	end, printer not connected, paper empty, printer
20	unplugged.
21	CHAIRMAN WOODBRIDGE: If the paper

- 22 jams, what message do you get?
- 23 MR. ALLEN: I believe it says
- 24 printer offline. There's no way to know whether
- 25 it's offline because of a jam or some other

1 reason.

2 CHAIRMAN	WOODBRIDGE:	Understood.
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- 3 Okay.
- 4 So as I understand it, we've gone
- 5 from two different types of error messages to
- 6 seven that are more descriptive of the issue; is
- 7 that correct?
- 8 MR. ALLEN: That's correct, yes.
- 9 CHAIRMAN WOODBRIDGE: Any questions
- 10 on the Panel's part here?
- 11 Issue No. 7, "There was debate as to
- 12 whether or not the machine needs to be able to
- 13 process 750 votes without a paper change.
- 14 "The state statute requires that
- 15 there should be one voting machine for every 750
- 16 registered voters" -- which doesn't necessarily
- 17 mean that there has to be 750 votes in a row
- 18 without changing the paper -- "the statute and the
- 19 State criteria, however, do not appear to require
- 20 the machine be able to print 750 ballots without a
- 21 paper change. The vendor indicated that the paper

- 22 supplier provides cartridges of folded paper in
- 23 units of 500 sheets each" -- and this was when you
- 24 were seeing an accordion-type fold feed -- "but
- 25 that they could probably provide more. After

- 1 consideration the Committee decided it should be
- 2 acceptable for the machine to go through at least
- 3 500 ballots before a paper change."
- 4 We've had some testimony here
- 5 indicating that you an 800-foot roll on the
- 6 machine; is that correct?
- 7 MR. ALLEN: That's correct.
- 8 CHAIRMAN WOODBRIDGE: And that the
- 9 ballot length is normally about 14 inches?
- 10 MR. ALLEN: Correct.
- 11 CHAIRMAN WOODBRIDGE: We don't know
- 12 how many times that voter is going to vote again,
- 13 so it could be fewer and 500 voters. But if an
- 14 issue is ballots, some of which are spoiled, then
- 15 it would seem to me that probably it comes close
- 16 to if not exceeding the 500 limit. I don't want
- 17 to testify for the vendor here, but we have been
- 18 through this issue.
- 19 Bob, John do you have any additions
- 20 to that? No?
- 21 Issue No. 8, "If the printer is

- 22 broken, the voting machine does not record in the
- 23 event in the DRE's internal audit log."
- 24 And the comment under that was, "The
- 25 vendor indicated this would be fixed with the

- 1 appropriate software within 2-3 months."
- 2 MR. ALLEN: That is correct. It now
- 3 records the printer error in the audit log.
- 4 CHAIRMAN WOODBRIDGE: Can you show
- 5 us before we go or give us some kind of visual
- 6 demonstration of that?
- 7 MR. ALLEN: Can we print out -- Andy
- 8 would have to induce an error.
- 9 MR. WYNHAM: When we take a break, I
- 10 could try to induce an error and force the printer
- 11 to malfunction.
- 12 CHAIRMAN WOODBRIDGE: We'll
- 13 definitely take one break at some point here and
- 14 resume, and we'll give you a little short list of
- 15 things we want to come and revisit. I think
- 16 that's one of those that we'd like to verify if we
- 17 could.
- 18 Issue No. 9, "The Committee noted
- 19 that there was no box on the side of DRE,
- 20 including the required 30 emergency ballots as has
- 21 been standard practice in the State of New Jersey

- 22 for many years."
- 23 The comment there was, "The vendor
- 24 indicated this would be corrected as it has been
- 25 on other Sequoia DREs."

1	MR. ALLEN: Andy's going to show you
2	that box. That box was available before.
3	MR. WYNHAM: We just didn't have it
4	at the machine that we had at the armory.
5	CHAIRMAN WOODBRIDGE: So you've got
6	the emergency ballots and the pencils and stuff in
7	there?
8	MR. WYNHAM: Yeah. That was the
9	prior requirement. Had nothing to do with VPAT.
10	We just didn't think you'd be looking for that
11	when we were doing the VPAT hearing, so we just
12	didn't have it on the machine.
13	CHAIRMAN WOODBRIDGE: How does
14	Hudson County rate a snazzy box like that when
15	everybody else gets the cheesy box?
16	MR. LESTER: Mercer has that, too.
17	CHAIRMAN WOODBRIDGE: Do you?
18	MR. WYNHAM: We've gotten these in
19	quite a few.
20	MR. FLEMING: How does that attach?
21	MR. LESTER: Actually, there's a

- 22 cable that attaches to the hinge plate.
- 23 MS. GOLDMAN: We can't hear
- 24 anything.
- 25 MR. WYNHAM: He asked how it was a

1	attached. There's a cable that attaches the
2	ballot box to the machine. The ballot box is
3	stored in the inside in the back of the machine.
4	It's brought out when necessary, hung on the
5	machine. The emergency ballots are actually
6	delivered inside the ballot box itself and is
7	sealed. And if they have to use emergency
8	ballots, they open it, they access the ballot,
9	they reseal it, it becomes the ballot box.
10	MS. GOLDMAN: How many does it hold?
11	MR. WYNHAM: I think the State
12	distributions 30 to each polling place.
13	MR. LESTER: Title 19 requires 30
14	ballots. In Mercer for a Primary there would be
15	30 Republican, 30 Democrats, so it actually does
16	hold at least 60.
17	MS. GOLDMAN: My comment would be to
18	the State.
19	CHAIRMAN WOODBRIDGE: Why don't we
20	hold off. We're going to get to that pretty
21	quickly because we're almost through this part

- 22 here. I think what we'll probably do is once we
- 23 go through this -- and I have actually one or two
- 24 follow-up questions myself -- is take a break, see
- 25 if you can provide some of those things we

- 1 require, and then get the full public input on
- 2 that, too, if that's okay with people.
- 3 Okay. Issue No. 10, "The vendor is
- 4 presently negotiating a Non-Disclosure Agreement
- 5 with the Attorney General's Office in order to
- 6 provide source code.
- 7 "Vendor indicated that it had
- 8 entered into similar agreements with the other
- 9 states. Committee encourages the vendor and the
- 10 AG's office to expedite the process."
- 11 What's the status of that now? Do
- 12 you know?
- 13 MR. ALLEN: That's been done.
- 14 MS. GOLDMAN: I'd like to have our
- 15 attorney come in and hear this.
- 16 CHAIRMAN WOODBRIDGE: Has source
- 17 code been provided, do you know?
- 18 MS. KELLY: This is under the court
- 19 proceeding --
- 20 MR. CHAGARIS: There's currently a
- 21 litigation pending involving the testing the

- 22 source code, which is pursuant to Protective Order
- 23 of the Court.
- 24 CHAIRMAN WOODBRIDGE: Okay. With
- 25 that understanding -- and again, I've got to deal

- 1 with this issue because it's right here in front
- 2 of us. So the issue is there is discussions with
- 3 the Court about disclosure of this and testing of
- 4 it; is that correct?
- 5 MR. CHAGARIS: It's pursuant to
- 6 Protective Order.
- 7 AUDIENCE MEMBER: Could you speak
- 8 up, please? We can't hear anything.
- 9 MR. CHAGARIS: There's currently
- 10 litigation pending having to do with the source
- 11 code. And that source code and the concerns about
- 12 it is under Protective Order at this point. So
- 13 we're not really at liberty to discuss it.
- 14 CHAIRMAN WOODBRIDGE: I guess the
- 15 question is, it's the delivery of the source code
- 16 is under Protective Order; is that correct?
- 17 MR. CHAGARIS: Yes.
- 18 MS. KELLY: So at this juncture, it
- 19 would not an issue for this Committee.
- 20 MS. HARRIS: Why not?
- 21 MS. KELLY: It's been overridden by

- 22 the Protective Court Order.
- 23 MS. GOLDMAN: Well, they haven't
- 24 started it.
- 25 MS. HARRIS: And it hasn't been

1	agreed to.	

2	MS. KELLY: This matter of the
3	source code is under Court Order that was signed
4	by Judge Feinberg on Monday. So that's where we
5	have to
6	CHAIRMAN WOODBRIDGE: So basically,
7	the matter is in the hands of the Court at this
8	time; is that correct?
9	MS. KELLY: Yes.
10	MS. HARRIS: Mr. Woodbridge, are you
11	asking the question in perpetuity or at this
12	immediate moment about the availability of the
13	source code to the State?
14	CHAIRMAN WOODBRIDGE: Well, the
15	issue is right now the ability, I believe, and I
16	don't recall all of the context of the original
17	question, but the issue was whether or not it
18	would be made available. I don't think the
19	question of perpetuity or not was the issue at
20	that stage. I think part of the thing that one is
21	concerned about is the ability if, God forbid, the

- 22 vendor goes bankrupt or what-have-you, that there
- 23 would be escrow, a code so that you could access
- 24 that if there's a problem. That's usually the
- 25 concern that you see.

1	Now, again, at the time we went
2	through this, I can't tell you precisely what
3	other discussions we had. It's pretty much all in
4	a very thick record here that you can see. But
5	that's my major concern when I see the machines
6	that have software components. If something
7	happens to the vendor, how do you get your hands
8	on the source code so you could make whatever
9	changes have to be done?
10	MR. GILES: I believe that exists at
11	the county level, because the county is the
12	purchaser of the software. So I believe the
13	counties have entered into the agreements to keep
14	it at escrow.
15	MS. GOLDMAN: I don't know that
16	that's the case. I don't know that that's the
17	case in every county.
18	MR. GILES: I believe that is the
19	case in at least some counties.
20	CHAIRMAN WOODBRIDGE: Why don't we
21	do this. We have about three, four issues that we

- 22 may want to come back and revisit after the
- 23 hearing. I wanted to get through this.
- I do want to add one other question,
- 25 just because it sometimes comes up. That is the

1 issue of is it possible to in one way, shape, or 2 form affect the performance of the machine by 3 putting in rogue code or something like that? Is 4 there any opportunity for anybody to do that sort of thing on a machine like this? In other words, 5 can some member of the public slip a card in here? 6 7 MR. WYNHAM: The Advantage machine 8 has always been built with no external access 9 point. The only way that election data is loaded 10 in the machine is through the results port that's 11 sealed and locked in the machine. There's no key 12 board connect, no alternate disk drive, there's no 13 hard drive on this computer. It simply is no way 14 to introduce code. Then there are firmware and 15 hardware restrictions inside the machine as well. But the simple answer for the average guy, there's 16 17 just no access point. 18 CHAIRMAN WOODBRIDGE: Okay. 19 Does the Committee have any further 20 questions? Then why we don't we do this. We 21

- 22 have -- I've been sort of trying to keep track of
- 23 this. There may be others, but there are several
- 24 follow-up issues that we want to deal with. One
- 25 is the audio. Point No. 2, I'd like to see a demo

2	With regard to our point No. 5 about
3	the paper trail, we wanted to see some of those
4	ballots, verify the fact you can show primary and
5	what-have-you.
6	Also, we'd asked, and Mr. Wynham, I
7	think you said you could probably force it into a
8	mode that would show the recording of the internal
9	log; is that correct?
10	MR. WYNHAM: I'll attempt to do that
11	during the break and then demonstrate it once I've
12	jammed or somehow
13	MR. ALLEN: We'll try.
14	CHAIRMAN WOODBRIDGE: That was our
15	Item No. 8.
16	I guess the Committee will probably
17	want to discuss the issue of the source code. The
18	Committee itself wasn't going to do anything with
19	the code; it was just more of a concern that, in
20	fact, the code be available.
21	So those really are the issues that

- 22 we have. I do notice a list that you had
- 23 provided, I believe, that went through some other
- 24 things, too. Do you have the list? Could you
- 25 walk us through those items that don't correspond

1	to ou	r item	s No.	1	through	10?
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2	MR. ALLEN: Okay. There was
3	obviously, as I pointed out earlier, the EAC's
4	interpretation of the 2002 standard has become a
5	great deal more strict. As a result, we made a
6	number of changes to meet those.
7	There was also a couple of defects
8	that had been reported, which were also corrected.
9	There are improvements to the
10	hardware to make it conform to the new strict
11	interpretation of the electrostatic discharge and
12	radiofrequency interference requirements in the
13	2002 specs. That does not effect the function of
14	the machine at all. It just provides hardware,
15	additional hardware protection.
16	There was a change. We had a number
17	of reports out in the field, and this was found by
18	Wyle as well, that during transport of the machine
19	the audio cable where it attaches to the
20	motherboard can become slightly loose. We made a
21	change to that connecter so it's now retained

- 22 better, and that improves reliability of the
- 23 machine after it's been transported.
- 24 Again, no functional impacts other
- 25 than improve the operation of the machine, the

1 reliability of th	e machine on	election day.
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	5
2	There is a requirement, again, due
3	to the EAC's new stricter interpretation of 2002
4	spec, we now will be providing maintenance
5	instructions and error code, an error code list to
6	the back of the machine.
7	AUDIENCE MEMBER: Can you speak
8	louder? I'm sorry.
9	MR. ALLEN: We will providing a
10	maintenance sheet which has maintenance
11	instructions and an error code list which could be
12	attached to the back of the machine.
13	CHAIRMAN WOODBRIDGE: As I recall,
14	just for the record, I believe you provided us
15	with maintenance instructions and things like that
16	in your original submission, but they weren't
17	attached to the machine; is that correct?
18	MR. ALLEN: The EAC on the 2002 spec
19	means that there must be a statement of
20	maintenance and a list of error codes attached to
21	the machine itself.

- 22 So I'll ignore the ones that we've
- 23 already addressed as a part of addressing the
- 24 Title 19 report.
- 25 CHAIRMAN WOODBRIDGE: We've gone

- 1 through those.
- 2 MR. ALLEN: We've increased the
- 3 strength of digital signatures we use to VSHA
- 4 standard which is FIPS approved; that means it's a
- 5 federally approved algorithm.
- 6 We removed smart card support from
- 7 the diagnostics because that's no longer
- 8 available, offered anymore. So it was redundant
- 9 codes, so that was removed.
- 10 There had been reported a defect
- 11 that could occur where you could get an incorrect
- 12 date and time set in the machine by basically
- 13 going to a certain condition and then trying to
- 14 move backwards. That defect has been corrected.
- 15 We have improved the audio quality
- 16 considerably. There was reports in the support of
- 17 MP3 audio that you could get squawking noises and
- 18 a considerable amount of noise in the audio. We
- 19 have improved and corrected that so now the MP3
- 20 audio is much better quality than had previously
- 21 been supported.

- 22 We reported in the field was a
- 23 number of random key selections or presses that
- 24 could cause the system to lock up. That defect
- 25 was tracked down and corrected.

1	MR. LESTER: Excuse me. Could you
2	explain that more please? What keys are you
3	referring to?
4	MR. ALLEN: I can't tell you details
5	of what keys they were. I don't have that
6	information in front of me.
7	There was a defect was reported in
8	the last primary whereby if a poll worker
9	accidentally selected a code and then selected
10	a switch option, a party option and then selected
11	an unused switch, that caused an issue. That
12	defect has been corrected. And that defect, by
13	the way, was specifically tested by Wyle as well
14	that that had been corrected.
15	We made improvements to inter-board
16	communication to prevent some of the failures and
17	lockup conditions that has been noticed in the
18	field. That's been corrected now or improved.
19	We improved the hardware error
20	checking process to prevent spurious error
21	reporting, hardware error reporting that was

- 22 occasionally occurring.
- 23 And of course, lastly the code
- 24 review, Wyle reviewed the code and came up with a
- 25 number of code, what they call code defects, which

1	we corrected those. Those are mostly comments or
2	coding standards issues like length of particular
3	lines of codes, things like, and they were all
4	corrected as well.
5	CHAIRMAN WOODBRIDGE: I had a
6	question I probably should have asked up front.
7	The machine in its present configuration with the
8	VVPAT, has that been used in any elections today?
9	MR. WYNHAM: No. You're the first.
10	CHAIRMAN WOODBRIDGE: You mean we
11	will be the first perhaps.
12	Are there any other states in line
13	with the same trajectory to have this kind VVPAT?
14	MR. ALLEN: There are a number of
15	states which use this machine that have expressed
16	an interest in going with the VPAT selection.
17	CHAIRMAN WOODBRIDGE: Now, if I
18	understand correctly, though, the first DRE,
19	that's the electronic part of that machine, is
20	used in other states in addition to New Jersey?
21	MR. ALLEN: That's correct. The

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- 22 Edge machine has been used with a VPAT
- 23 configuration for a number of years now.
- 24 CHAIRMAN WOODBRIDGE: Now, this is
- 25 not the Edge; is that correct?

- 1 MR. ALLEN: No. This is Advantage.
 - 2 CHAIRMAN WOODBRIDGE: Okay. Has the
 - 3 Edge machine, is it currently using this
 - 4 particular VPAT configuration.
 - 5 MR. ALLEN: No. The Edge uses its
 - 6 own different style of VPAT.
 - 7 CHAIRMAN WOODBRIDGE: Like the one
 - 8 we saw last time; is that correct?
 - 9 MR. ALLEN: Yes.
 - 10 MS. VENETIS: The Edge is touch
 - 11 screen.
 - 12 CHAIRMAN WOODBRIDGE: We have gone
 - 13 through our 10 concerns and plus a few more of our
 - 14 own. We've gone through the list of --
 - 15 comprehensive list of changes that we've gotten
 - 16 from the vendor. We've noted a number of things
 - 17 that we do want some additional feedback before we
 - 18 conclude these hearings. Like Bob here, I'm a
 - 19 little bit curious about the improbable key
 - 20 combination issue. If we can get a little bit
 - 21 more information about that, that would be

22 appreciated.

23	This is probably an appropriate time
24	to take a break, so why don't we take about a
25	10-minute break and reconvene. If things go

1	smoothly, it would be good we can probably
2	conclude this by about 1:00 this afternoon. I
3	can't guarantee it, but let's see where this goes.
4	After the break, we'll ask the vendors to respond
5	to the four areas actually, five issues we
6	talked about, and then we'll come back and take
7	all the public comment, too.
8	(Whereupon, a recess was taken.)
9	CHAIRMAN WOODBRIDGE: We're going to
10	go back on the record again. I hope that was
11	close to 10 minutes.
12	When we last stopped, we had
13	finished going through the basic points and
14	additional items that the vendor had noted. And
15	we were going to come back when we adjourned and
16	deal with the four or five issues where we had
17	lingering questions.
18	Is Andy hiding behind the machine?
19	I was just mentioning that now is
20	the time to revisit the four or five questions

21 that we had. And the first issue we wanted to

- 22 revisit was the issue of the audio. And if could
- 23 you tell us where you are on that.
- 24 MR. CHAGARIS: Before we begin that,
- 25 if I may, the question came up at very end about

1	the source code. And I can confirm to the
2	Committee that the source code is in escrow with
3	Iron Mountain, which is a repository of source
4	codes for the benefit for the State of New Jersey.
5	CHAIRMAN WOODBRIDGE: For the
6	benefit of the State of New Jersey?
7	MR. CHAGARIS: Yes.
8	CHAIRMAN WOODBRIDGE: So if the
9	balloon goes up and something, God forbid, happens
10	to Sequoia, we have access to that; is that
11	correct?
12	MR. CHAGARIS: That's correct.
13	CHAIRMAN WOODBRIDGE: Also, there
14	was a question of whether or not some of the
15	counties had access to that.
16	MR. CHAGARIS: The entire State of
17	New Jersey.
18	CHAIRMAN WOODBRIDGE: Do any the
19	counties individually have access?
20	MR. CHAGARIS: It's in escrow with

21 Iron Mountain for every county in the State of New

22 Jersey.

- 23 And then the question, I guess, was
- 24 asked of the audio. Dave.
- 25 MR. WYNHAM: You mentioned before

1	about hearing the next prompt on the audio. We're
2	demonstrating today a single-page ballot, so there
3	would be no next prompt that I can demonstrate at
4	this point in time. I can certainly demonstrate
5	that at a later date or demonstrate it for staff,
6	just for the purpose of proving that it does
7	function. Whatever the Committee's discretion is.
8	CHAIRMAN WOODBRIDGE: We would like
9	some verification of it. Now, how you do that is
10	going to be your problem, not ours. One thing
11	it's a little premature, but I'll bring it up
12	right now. We are going to expand the public
13	comment period. Again, we don't make our
14	decisions today. And we will be taking public
15	comment up until 5 p.m. on Friday, May 30th. That
16	basically gives people an extra eight days to add
17	whatever they'd like, including the vendor if the
18	vendor can provide that kind of response. The
19	sort of thing that might be useful if it's not a
20	large file is a fairly simple video clip or
21	something like, if you can show it. That might

- 22 work. If you keep it down to maybe a minute or
- 23 two so we can get it.
- 24 MR. WYNHAM: To see that it
- 25 functions when I hit the button and --

1	CHAIRMAN WOODBRIDGE: Yes. Send us
2	an MPEG or whatever. It doesn't have to be high
3	grain quality. We just want to be able to verify
4	it, if we could. Or anything else that would be
5	useful to show us, in fact, we do get that audio
6	signal.
7	Let's hold it until we get finished.
8	So you'll provide us with some
9	how soon can you do that for us?
10	MR. WYNHAM: I can do that before
11	the middle of next week. When is the public
12	comment?
13	CHAIRMAN WOODBRIDGE: Public comment
14	will be finished eight days from today, which will
15	be 5:00 on Friday of next week.
16	Now, keep in mind, all responses do
17	not come to us individually. They're to go to
18	I guess now it goes to the Secretary of State. So
19	make sure that it goes to them. They'll forward
20	that information to us, because we try to
21	discourage discussions between and Irene wants

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- 22 to make sure she gets a copy of whatever it is.
- 23 So there should be some mechanism, I assume, on
- 24 the Secretary of State's web page or whatever so
- 25 the public can get access to some of this

1 material.

2	MS. VENETIS: I just have a
3	logistics question, Mr. Chairman. Two questions:
4	Number 1 is, where does the public send its
5	comments to, the Secretary of State or to your
6	office?
7	CHAIRMAN WOODBRIDGE: That will be
8	the Secretary of State's Office. Actually, we'll
9	be getting to that towards the end of this program
10	today.
11	MS. VENETIS: And then second is,
12	when will be the transcript become available so
13	that if we wish to reference the transcript we can
14	do so in our comments? Because I think that would
15	be helpful to everybody involved.
16	CHAIRMAN WOODBRIDGE: I don't know
17	the answer to that.
18	MR. GILES: By Tuesday, we'll have
19	the transcript.
20	MS. VENETIS: And it will be posted
21	on the Secretary's web site?

- 22 MR. GILES: We'll try to get it
- 23 posted. If not, you can reach out to us and we'll
- 24 get you a copy.
- 25 CHAIRMAN WOODBRIDGE: It's a little

1	bit premature,	but now	that you	bring it up	

	2	MR.	GILES:	I'm	sorry.	I'11	give
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3 out my cards. You can send the comments to me at

4 the Division of Elections' Office and then we will

5 get a repository for those.

6 CHAIRMAN WOODBRIDGE: On that same

- 7 issue -- and again, it's a little bit premature
- 8 but it's worth noting. The Wyle report that we
- 9 referred to, the copy that the committee has is an
- 10 unofficial partially confidential one. They will
- 11 be posting a redacted version of that. I have no
- 12 idea what they redact.
- 13 SECRETARY WELLS: And that will be
- 14 done today.
- 15 CHAIRMAN WOODBRIDGE: That will be
- 16 done today, so you'll be able to see the Wyle
- 17 report in all its glory, although I've got no idea
- 18 what in there is especially confidential, but
- 19 that's regardless.
- 20 Okay. So you'll provide us --
- 21 you'll try to provide us with something that

- 22 demonstrates to us and shows the audio on the next
- 23 page issue; is that correct?
- 24 MR. WYNHAM: Yes, sir.
- 25 CHAIRMAN WOODBRIDGE: And Wednesday

1	is when	you'll	be able	to get	that	done?

2	MR.	W	YN	HA	M:	Yes.
4	1111.	• •	TIA	IID	. 1111.	103

3 CHAIRMAN W	OODBRIDGE:	Issue No. 2
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- 4 was the question of the ballots. And I think
- 5 there are two issues: One is showing the General
- 6 and the Primary, and the other is the issue of the
- 7 internal audit log. Actually, they're two
- 8 different questions. So why don't you show how
- 9 the ballots now show us whether we're voting in
- 10 General or Primary.
- 11 MR. WYNHAM: What I've basically
- 12 done for the Committee is just provided a copy of
- 13 the output from the VPAT. And at the top of each
- 14 form, you'll see in this case of this
- 15 demonstration ballot it says Essex County,
- 16 November 4, 2008, denotes it as a General
- 17 election. That one line actually contains all the
- 18 information that you required. However, if you
- 19 note, I circled the area on the form where the
- 20 software that sets up the coding for the machine
- 21 allows you four lines of text, so if you want to

- 22 break that out -- some counties spell it out in
- 23 great detail, election, the date, and all the
- 24 pertinent information you request.
- 25 CHAIRMAN WOODBRIDGE: Also,

1	likewise, last time if you could provide us with a
2	couple of your spoiled ballots just for the files.
3	MR. WYNHAM: And that's what these
4	are.
5	CHAIRMAN WOODBRIDGE: This says
6	accepted.
7	MR. WYNHAM: And there's two
8	CHAIRMAN WOODBRIDGE: Oh, I'm sorry.
9	The public should get a copy or have a chance to
10	see these also.
11	Okay, fine. So that deals with that
12	issue.
13	The issue of the audit log, I take
14	it you ran something during the break; is that
15	correct?
16	MR. WYNHAM: This is the audit log
17	from actually, I just generated an audit log.
18	I had to unplugged the printer this morning as I
19	set up the machine. It generated an error code.
20	So all I did during the break was print the audit
21	log and let you review it for yourself.

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22 CHAIRMAN WOODBRIDGE: What we're

- 23 looking at here looks like a chronological event
- 24 log of things that happens in the machine; is that
- 25 correct?

1	MR. WYNHAM: Every event. You'll
2	see every time I turned the power on, if opened or
3	closed the polls, everything that happens to the
4	machine is recorded in the log.
5	CHAIRMAN WOODBRIDGE: And I note
6	that there are three instances where it indicates
7	a power off; is that correct?
8	MR. WYNHAM: Yes, sir.
9	CHAIRMAN WOODBRIDGE: I've got to
10	ask a stupid question. Are these times here
11	is this time zone or is this a different time
12	zone? Because I notice it says 8:49. I wonder if
13	that was
14	MR. WYNHAM: That was the time that
15	we were setting up this morning, yes.
16	CHAIRMAN WOODBRIDGE: In other
17	words, you provoked these errors
18	MR. WYNHAM: Instead of generating a
19	new error, I just went and printed the audit log.
20	Rather than me manipulating something, you're just
21	seeing the audit log from this morning.

22 CHAIRMAN WOODBRIDGE: Okay.

- 23 We talked about the source code
- 24 issue, and that is the State is the beneficiary;
- 25 is that correct, of the Iron Mountain escrow

1 account?

- 2 MR. CHAGARIS: Yes.
- 3 CHAIRMAN WOODBRIDGE: Also, the
- 4 issue was raised about the improbable key
- 5 combinations. Were you able to get any more
- 6 information on that?
- 7 MR. ALLEN: That was an error that
- 8 was discovered during our QA testing. I've asked
- 9 our QA department to track down records on that.
- 10 They're doing that at the moment.

11 CHAIRMAN WOODBRIDGE: So they can

- 12 provide us before --
- 13 MR. ALLEN: They won't necessarily
- 14 be able to provide you with the exact key presses
- 15 that cause it. I mean, these guys -- it's
- 16 different ballots it would have been -- they do
- 17 all sorts of things to these machines.
- 18 CHAIRMAN WOODBRIDGE: We'd certainly
- 19 like to know at least what one or two of these
- 20 things look like. So if we can --
- 21 MR. ALLEN: It locks up the machine.

22 CHAIRMAN WOODBRIDGE: That, I

- 23 understand. I guess the question goes through my
- 24 mind is show us what one of these improbable key
- 25 strokes combination --

1	MR. ALLEN: As I said, we may not be
2	able to reproduce it on one of your ballots.
3	CHAIRMAN WOODBRIDGE: It doesn't
4	necessarily have to be on one of ours. We just
5	want to know what an improbable combination looks
6	like. If it's like A, B, C, that's one thing. If
7	it's like
8	MR. ALLEN: That doesn't exist
9	anymore on this machine.
10	CHAIRMAN WOODBRIDGE: I'm still
11	confused. What I'd really do is I'd like to know
12	what the improbable key combination was on
13	whatever machine it was that provoked this issue.
14	If you could do, that would be what I'd like to
15	see.
16	MR. ALLEN: I'll try and provide
17	more information for you.
18	CHAIRMAN WOODBRIDGE: If you can,
19	that's what I'm looking for.
20	So we have, it looks likes, really
21	two issues hanging, and one is the improbable key

- 22 stroke issue --
- 23 MR. ALLEN: Can I say that I don't
- 24 really believe that improbable key stroke issue
- 25 was actually pertinent to this meeting.

1	CHAIRMAN WOODBRIDGE: It may not be
2	I just want to know what the improbable key stroke
3	issue is. I want to see what is it that provoked
4	that. I want to see how improbable this
5	combination was. That's my question.
6	And the issue of the audio, we
7	talked about you're going to give some sort of
8	demo. It doesn't have to be in a MPEG. That
9	might be the easiest way. So all questions should
10	go to the Secretary of State.
11	So at this stage, I think we've sort
12	of walked through this. We have some additional
13	things we're waiting for input from. As soon as
14	the official comment period is finished, the
15	Committee here will do its magic and come to
16	whatever conclusions it's going to come to.
17	I'm going to ask the Committee
18	before we go any further if John or Bob, if you
19	have any further questions you would like pose.
20	MR. FLEMING: I always have at least
21	one. I guess just from a logistics standpoint

- 22 from the county end, the machines that they have
- 23 now, what is it going to take to convert them from
- 24 what they presently have until what they will end
- 25 up getting if this gets approved as it is?

1	I'm just trying to get an idea of
2	the feel and, hopefully, this will give some
3	information to the counties what it's going to
4	take, you know, like, would it be one machine a
5	day. Get an idea of what
6	MR. ALLEN: Again, really, that's
7	outside the scope of this hearing. The exact
8	once a contract is signed, if a contract is
9	signed, the exact schedule for doing these
10	upgrades will be put together with the county and
11	we will as a company we will ensure that we
12	meet any milestones, scheduled commitments that we
13	make at that time.
14	MR. FLEMING: Do you have a ballpark
15	figure?
16	MR. ALLEN: I can't tell you.
17	That's an operations issue.
18	CHAIRMAN WOODBRIDGE: Bob, any
19	questions?
20	MR. LESTER: No.
21	CHAIRMAN WOODBRIDGE: While we have

- 22 the Madam Secretary here, do you have any
- 23 questions?
- 24 SECRETARY WELLS: I do not.
- 25 CHAIRMAN WOODBRIDGE: I think we're

1	probably finished with the formal part of this.
2	And we would respectfully solicit any questions
3	that the audience has or any comments.
4	Go ahead. Make sure you identify
5	yourself when you stand up.
6	MS. HARRIS: Stephanie Harris. I
7	have two questions. One is about the retrofit
8	which you were just asking. My first question is,
9	in order to retrofit that printer onto that DRE,
10	knowing the DREs that New Jersey now has, what
11	other components will be required in order to make
12	that retrofit? In other words, do we need to add
13	an audio pack or anything else? And the second
14	part of that question is, how much will that
15	retrofit cost? That's my first question.
16	CHAIRMAN WOODBRIDGE: Thank you,
17	Stephanie. I appreciate and I'm glad you
18	addressed the question to the Chair because that
19	way we can keep traffic down.
20	Again, just to remind people, the
21	Wyle report will be posted. We will have comment

- 22 period from the public up until 5 p.m. on Friday.
- 23 I apologize for repeating myself. I just want to
- 24 make sure on record that it got there.
- 25 David and Andy, the retrofit

1	question.
2	MR. ALLEN: That's not finalized at
3	this time.
4	CHAIRMAN WOODBRIDGE: So the
5	question is when you say it's not finalized, I
6	think what Stephanie was asking was will it
7	require additional hardware stuff to attach onto
8	the existing machines?
9	MR. ALLEN: The upgrade consists of
10	a kit of a number of things that are altered and
11	added. And the cost to the State is subject to
12	negotiation. It has not been finalized at this
13	time.
14	CHAIRMAN WOODBRIDGE: So in other
15	words, you're telling us basically that at the
16	present time you don't know what you're going to
17	put on them because you haven't finished
18	negotiating with the State what that's going to
19	be?
20	MR. WYNHAM: We know what the
21	upgrade is. I'm not going to go through a detail

- 22 of that. At that time, that information will be
- 23 provided to the counties at that such time that
- 24 during the negotiations. And the cost to the
- 25 counties is under negotiation and it's not been

1 finalized.

2	CHAIRMAN WOODBRIDGE: By upgrade,
3	you mean the physical attaching of the printer to
4	the existing machine?
5	MR. ALLEN: All components.
6	MS. GOLDMAN: That's avoiding the
7	question. The question to you, through the
8	Chairman, was what parts are required? What do
9	you require to add to existing DREs and what will
10	that cost? What are the parts? You're asking for
11	an approval today.
12	CHAIRMAN WOODBRIDGE: I think Irene
13	has a good point. What do you need to attach one
14	of those things to the existing machine and what
15	do you need to attach the printer assembly to this
16	machine. Do you have any idea of what the
17	hardware is going to be? The cost may be a
18	separate issue, but
19	MR. ALLEN: Is the Committee asking
20	me to provide a detailed list of all the changes?
21	CHAIRMAN WOODBRIDGE: I'm not asking

- 22 for the list of changes; I just want to know what
- 23 the major -- what are you going to do to attach
- 24 that to an existing machine.
- 25 MR. ALLEN: We cut a hole in the

1	panel, put the fittings on it. We put this
2	extension box on the back to house the
3	daughterboard. There's changes to some of the
4	electrical components inside, things like that
5	that are added to give an ESD protection.
6	Obviously, the bag. There's some parts and
7	changes, mechanical parts to strengthen the
8	structure of the machine to take the extra weight.
9	And that's a rough summary of the changes.
10	There's some membranes that are added to things
11	like where there's LCDs to give it additional
12	protection from electrostatic discharge. There's
13	a number of things. And obviously, the build of
14	the materials process, doing the upgrade, the
15	details will be provided to the counties at some
16	time that we enter into a contract.
17	CHAIRMAN WOODBRIDGE: It would seem
18	to me I don't mean to jump ahead, but it would
19	be premature to negotiate the price of these
20	things until they're approved by the State; is

21 that correct?

- 22 MR. ALLEN: Yes. Initial
- 23 discussions have taken place, but obviously
- 24 nothing has been finalized.
- 25 CHAIRMAN WOODBRIDGE: And I realize

- 2 recall at one time an estimated price of about
- 3 \$2,000 per VVPAT? Is that ballpark, is that high
- 4 or low or --
- 5 MR. ALLEN: Approximately. It's of
- 6 that order of magnitude, yes.
- 7 MS. GOLDMAN: To continue on that,
- 8 you've mentioned the extension box, you've
- 9 mentioned the bag, the structural strengthening,
- 10 the membranes, kit of materials. You describe how
- 11 to do all that. But you also mentioned that there
- 12 are changes in electrical components to interface
- 13 into the DRE itself. Now you're changing the DRE.
- 14 It's not just the printer. You're affecting it
- 15 through electronic changes. This not then a
- 16 certified machine onto which you are attaching a
- 17 printer. You're here to speak to the printer, but
- 18 the Committee has to deal with whether or not the
- 19 DRE itself has been changed in some way and
- 20 affected in some way and doesn't the have to be
- 21 recertified, or certified in the first place,

- 22 depending on your point of view.
- 23 CHAIRMAN WOODBRIDGE: Do you want to
- 24 respond to that?
- 25 MR. ALLEN: These are additions to a

1 certified machine. I disagree with your view.

- 2 MS. GOLDMAN: They are not
- 3 additions?
- 4 MR. ALLEN: They are additions to a
- 5 certified machine.

6 MS. GOLDMAN: You're changing a

7 certified machine. You're making changes to a

- 8 certified machine.
- 9 MR. ALLEN: These are additions to a
- 10 certified machine.

11 MS. GOLDMAN: So they are changes.

12 That's not your word, but it's my word. You're

- 13 not agreeing to it.
- 14 Mr. Chairman, that's what we see
- 15 this to be. The Committee has to answer that for
- 16 themselves. Is a change a change?
- 17 CHAIRMAN WOODBRIDGE: That's
- 18 something we'll probably talk about. And again,
- 19 we haven't come to -- the purpose of this hearing
- 20 is a hearing, not to make --
- 21 MS. GOLDMAN: I have other comments,

- 22 but I'll wait.
- 23 CHAIRMAN WOODBRIDGE: Stephanie.
- 24 MS. HARRIS: The second part of my
- 25 question, I tried using this machine -- and my

1	children tell me I'm technologically challenged.
2	But I really did follow all of the instructions
3	that were on there, and I tried to void according
4	to your instructions and the instructions that are
5	printed. I tried to void my ballot, and it took
6	away the ballot and it said voided, but then
7	nothing else appeared. So either do you want to
8	print an error code and tell me what I did wrong?
9	Or how do I get the machine to then function?
10	Because it froze and it wouldn't go any further.
11	I couldn't do anything more to it. So what did I
12	do wrong?
13	MR. WYNHAM: Mr. Chairman, the
14	function that she described meets the
15	specifications laid out before by the State of New
16	Jersey. She voided a ballot. The voided ballot
17	was deposited in the bag. She was now free to
18	make new selections and cast her ballot again.
19	MS. HARRIS: Which I tried to.
20	MR. WYNHAM: I'll try to finish.
21	Nothing should present itself as another ballot

- 22 image until such time as you cast the ballot
- 23 again. So what she describes and what I heard is
- 24 exactly what was proscribed for us to happen by
- 25 the specifications of New Jersey NJIT.

1	CHAIRMAN WOODBRIDGE: Now, do I
2	understand correctly that you tried to cast a
3	second ballot after that stage?
4	MS. HARRIS: Yeah. I tried to cast
5	it but the little green X wouldn't move from the
6	person who I was trying to remove and to the
7	person I was trying to cast a ballot for. So I
8	was unable to change my vote.
9	MS. VENETIS: It appears that the
10	machine froze.
11	MR. WYNHAM: Again, we're taking
12	testimony on something that appeared to happen.
13	We can either demonstrate it right now in front of
14	the group again and she can try to reproduce the
15	error condition. You could repeat the step you
16	took.
17	MS. VENETIS: It's still frozen on
18	the screen. Let her go over there.
19	MR. WYNHAM: The cast vote button is
20	illuminated. It's waiting for you to make
21	choices.

22 CHAIRMAN WOODBRIDGE: So are we

- 23 right now in the middle of a voting process?
- 24 MR. WYNHAM: I can tell you, as I
- 25 described to the Committee when I did the

1	demonstration, she is on her third ballot. In the
2	LCD prompt right now there is the message warning
3	the voter that this your final ballot with the
4	prompt to press the button to the right of the
5	arrow where it says okay. This right here. So if
6	you will press the enter button.
7	MS. HARRIS: It says okay, but it
8	doesn't say to press enter. It just says okay.
9	MS. WYNHAM: I understand the point
10	that you're trying to make, but this is the way
11	the machine functions. She simply hasn't pressed
12	the enter key next to the okay prompt. If you'll
13	do so because as necessary, we had to give the
14	voter a warning that this was their final chance.
15	MS. HARRIS: It says to press the
16	okay button, but there is no okay button. So you
17	have to know to press the enter button.
18	MR. WYNHAM: Again, I understand
19	your it does not say to press the okay button.
20	There's an arrow that points to the enter button.
21	It's asking you to caution, your final ballot,

- 22 okay? And then the function.
- 23 MR. FLEMING: There will be an
- 24 instruction that will explain that?
- 25 MR. WYNHAM: A component of this

2 worker training.

3 CHAIRMAN WOODBRIDGE: I sympathize

- 4 with being challenged on these machine, too.
- 5 You'd think after all these years it would be easy
- 6 I for me, but...
- 7 Any other question?
- 8 Penny.
- 9 MS. VENETIS: Thank you, Mr.
- 10 Chairman. I have some comments and questions.
- 11 The first comment is I'd like to put my formal
- 12 objection on the record about lack of public
- 13 knowledge about this hearing. I found out about
- 14 it yesterday late in the morning through the
- 15 Public Advocate's Office. And there was no
- 16 notice. I had to completely revamp my schedule.
- 17 Our expert witnesses who would have like to have
- 18 been for the whole day, one couldn't make it, the
- 19 other had a conference where he's speaking in
- 20 Philadelphia. He gave us a few hours of his time
- 21 and he had to leave. And it really is not

- 22 sufficient notice to -- the Public Advocate found
- 23 out about it at 10 o'clock or so in the morning.
- 24 It's not sufficient notice to tell the public 24
- 25 hours or less than 24 hours in advance of this

1	hearing. We believe there would have been
2	concerned citizens and concerned members of the
3	computer science community here who would be able
4	ask very important technical questions. And as a
5	result of this lack of notice, I think that the
6	Committee in general is not benefiting from the
7	comments of other members of the public and
8	members of the computer science community who
9	could focus some of the issues for the Committee.
10	So that's my objection on the record.
11	And the other comment that I want to
12	make really echoes what Ms. Goldman stated a
13	little while ago. And that is, the members of the
14	Sequoia team, just in response to the Committee's
15	questions, stated that they're introducing a
16	sisterboard into the process. And they're going
17	to drill a hole in the existing DREs that all the
18	counties have and they're going to attach a
19	sisterboard, where a sisterboard is an entire
20	computer new computer system. And my
21	understanding of that is that this new computer

- 22 system is going to be communicating with a Z80
- 23 chip that's currently in the machines that are
- 24 used in the electronic computers used in New
- 25 Jersey. And in addition to that software,

1	brand-new software, they're also going to
2	introduce new hardware into the whole voting
3	process. It is my belief that that is a material
4	alteration that could impair the accuracy and
5	efficiency and capacity of the current machines
6	and that the entire system would warrant
7	recertification because they are introducing a
8	totally new voting system that not only has the
9	printer capacity, but also there is a new computer
10	system involved and that that computer needs to go
11	through the certification process.
12	Additionally, my other comment is
13	that given the complexity of the software and the
14	introduction of a new set of software, a new set
15	of communications between the printer, the new
16	sisterboard and the motherboard, that I believe
17	quite strongly and this is upon consultation
18	with computer scientists at Princeton
19	University that it would benefit the
20	Committee and I hope I'm not speaking out of
21	place, but it would benefit the Committee to seek

- 22 the assistance of individuals who have knowledge
- 23 of computer science and computer security issues
- 24 if indeed the Committee holds a recertification
- 25 hearing so that those individuals can advise the

1 Committee on matters concerning computer and

2 electronics issues that perhaps the Committee does

3 not have the capacity right now to analyze. So

4 those are my comments.

5 My questions are as follows: And

6 this is a question for the Committee. Is the NJIT

7 team going to reexamine the printers that are now

8 being presented to the Committee? Because it

9 appears that, obviously, representatives of

10 Sequoia are here saying that they fixed all the

11 problems, but they obviously have a vested

12 interest and a financial interest in saying that

13 everything is fine. And that I want to show

14 whether the NJIT team is going to have an

15 opportunity to examine the printers again. So I

16 don't know if the Committee would answer my

17 question.

18 CHAIRMAN WOODBRIDGE: Do you want to

- 19 respond to the question?
- 20 MR. ALLEN: First of all, I'm afraid
- 21 that the professor was incorrect in some of her

- 22 statement. The daughterboard is -- the new board
- 23 is already in the machines as part of the
- 24 requirement for the audio upgrade, which has
- 25 already been certified in the State of New Jersey.

1 It's not - that board is not additional to the	1	It's not -	that board	is not	additional	to this
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- 2 particular upgrade. This is a -- these are
- 3 modifications to an existing certified machine
- 4 with the audio function.
- 5 CHAIRMAN WOODBRIDGE: So in other
- 6 words, the printer driver mechanism and all that
- 7 was on the machine that we certified before?
- 8 MR. ALLEN: That's firmware.
- 9 CHAIRMAN WOODBRIDGE: Was that on
- 10 the -- was that firmware on the machine that was
- 11 certified before or not?
- 12 MR. ALLEN: That's software. Mrs.
- 13 Venetis' comment was related to -- specifically
- 14 related to the accusation we're adding a new
- 15 processing card.
- 16 MS. VENETIS: No, I said you're
- 17 adding firmware and software.
- 18 MR. CHAGARIS: Mr. Chairman, we
- 19 didn't interrupt Ms. Venetis. I would appreciate
- 20 if she would not interrupt the response.
- 21 CHAIRMAN WOODBRIDGE: Okay.

- 22 MR. WYNHAM: The specific statement
- 23 was a sisterboard. And there is no new board
- 24 that's added to the already certified audio
- 25 machines in New Jersey. That's what we're trying

1 to clarify.

2	MS.	VENETIS:	Ι	want to	clarify	my
						_

3 comments.

- 4 MR. CHAGARIS: Mr. Chairman, there
- 5 were two comments and there was also a question.
- 6 I'd appreciate if we be given the opportunity to
- 7 respond in an orderly fashion.
- 8 CHAIRMAN WOODBRIDGE: Please do.
- 9 MR. ALLEN: I'd also like to state
- 10 that all the modifications that are part of this
- 11 upgrade have been fully tested by
- 12 federally-approved test lab at the request of the
- 13 State of New Jersey to show and to prove that it
- 14 is compliant with the federal 2002 standards.
- 15 The other there was another
- 16 question related to the printer. NJIT were
- 17 presented with the printer and we tested in
- 18 November 2007. So NJIT have seen it, have looked
- 19 at it, have tested it.
- 20 CHAIRMAN WOODBRIDGE: When you say
- 21 that they've seen it and tested it, was it whole

- 22 thing there, or is it just -- what is it?
- 23 MR. ALLEN: The whole thing.
- 24 MR. WYNHAM: This very configuration
- 25 with the exception of the ESD stuff that we work

1 through that we're required by Wyle.

2	CHAIRMAN WOODBRIDGE: Did they
3	generate a report on that? Do you know?
4	MR. CHAGARIS: Isn't that part of
5	the December 22nd report?
6	CHAIRMAN WOODBRIDGE: Okay. Thank
7	you.
8	MS. VENETIS: If I may, Mr.
9	Chairman. The question is still open whether this
10	system has any new firmware. And again, any sort
11	of new firmware or new hardware to the machine
12	impairs the accuracy, efficiency, and capacity so
13	that the entire system needs to be recertified.
14	This Committee has not seen the whole system
15	working, has not seen everything from soup to
16	nuts, has not been able to test the system as a
17	whole. And whether you call it a sisterboard or
18	something else, it seems like the Sequoia folks
19	were seizing on that word daughterboard, were
20	seizing on that word and were not really answering
21	the question as to whether or not there's

- 22 additional software/firmware that is being
- 23 introduced into the system.
- 24 The other comment is about the
- 25 federally approved test labs. Well, the State

1	requires that the machine be certified, any voting
2	system be certified by the State. And there's no
3	requirement, statutory or otherwise, that says
4	that the State relies heavily or at all on any
5	sort of federal testing, the testing labs, the
6	federal the testing labs upon which states rely
7	have been decertified by the EAC. So that really
8	is not a legally cognizable analysis.
9	CHAIRMAN WOODBRIDGE: I think one
10	lab, Cyber, was decertified. I don't think Wyle
11	was decertified.
12	MS. VENETIS: And the software that
13	the Sequoia folks are saying was certified by the
14	State of New Jersey, that was based on tests that
15	were performed by Cyber after it had been
16	decertified. So my comment still holds that the
17	system as a whole needs to be reexamined by the
18	Committee and that the Committee would most likely
19	would certainly benefit with having the technical
20	expertise of computer security experts.
21	So I just wanted to reiterate that

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- 22 it is a different system and there is new
- 23 software. And that's the Sequoia folks are saying
- 24 whether it's on a daughterboard or sisterboard or
- 25 otherwise, it's a technicality that really is not

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2	The other thing is that I just want
3	the Sequoia folks to confirm that they concur with
4	the Wyle reports on the record if they believe
5	that they are accurate. And then I just have a
6	comment concerning that, the Wyle report. So I,
7	through the Chair, ask if they concur with the
8	findings of the Wyle report.
9	CHAIRMAN WOODBRIDGE: Does the
10	vendor want to respond to that?
11	MR. ALLEN: I can certainly say that
12	we concur with the summary findings of the Wyle
13	report.
14	MR. CHAGARIS: She had a comment
15	that I wanted respond to.
16	MS. VENETIS: Well, I'm not quite
17	finished yet.
18	MR. CHAGARIS: Ms. Venetis
19	reiterated her statement that this is an entirely
20	new system that needs new certification. And we
21	reiterate that it's not. And the testimony on the

- 22 record is that this is an addition to an existing
- 23 certified machine. That's what the testimony is.
- 24 It was also reviewed by NJIT. As the Committee
- 25 knows, was designated by the then Attorney General

1	at the time prior to the July '07 hearings for
2	that very purpose and there's no need for any
3	other experts. That's the whole reason, in fact,
4	statutorily this Committee that makes the
5	determination. The Attorney General at the time
6	determined that for benefit for this Committee who
7	has jurisdiction, the NJIT would be involved. And
8	they were involved and have been involved
9	extensively and have submitted extensive reports.
10	I think that this surrebuttal of a surrebuttal of
11	a surrebuttal is unnecessary. I think Sequoia has
12	complied with the requirements of NJIT completely.
13	MS. VENETIS: The NJIT team, I just
14	want remind members of Committee, examined only
15	the printers. The NJIT team did not look at the
16	underlying computer system. NJIT has not examined
17	any of the source code, any of the software at all
18	and has not actually analyzed the computer and
19	software of the printers. They really did a
20	physical examination of the hardware.
21	

21 CHAIRMAN WOODBRIDGE: As they say on

- 22 Jeopardy, is that in the form of a question or a
- 23 statement?
- 24 MS. VENETIS: That was the comment
- 25 based on comment that was made. I just want to

1	remind everyone that the NJIT team didn't look at
2	the voting computer, it looked at the printer
3	exclusively. So any sort of comments by the NJIT
4	committee deals exclusively with the printer.
5	They're very clear about the whole thing. And
6	they also looked at the physical nature rather
7	than the software.
8	MR. CHAGARIS: The NJIT look at the
9	software, looked at the entire system, not just
10	the printing part of it. It's in the record, in
11	the reports. The Committee will review these
12	records, I'm sure, and review the reports and come
13	to their own conclusion.
14	MS. VENETIS: Again, it's in the
15	NJIT report they looked at the printer, they
16	didn't examine any software or source code.
17	The other comment I want to make on
18	the record is that there was some discussion
19	earlier about the source code. And Ms. Kelly
20	stated that there's some sort of protective order
21	in place that would prevent the discussion of a

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- 22 source code, anything related to the source code.
- 23 That is not true. Nobody has signed a Protective
- 24 Order. The Protective Order is valid concerning
- 25 information gleaned from examination of the source

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- 2 public hearings is not prohibited by any order.
- 3 And any representations by the Attorney General's
- 4 Office to that effect are simply untrue.
- 5 So I just wanted to make one last
- 6 comment about the Wyle report. The Wyle report,
- 7 my understanding is -- and this was confirmed by
- 8 the gentleman in the brown shirt. I don't
- 9 remember what your name is, sir. But Professor
- 10 Appel told me that in discussions with the
- 11 gentleman in the brown shirt -- can somebody tell
- 12 me his name?
- 13 CHAIRMAN WOODBRIDGE: Mr. Allen.
- 14 MS. VENETIS: Mr. Allen in the brown
- 15 shirt. My understanding is that, Mr. Allen, you
- 16 confirmed to Professor Appel that the new system
- 17 uses a flash memory; is that correct? That's what
- 18 you said to Professor Appel, and that there is
- 19 control data on the flash memory? That was said
- 20 to Professor Appel earlier in the day. He asked
- 21 you the question and then you followed up and

- 22 checked in on that matter?
- 23 MR. ALLEN: There is flash memory on
- 24 the existing certified system, not the new board.
- 25 The board is not new. That is flash memory on the

- 2 audio system.
- 3 MS. VENETIS: Well, this flash
- 4 memory was not part of the 1987 component, is that
- 5 correct, that was examined and certified?
- 6 MR. ALLEN: The audio system, the
- 7 Advantage with an audio capability has been
- 8 certified in the State of New Jersey and that
- 9 board with that flash memory is part of that
- 10 certified system.
- 11 MS. VENETIS: Well, it's a new
- 12 system that was -- my understanding it was a new
- 13 system that was attached to what was certified in
- 14 1987. The reason I raise this is, again, this is
- 15 new software that was introduced. And in every
- 16 single study that has been done with DREs in
- 17 California and Ohio, they have found that systems
- 18 that use flash memory that have control data on it
- 19 are eminently hackable, that you can hack a system
- 20 through that system. The 1987 version of this DRE
- 21 that was certified by this Committee did not have

- 22 that flash memory. It didn't exist
- 23 technologically, and it was something that was
- 24 introduced. And Sequoia is very cagey in
- 25 answering the question. So this is more

1	indication that the whole system, because there's
2	so many additional components that were not part
3	of the 1987 system that was reviewed by this
4	Committee, that the whole system in and of itself
5	has to be reexamined and that the Committee woul
6	benefit from looking at the Ohio reports and the
7	California reports and looking at those points of
8	vulnerability and checking out this system as a
9	whole on which 10,000 people in the State of New
10	Jersey will be voting.
11	We're all concerned about the
11 12	We're all concerned about the accuracy and integrity of systems, and the
12	accuracy and integrity of systems, and the
12 13	accuracy and integrity of systems, and the Committee, in my opinion, should look at this
12 13 14	accuracy and integrity of systems, and the Committee, in my opinion, should look at this system as a whole because, again, these
12 13 14 15	accuracy and integrity of systems, and the Committee, in my opinion, should look at this system as a whole because, again, these components, this software and this entry into the
12 13 14 15 16	accuracy and integrity of systems, and the Committee, in my opinion, should look at this system as a whole because, again, these components, this software and this entry into the entire system is something that was introduced
12 13 14 15 16 17	accuracy and integrity of systems, and the Committee, in my opinion, should look at this system as a whole because, again, these components, this software and this entry into the entire system is something that was introduced after 1987. And that is unless there's a
12 13 14 15 16 17 18	accuracy and integrity of systems, and the Committee, in my opinion, should look at this system as a whole because, again, these components, this software and this entry into the entire system is something that was introduced after 1987. And that is unless there's a comment made that I need to respond to, those are

- quick
- 21 question. You mentioned controlled data on the

- 22 flash memory. I'm a little confused by what you
- 23 mean controlled data. Do you mean by executing a
- 24 code or do you just mean data?
- 25 MS. VENETIS: Data that can control

1	the machine, that can say, okay, do this, machine.
2	And again, if you look at the Ohio reports and the
3	California reports in every report that's been
4	done that has been sanctioned by another state
5	it's not sanctioned by me or my experts or
6	anything like that, but that has been sanctioned
7	by a state, they have found and Florida as
8	well, that that is a very, very big point of
9	vulnerability. Those reports are available on the
10	web sites of the Secretaries of State of those
11	states that I will be happy to send to the
12	Committee those reports and highlight the specific
13	pages because that is a very, very big point of
14	vulnerability and that is a feature that was
15	introduced into this voting system after 1987. So
16	I believe that given that very, very critical new
17	feature that the integrity of the system has been
18	impaired and its accuracy, efficiency, and
19	capacity has been changed significantly so that
20	the recertification of the entire system is
21	warranted.

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22 CHAIRMAN WOODBRIDGE: A quick

- 23 question I'd ask you, though. We did broach a
- 24 subject related to that, and that was what access
- 25 would an outsider have to the machine. And the

1	response, I believe, was that it would be
2	virtually impossible physically to do that. So I
3	guess the question I have is, if we were to assume
4	the worst case scenario that you could mess it up,
5	how do you get access to it to do that?
6	MS. VENETIS: All you need is the
7	card.
8	CHAIRMAN WOODBRIDGE: But if you
9	can't get access to the port, how do you do that?
10	MS. VENETIS: Well, you know, as I
11	said it's part of my objection earlier.
12	Professor Appel who is a computer security expert,
13	if he were here, he would easily be able to answer
14	any questions that you might have concerning this
15	matter. Unfortunately, because of the lack of
16	notice, he had to be in Philadelphia to deliver a
17	paper at a conference that was scheduled six
18	months, so he could not make other arrangements.
19	CHAIRMAN WOODBRIDGE: That, I
20	understand. But even so, if he can't get access
21	to the port, how can he mess it up?

- 22 MS. VENETIS: Well, I think that
- 23 anyone have access to the card -- if you have
- 24 access to the card and you change the program data
- 25 on the card itself and you put the card into

1	whatever place it is in the county official's
2	office, then you have automatically changed
3	it's really access to the card. Once you have
4	access to the card and change the data on the
5	card, then any well-intentioned poll worker thinks
6	they're putting program data A into the machines
7	may very well inadvertently be putting program
8	data Z into the machine. So that is a very, very
9	important feature and that is a post-1987 feature
10	that needs to be reexamined.
11	CHAIRMAN WOODBRIDGE: Does the
12	vendor have any comments on that?
13	MR. FLEMING: Going back in our
14	records, this machine was revisited in '05.
15	MS. VENETIS: No, not the machine.
16	There was, I believe the ES system.
17	MR. FLEMING: That was in '06. I
18	have Advantage and Edge was before the Committee
19	and at that point it was determined that it did
20	not require recertification.
21	MS. VENETIS: Well, you know, I've

- 22 been in litigation with the State for many years
- 23 on this. I don't have a copy of that document.
- 24 MR. FLEMING: This is a compilation
- 25 of all --

1	MS. VENETIS: I don't have that
2	information.
3	MR. FLEMING: I'm just stating that
4	you were going back to '87. It was brought before
5	the Committee in '05.
6	MS. VENETIS: Well, what was?
7	MR. FLEMING: Advantage and Edge.
8	MS. VENETIS: Pardon?
9	MR. FLEMING: The Advantage and the
10	Edge.
11	MS. VENETIS: Was the Committee made
12	aware that new software was being introduced?
13	MR. FLEMING: It was based on
14	software update.
15	MS. VENETIS: A software update?
16	Was there an explanation of this new component
17	using the flash memory device and the control data
18	on the flash memory device?
19	MR. FLEMING: My mind doesn't
20	remember that far back. We can pull that report
21	and see. But the idea of at that point is when

- they would have gone through the whole demo of
- 23 showing you that the product work, so the
- 24 Committee did see this machine later than '87.
- 25 MS. VENETIS: Okay. Well, the

- 2 Because it seems like Sequoia has been working on
- 3 this feature of adding the printer post-2005. So
- 4 the question is --
- 5 MR. FLEMING: I believe that the
- 6 audio kits had to be on there before '05.
- 7 MS. VENETIS: Well, I don't know.
- 8 I'm raising these issues for the Committee.
- 9 Perhaps members of the Committee can go back in
- 10 their records and ask of Sequoia -- they're not
- 11 really speaking up to let you know when this flash
- 12 memory device was introduced. And that, again, as
- 13 I said, is really the vulnerable -- a very, very
- 14 vulnerable feature that has been highlighted by the
- 15 other states.
- 16 MR. FLEMING: But the way you state
- 17 it's vulnerable, and the same statement I made
- 18 since I've been on the Committee is the security
- 19 of anything -- I don't care if it's a piece of
- 20 paper or a machine or going back to a lever
- 21 machine -- if you lose physical security of that

- 22 product, whatever it is, you've lost the battle.
- 23 That's what the counties are responsible for, is
- 24 to make sure that the machines are physically
- 25 secured so that nobody can get in there. I'm

1	assuming that flash memory is not something that's
2	out on everybody desks in the county so it can
3	grabbed and then thrown on desk to be picked up
4	again.
5	MS. VENETIS: Well, again, I
6	respectfully request the Committee members look at
7	the reports that have been written by members
8	of released by the states of Ohio and
9	California.
10	MR. FLEMING: I truly understand
11	that.
12	MS. VENETIS: And then you can talk
13	about it. Again, I am not a computer expert. And
14	my experts would have been here had they been able
15	to rearrange their schedules on such short notice,
16	but those vulnerabilities are discussed. And
17	again, I'm not saying that poll workers or county
18	officials are careless, but there are ways the
19	reason that Title 19 is this thick with talking
20	about where you can stand what you say is because
21	for as long as there's been voting, there's been

- 22 vote tampering. And if this is a way to tamper
- 23 with the system, then the Committee should know
- 24 about it and should also know when it was
- 25 introduced and should test for vulnerabilities of

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2 CHAIRMAN WOODBRIDGE: I think we may

3 already have done that. We've actually looked at

- 4 seven -- at least seven Sequoia systems since
- 5 2001. And this was the upgrade software we did
- 6 look at -- and I can't remember what date it was,
- 7 but this sounds about right -- to this system.
- 8 Flash memory, everybody's using that to replace
- 9 whatever they had before because that's cheaper
- 10 and faster and it doesn't require any backup. So
- 11 I'm not sure whether flash memory in itself is
- 12 especially --
- 13 MS. VENETIS: No, not the flash
- 14 memory, it's the data -- the thing is that the
- 15 problem that Wyle has pointed out is that there is
- 16 data, information data control on the flash memory
- 17 card. It's not the flash memory card itself
- 18 that's problematic; it's the fact that there is
- 19 data control flash memory card.
- 20 CHAIRMAN WOODBRIDGE: What would be
- 21 useful for me is if you could send to the

- 22 Committee that portion of the Ohio reports and the
- 23 other reports. I'd like to take a look at it.
- 24 MS. VENETIS: Absolutely.
- 25 Then there's another question. And

1	this is for Sequoia. Does Smartmatic still own
2	the source code of Sequoia? Because that's an
3	open question and it is very, very important to
4	know who is in charge of the source card and
5	whether it's Smartmatic still owns it.
6	There's a conference that was
7	recently held where there was someone from Sequoia
8	very high up in the corporate ladder who said that
9	it was Smartmatic who actually owns the source
10	code for these machines, not Sequoia. So that
11	goes to the source code question.
12	CHAIRMAN WOODBRIDGE: When you talk
13	about own, do you talk about own in the legal
14	sense or owned as in physical possession?
15	MS. VENETIS: In the legal sense.
16	Whose intellectual property is it?
17	MR. CHAGARIS: If I may, Mr.
18	Chairman. First of all, I don't know if Mrs.
19	Venetis was present at the time that I made the
20	statement. And I'll repeat it for her benefit.
21	The source code is being held in escrow for the

- 22 benefit of the State by Iron Mountain, so that's
- 23 not an issue. It's not the Protective Order.
- 24 That question was modified by that statement, that
- 25 the source code is in escrow by Iron Mountain for

- 1 the benefit of State of New Jersey.
- 2 Also, Smartmatic is not involved in
- 3 the ownership of Sequoia and that the ownership of
- 4 the IP intellectual property and the source codes
- 5 and the firmware and software is all in the name
- 6 of Sequoia Voting Systems, Inc.
- 7 CHAIRMAN WOODBRIDGE: You did raise
- 8 a question early on about notice. And I'm going
- 9 to ask the Secretary of State --
- 10 SECRETARY WELLS: Our Director is
- 11 going to respond to that. Thank you.
- 12 MR. GILES: We got everyone
- 13 scheduled together. We received the Wyle report,
- 14 contacted the members, and as soon as we were able
- 15 to confirm everyone's scheduled, we posted it on
- 16 our web site May 15th last Thursday. And in
- 17 addition on this past Monday, we sent notice to
- 18 the Star Ledger and the Trenton Times.
- 19 MS. VENETIS: Were they published,
- 20 though? You sent notice, does that mean that
- 21 these were these published in the Trenton Times

- 22 and the Star Ledger?
- 23 MS. HARRIS: And if so, when were
- 24 they published?
- 25 MR. GILES: We were told they were

2	did we posted it on our web site last Thursday.
3	MS. VENETIS: Well, did you pay for
4	an ad to publish it? I mean, that's how normally

1 published. I did not physically see those, but we

5 you do it. If you want to give notice, you pay

- 6 for an ad in the papers.
- 7 MR. GILES: Yes.

8 CHAIRMAN WOODBRIDGE: It might be

- 9 useful to get a copy of that in the record, just
- 10 for the safety of it.
- 11 Irene.

12 MS. GOLDMAN: Thank you very much.

13 And thank you all for your time. And I'm glad to

14 see the Secretary here today in person, and Kay.

15 And congratulations to Mr. Giles on your new

- 16 battle.
- 17 SECRETARY WELLS: Collaboration.
- 18 MS. GOLDMAN: Collaboration.
- 19 And I look to you, Madam Secretary,
- 20 exactly for that reason. You know, historically
- 21 we have had a great deal of difficulty with the

- 22 Attorney General's Office. And Ms. Kelly would,
- 23 I'm sure, agree that we've had some four years of
- 24 litigation here. So we have a concern. The
- 25 public has tried everything in its power to speak

1	to the Attorney General, to speak to the Governor,
2	to speak to the Legislature to resolve what could
3	have been resolved years ago. And with the
4	Secretary of State just taking this on fairly
5	recently we hope that after that first meeting
6	reflecting an openness that that will continue and
7	that we will get a resolution to this problem
8	quickly. But right now we are in court against
9	the State.
10	You are really, at this point, in
11	charge of what's going to happen with these
12	machines. You protect the public. We are the
13	public. And the fact that the vote has been
14	privatized in the State of New Jersey for all
15	these many decades is outrageous. How it
16	happened, I don't know. It is the case.
17	We should own in the State of New
18	Jersey our own source code. It should be open.
19	It should be free. The State of New Jersey should
20	be able to look at it not in case of something
21	that they think may have happened and go to an

- 22 escrow, but to be able to own that code open,
- 23 free, and clear. You can make that happen.
- I have a fairly -- a two-page
- 25 statement. I'm not going to read the whole thing.

1	I do want to say about public notice, it is not a
2	secret that the Coalition of Peace Action, that
3	Stephanie Harris, that Irene Goldman, that Penny
4	Venetis are interested in what happens. I am
5	deeply disappointed, deeply disappointed that no
6	communication came to us directly. We saw Mr.
7	Giles and Ms. Kelly on Friday in court. It wasn't
8	maybe the place for them to have mentioned it.
9	Maybe they didn't feel like it or it wasn't on
10	their minds, but it was an opportunity where if
11	things were different you might have at that
12	moment said, you know, we're going to have the
13	certification hearing. Check back with me. I
14	would have been delighted to call the office or
15	wherever you said and say, okay, if you have date,
16	what is the date? And I would have been relaxed
17	and informed my attorney and other citizens who
18	have grave concerns from all over the State. It's
19	not just us. We happen to be locally based and we
20	can show up. And what we're not doing today, we
21	should be doing. Just as what you we're all

- 22 very busy.
- 23 And so there's a real disconnection
- 24 when the citizens cannot have enough notice to
- 25 come to speak. Even if it's hard for you all to

1	hear our complaints and our nervous reaction,
2	we're very serious. We tell the truth. We do not
3	put out any false statements. We seek the truth,
4	and we expect that from our State officials. In
5	some cases, we're very pleased; and in some cases,
6	we're very disappointed.
7	Sequoia is a private vendor. They
8	have 19 counties. One of the counties is Edge, 18
9	are Advantage. It is in their interest to make
10	good business decisions for them. I have no
11	argument with the way that they conduct the
12	hearing or that the way that they respond. It's
13	our responsibility as the public to question them
14	and to ask them pointed questions.
15	We believe we are asking you very
16	serious questions. We believe that the changes
17	made to that DRE were made and were not tested and
18	not certified. That's what we believe. And it is
19	for our Commission members, our Committee members
20	to note that and to I'm not sure I I really
21	am interested in what information you have, Mr.

- 22 Fleming, and that was very nice of you to make us
- 23 aware of that for the first time four years to
- 24 know that. That's good. Maybe it's not
- 25 exactly -- what was tested is not exactly what

1 we're talking about. So we do need to find that

2 out.

3	I will hand you this document so
4	that you have it for yourselves. I am upset, and
5	you know that. And we ask questions and we want
6	to be intelligent and friendly. With all respect,
7	we should not be here to discuss the kinds of
8	matters that are raised here today, feeling that
9	the State in some way has been in concert through
10	the Attorney General's Office has been in concert
11	with Sequoia to the extent that the public has
12	been disadvantaged. So that's my statement.
13	Thank you.
14	CHAIRMAN WOODBRIDGE: Thank you. A
15	very good statement, too.
16	The two-page comments you gave to
17	us, I think, will be included in the report. I
18	think over the years one the purposes of this
19	Committee, which has no stake of the outcome
20	whatsoever, is to try to be an honest and open in
21	this whole effort and to try to make sure that the

- 22 right things are done.
- 23 This is an unusual time for this
- 24 Committee. I've been on it and off it for
- 25 probably too long. But the interesting squeeze on

1	the other end is that there's a big push by the
2	legislature to put VVPATs on voting machines by
3	January. So it creates again, we are not
4	officially pressured by this and probably do
5	whatever our pleasure is. On the other side of
6	the coin is there is a lot of concern about
7	whether the voting machines that we use have
8	integrity, whether there's a verified trail. And
9	as a friend of mine put more eloquently than I
10	can, where does the bald man stop washing his
11	forehead? With all due respect to whoever may fit
12	in that category.
13	MS. GOLDMAN: Mr. Chairman, I thank
14	you for that comment. You are the last arbiters
15	here.
16	The Legislature under great duress
17	and pressure from the State of New Jersey's
18	Attorney General's Office was convinced to give,
19	with great promises, an extension when the
20	legislation was first being considered. In July
21	of 2005, with pressure from the then powers in the

- 22 Attorney General's Office, the drop dead date was
- 23 not 2006; they insisted January 1, 2008, because
- 24 of then for sure and for certain they would be
- 25 able to provide the State of New Jersey not

1	printers; it's not about the touch screen
2	machines, it's about a voter-verified paper
3	ballot. It could be a piece of paper and a
4	pencil, it could be optical scan technology, it
5	could be a touch screen machine with a printer
6	added on. It's agnostic. They refused and
7	dragged their feet until they were even the
8	Court was too slow in all of this and did not
9	respond to the Court's demands and urged the
10	Legislature to pass legislation which the
11	Legislature didn't really want to but did. And
12	passed it to extend it to June of 2008. Oh,
13	please just do it until 2008.
14	Then they pressed the Legislature to
15	say, oh, no, we really want it until January 1,
16	2009. When will that end? Who is depending the
17	public here? When they close the doors to other
18	technology, they make it an unfriendly state for
19	optical scan or whatever technology that may exist
20	that I don't even know about, you don't know
21	about. There may be things out there that have

- 22 been made, companies, inventors -- the State of
- 23 New Jersey could itself design a machine with open
- 24 source code and could have done that and certified
- 25 it itself and been, you know, a star in that way.

1 Maybe the Secretary will do that. Who knows	1	Mavbe the	Secretary	will do that.	Who knows
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- 2 Maybe she has a machine in mind. We never know.
- 3 We have scientists.
- 4 CHAIRMAN WOODBRIDGE: I think you
- 5 put it very well.
- 6 MS. GOLDMAN: So that's the point.
- 7 CHAIRMAN WOODBRIDGE: And we're sort
- 8 of right stuck in the middle of all this, too. On
- 9 the one side of the coin, we have technology
- 10 that's fairly new that's continuing to evolve.
- 11 And on the other side of the coin, the State has a
- 12 drop dead date, and being between now and then,
- 13 even if everything is approved, there's got to be
- 14 purchasing, put together specs, money spent,
- 15 things built, you know.
- 16 MS. GOLDMAN: That's their problem.
- 17 CHAIRMAN WOODBRIDGE: Well, it may
- 18 be their problem, but we're also right in the
- 19 middle of it.
- 20 Again, we officially don't respond
- 21 to that. Our only interest is to continue to be

- 22 very picky and careful about what we do, as best
- 23 we can. Sometimes, frankly, the statutes, the old
- 24 statutes aren't particularly helpful. That's been
- 25 one of our problems. So we have to pray a lot in

- 1 this business.
- 2 MS. GOLDMAN: Be strong.
- 3 CHAIRMAN WOODBRIDGE: So I think we
- 4 have pretty much wrapped up the input part.
- 5 Again, please, if you have comments, documents,
- 6 papers, anything you think that's relevant, please
- 7 provide it to Secretary of State Office before a
- 8 week from tomorrow at 5:00. And we will
- 9 definitely go through all that material.
- 10 And I would say it is always a
- 11 pressure to be here. I welcome the Secretary of
- 12 State back into the process.
- 13 SECRETARY WELLS: Thank you.
- 14 (Applause.)
- 15 CHAIRMAN WOODBRIDGE: With the
- 16 assistant with the Attorney General's Office.
- 17 (Applause.)
- 18 CHAIRMAN WOODBRIDGE: And appreciate
- 19 what the vendors have done and how they responded
- 20 to difficult questions. We are looking forward to
- 21 those two particular additions of material.

- 22 It will probably take us -- my guess
- 23 is at least a week after the final date to come up
- 24 with some kind of report. And keep in mind, the
- 25 report is a recommendation. We do not certify

1 anything.

2	MS. GOLDMAN: I'm sorry. You did
3	instruct Sequoia to also copy us with whatever
4	they're providing, new material for you to
5	consider. The public wants to know what that
6	material is.
7	CHAIRMAN WOODBRIDGE: I haven't
8	instructed them yet. All of that material will go
9	to the Secretary of State's Office. It's really
10	up to the vendor as to whether or not they want to
11	interface with individuals, I assume.
12	MS. GOLDMAN: Well, through you
13	CHAIRMAN WOODBRIDGE: Can you
14	provide to the individuals here?
15	MR. CHAGARIS: I have to consult
16	with my client what the mechanics will be. We'll
17	look into it. We'll make a good faith effort to
18	look into it.
19	MS. GOLDMAN: We'll be in touch with
20	the Secretary of State's Office. That's easier.
21	CHAIRMAN WOODBRIDGE: You will

- 22 obviously provide them with your e-mail address
- 23 and whatever else.
- 24 MS. GOLDMAN: Sure.
- 25 CHAIRMAN WOODBRIDGE: It's important

- 1 that you guys get the information, too.
- 2 MS. GOLDMAN: Thank you.
- 3 MR. GILES: Just for the record, we
- 4 were able to supply them with a copy of Wyle
- 5 report today before they left.
- 6 CHAIRMAN WOODBRIDGE: Thank you very
- 7 much.
- 8 Are there any further comments?
- 9 If not, I'm going to thank you all
- 10 for attending, and we look forward to your further
- 11 comments. Thank you.
- 12 (Meeting adjourned at 1:02 p.m.)
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CERTIFICATE I, Lisa C. Bradley, a Certified Court Reporter and Notary Public of the State of New Jersey, do hereby certify that the foregoing is a true and accurate transcript of the testimony as taken stenographically by and before me at the time, place and on the date hereinbefore set forth, to the best of my ability. LISA C. BRADLEY, CCR, RPR CCR NO. 30XI00228700 DATE: May 23, 2008