

**United States Election Assistance Commission
Public Meeting**

Hyatt Regency Grand Cypress
1 Grand Cypress Boulevard
Orlando, Florida 32836

VERBATIM TRANSCRIPT

The following is the verbatim transcript of the Public Meeting of the United States Election Assistance Commission ("EAC") held on Wednesday, August 18, 2010. The meeting convened at 1:00 p.m., EDT. The meeting was adjourned at 2:47 p.m., EDT.

PUBLIC MEETING

CHAIR DAVIDSON:

Good morning everybody, or afternoon I guess it is. We usually start in the morning. It's great to see everybody here. I'd like to remind you to turn your cell phones on silent or turn them off, one or the other, if you would please for us. And then, if everybody would stand with me, we'll do the Pledge of Allegiance.

[Chair Donetta Davidson led all present in the recitation of the Pledge of Allegiance.]

CHAIR DAVIDSON:

Tamar is our Assistant General Counsel -- or Associate, I should say, General Counsel. Would you please give the roll call for us?

MS. NEDZAR:

Certainly, Commissioners please respond when I call your name.
Chair Donetta Davidson?

CHAIR DAVIDSON:

Present.

MS. NEDZAR:

Commissioner Gracia Hillman?

COMMISSIONER HILLMAN:

Here.

MS. NEDZAR:

Commissioner Gineen Bresso?

COMMISSIONER BRESSO:

Present.

MS. NEDZAR:

Madam Chair, a quorum is present.

CHAIR DAVIDSON:

Thank you. I'd like to turn to the minutes and ask if the Commissioners have reviewed the minutes, and is there a motion to approve them?

COMMISSIONER BRESSO:

I move to approve them.

CHAIR DAVIDSON:

A second?

COMMISSIONER HILLMAN:

Second.

CHAIR DAVIDSON:

All those in favor please say aye.

[The motion carried unanimously.]

CHAIR DAVIDSON:

The minutes have been passed, so we'll move directly on to the agenda. So, is there any comments on the agenda that we have in front of us today? If not, is there a motion to approve the agenda?

COMMISSIONER HILLMAN:

Move adoption.

CHAIR DAVIDSON:

Second?

COMMISSIONER BRESSO:

Second.

CHAIR DAVIDSON:

All in favor please say aye.

[The motion carried unanimously.]

CHAIR DAVIDSON:

Okay, well I'd like to say that it's really kind of nice I think to be in Florida right now, because it's raining very hard in D.C. I understand there's even possible flooding, so maybe being in the 90s here is not near as bad as being back home. So, it's nice to be here, and we appreciate everybody that is here today with us.

I'd like to remind all the election officials, if they would go onto our website, we have a lot of new information and you'll be really surprised because it's even -- we've redone the website and you can go to our library, which is really very helpful to us and gives us a resource, and rate the material, leave your comments. We need your feedback. It's a new website that we have just brought up, so we'd really like to have all of your feedback on it, whether you like it, whether it's right. But you can always give your feedback and definitely we'll use that.

The other thing I would like to say is that a few weeks ago EAC hosted an accessibility roundtable for discussion about our future revisions to the VVSG, which is the Voluntary Voting System Guidelines. And this was really one of the most productive meetings that we've held in a long time. I do want to thank the staff, and I appreciate it. I know, as one of the Commissioners, that information that we receive at those meetings is very important as

we're making policy decisions. And I'm very grateful to have that input.

Also EAC, NIST, and FVAP had a meeting on -- a workshop really on UOCAVA. I will say there was a lot of different opinions, a lot of healthy discussion that went on at that meeting also. And I -- the staff, again, they all worked very hard and some of them facilitated discussions that were very enlightening.

Just a few other notable things, I just recently traveled to Australia and Switzerland and attended an E-voting conference. And all the notes on that trip are up on our website so you can follow -- we tried to do notes from the road, and so you can follow exactly what we've tried to learn. And it was a real education to be able to do that I will say in many, many ways. We did learn a lot, so I'm looking forward to giving -- making sure that the Commissioners are updated and have a presentation on that trip. So it will be very useful.

And one last thing, some of you have asked about the status of our logic and accuracy grant that is out. We're getting ready to put it out. We're going to try to fast track that and get it out right away, because I know that lots of the locals and -- or really the States are very interested in it, and so we'll try to get that out right away.

We've got a full agenda ahead, but I want to turn to the Commissioners to see if they have any items they would like to bring up this morning.

Commissioner Hillman?

COMMISSIONER HILLMAN:

Thank you, I do. I just want to acknowledge, today, 90 years of women having the right to vote, and with a little editorial amendment that it took almost 50 years after that for African-American women to have the right to vote, but, nonetheless, the first effort did include all women. Unfortunately, that wasn't recognized by all States, but I'm pleased to acknowledge this momentous occasion, 90 years.

And then, we can move back to the minutes later, but I neglected to see that the minutes of the hearing were behind here, and I'm not so sure if we have to adopt the minutes of the hearing, it's a separate, or if we believe that in adopting the minutes we were adopting both the minutes of the meeting and the public hearing.

CHAIR DAVIDSON:

I would just ask the lady next to you, Ms. Nedzar, what -- do we have to go back and adopt the public meeting portion of it?

MS. NEDZAR:

I'm just looking at the -- we do.

CHAIR DAVIDSON:

We did adjourn the public meeting...

MS. NEDZAR:

Yes because...

CHAIR DAVIDSON:

...and we always do that. So I would think we would have to.

MS. NEDZAR:

The agenda says for old business approval of the minutes from the meeting.

CHAIR DAVIDSON:

Okay.

MS. NEDZAR:

So we do need to go back and adopt the minutes from the hearing.

COMMISSIONER HILLMAN:

Okay, if we can do that a little later so I can just have a few minutes to look at it before we get to it...

CHAIR DAVIDSON:

Sure.

COMMISSIONER HILLMAN:

...I'd appreciate that.

CHAIR DAVIDSON:

All right.

COMMISSIONER HILLMAN:

Thank you.

CHAIR DAVIDSON:

And if you want more time, we could always do that next meeting.

COMMISSIONER HILLMAN:

No, I think by the end of this meeting I'll be fine.

CHAIR DAVIDSON:

Okay, very good. Okay, Ms. Bresso?

COMMISSIONER BRESSO:

Good afternoon everyone. First, I'd like to just remind everybody that the Standards Board did have their first virtual meeting on July 27th and it was the first time the EAC had conducted a virtual meeting in this format for one of their statutory Boards, and it was very successful. And certainly, we had saved a significant amount

of federal dollars having it in this format. And I just want to thank all the members that participated and the public that had viewed it.

And I'd also like to join Commissioner Hillman and Commissioner Davidson in acknowledging the 90th anniversary for women's right to vote. And in fact, I had received a pin from a dear friend from the Newport Mansions, where they actually had discussions about that, during that time. So, I am going to wear this pin during the rest of the meeting in acknowledgement of women's right to vote.

And I will turn it over to Commissioner Davidson.

CHAIR DAVIDSON:

Thank you. Okay, Mr. Wilkey I think we're ready for our monthly executive report.

MR. WILKEY:

Thank you, Madam Chair. All three of the Commissioners have already mentioned, and stole my thunder, as I was also going to mention, in opening, the 90th anniversary of the passage of the 19th Amendment. But now, I can just say, as a New Yorker, I'm doubly pleased that the heart of the effort to get that done by a courageous group of women happened in the great State of New York. So, I think we've come a long way. If you look at the makeup of this Commission, we certainly have come a long way in 90 years, together with all of the women who have served in town, local, county, State and federal offices. And today, we're very proud of that.

Thank you everyone for being here today. Under testing and certification, our Testing and Certification Division recently held two

meetings about voting technology. The first was a roundtable discussion on accessibility and the voluntary voting system guidelines. The second was a meeting on remote electronic absentee voting systems that EAC participated in, with the Federal Voting Assistance Program and the National Institute of Standards and Technology. We received valuable input from a variety of stakeholders during these meetings, which will inform our continued work in these areas. Information about the meetings, including speaker presentations and testimony, is available on our website, eac.gov.

As we continue to focus on testing and certifying additional voting systems, we are also monitoring EAC's certified systems being used by election officials. As part of this effort, we've issued a System Advisory for the federally-certified ES&S Unity 3.3.2.0 system. We're investigating the root cause of the issue and will follow up with additional notice as more information is gathered and the problem is resolved. Part of the investigation has included site visits to Cuyahoga County Ohio to observe the logic and accuracy testing of the certified system, and we're very grateful to the local officials for inviting us there.

We have also redesigned a section of our site -- on our website dedicated to EAC's Voting System Testing and Certification Program. You can now view, on a single page, all systems that are under testing, along with their test plans and reports. This page is only two clicks away from our homepage.

We recently posted test plans and reports for modifications to two EAC certified systems: Microvote EMS 4.0B, and the Unity 3.2.0.0 Revision 1.

Under research and policy, during the last month we discussed the process for updating the National Voter Registration Act regulations. We're moving forward on this work and are seeking public comment on proposed changes to the regulations. The comment period ends November 23, 2010. We encourage everyone with an interest in this topic to comment. Information about the proposed changes is available on our website along with instructions on how to submit a comment. As a reminder, no changes to the rules will take effect before the November election.

Under requirements payments, since our last public meeting EAC has issued nearly 10 million in requirements payments. Illinois has received 4.2 million in 2009 funds and 2.9 million in 2010 funds. North Carolina has received 1.95 million in 2010 funds and Mississippi has received 671,000 in 2010 funds. This brings the total amount of disbursed payments to 81.2 million for 2008, 57.5 million for 2009 and 16.3 million for 2010. We also have funds pending for Indiana and Puerto Rico. And California has submitted their State Plan to the *Federal Register*, so we expect to disburse their funds in the near term.

Under grants, we've completed the peer reviews of the Military Heroes Initiative grant applications and are now conducting the staff review. Our grantees for this year's mock election and college poll worker grants have received their funds and are moving forward in their recruitment and education activities in preparation

for the 2010 election. And all of the grantees are all up on our website for people to look at.

Under Election Management Guidelines, we've just completed three new chapters in our population Election Management Guideline series. These topics include: Technology in Elections, Election Office Administration and Accessibility. The Guidelines will be posted on our site shortly, and we'll send out an email update when they are available. As a reminder, you can view and order copies of all of our Election Management materials online at eac.gov.

Under tally votes, the Commission held three tally votes since our last meeting: The Notice of Proposed Rulemaking for NVRA regulations, three new Election Management Guideline chapters, which I mentioned earlier, and closing the August 25, 2010 meeting to discuss the appointment of a General Counsel

Other news, last month we announced the officers selected to serve on our Advisory Boards over the next year. For the Board of Advisors, Jim Dickson is Chair, Keith Cunningham is Vice-Chair, and Linda Lamone is Secretary. For the Standards Board, Jim Silrum is Chair, Brad King is Vice-Chair, and Leslye Winslow is Secretary. We're grateful to have these distinguished public servants leading our Boards, and look forward to working with them in the coming year. And, as a reminder, if you're interested in keeping up with EAC's news, please sign up for our automatic email alerts from our website. It's a great way to stay on top of our activities, and we're very pleased that over 100 people have already signed up.

Lastly, EAC has also issued several policies that govern our internal operations, such as our Information Quality Guidelines and Privacy Statement. Tamar Nedzar, EAC's Associate General Counsel, will give us a brief update on these activities.

Ms. Nedzar?

MS. NEDZAR:

Thank you, Mr. Wilkey. Good afternoon, Chair Davidson, Commissioner Hillman, Commissioner Bresso.

Chair Davidson and Mr. Wilkey invited me to talk about several new policies the Commission has recently adopted and provide an update on two previously existing policies we're currently in the process of amending.

Over the past year, EAC has made a concerted effort to identify, draft and adopt several policies we did not yet have in place. In most cases, EAC was already compliant with the substantive elements of these policies, but the Commission had not yet documented its compliance or provided notice to the public in a succinct format.

The Commission has also reviewed some existing policies and proposed amendments to ensure that EAC's policies accurately reflect the environment in which the agency is sometimes required to act. I'll talk to you about the new policies the Commission has adopted, and then, I'll provide you with an update on the two policies we're currently in the process of amending.

There are three new policies EAC has adopted this year. First, the Information Quality Guidelines. Pursuant to Section 515 of the Treasury and General Government Appropriations Act for

fiscal year 2001, the Office of Management and Budget issued guidelines governing the sharing of and access to information disseminated by federal agencies. These guidelines require federal agencies to, among other things, establish pre-dissemination review guidelines and procedures for requesting corrections to EAC data. President Obama's recent Open Government Initiative reiterated the need for agencies to make Information Quality Guidelines available to the public. By tally vote, on July 2nd, 2010, the Commission adopted its Information Quality Guidelines to provide notice of the steps EAC takes to maximize the quality, objectivity, utility, and integrity of the information it provides to the public and to provide a mechanism for members of the public to request corrections to EAC data. Prior to adoption of the guidelines, EAC was already performing pre-dissemination quality control activities. The guidelines served to document those activities and may provide a formal mechanism for correcting -- requesting correction to EAC data. The Commission adopted these guidelines after soliciting comments from the public.

The second new policy is our Privacy Policy Statement. Pursuant to the Office of Management and Budget Memorandum 99-18, federal agencies must post their privacy policies and procedures related to the use of agency websites. The policies agencies post pursuant to the memorandum document and supplement compliance with government wide statutes, regulations and requirements such as the Government -- the Privacy Act and the Federal Information Security Management Act, or FISMA. By tally vote on July 13th, 2010, the Commission adopted its Privacy

Policy Statement to provide notice to the public of how and when EAC collects information related to an individual's use of our website. The statement documents EAC's policies and practices related to accessibility, privacy, security, and the agency's use of items, such as Cookies. EAC finalized its Privacy Policy Statement after reviewing applicable statutes and regulation, and after soliciting comments from the public.

The third new policy is a Guide to the Election Administration and Voting Survey. By tally vote on May 11th, 2010, the Commission adopted this guide to summarize in one document information concerning the processes and procedures associated with a State's submission, review and correction of survey data. EAC had previously provided the vast majority of this data to survey respondents and adopted this guide to provide all the information in one succinct document. The document further provides information concerning the Commission's treatment of data submitted after reporting deadlines. The Commission finalized the Guide to Election Administration and Voting Survey after soliciting comments from the public.

There are two existing policies that EAC is also in the process of amending. EAC's Voting by Circulation Policy, also called the Tally Vote Policy, was one of the first adopted by the Commission on May 17, 2004. Under the Government in the Sunshine Act, when a deliberative body, such as EAC, holds meetings it must, subject to several exceptions, do so in an open forum. The Sunshine Act, however, does not preclude deliberative bodies from making decisions other than at public meetings. EAC's

policy providing for notational voting was adopted -- sorry -- the amendment to the document titled "Procedures for Voting by Circulation" was posted on April 30, 2010, for comment. The draft amended policy was intended to provide the Commission with some flexibility to make decisions in truncated timelines due to unforeseen emergency situations. We thank those of you who submitted comments, and we'll continue to work with the Commissioners to incorporate those comments and adopt a final policy.

And the last policy I'll discuss is an existing policy, the Notice and Public Comment Policy. The Commission first adopted this policy on September 18, 2008, at a public meeting. The purpose of the policy is to provide an opportunity for the public to comment on policies of general applicability that affect outside parties, even when comment is not otherwise required by law. That is where EAC does not otherwise have a legal requirement to post proposed policies for public comment, the Public Notice and Comment Policy requires the agency to do so. We posted the amended version on April 29, 2010, for comment. The draft amended policy, as with the previous amended policy, was intended to provide the Commission with flexibility to make decisions in emergency timeframes. We, again, thank those of you who provided comments, and we will continue to work with the Commissioners to update and adopt an amended policy.

At Mr. Wilkey's direction, my division stands ready to continue to assist the Commission as it adopts new policies and

updates existing policies. I'd be happy to answer any questions you may have.

CHAIR DAVIDSON:

Thank you. Do the Commissioners have questions for either Mr. Wilkey or Ms. Nedzar? Commissioner Hillman?

COMMISSIONER HILLMAN:

I do. For Tamar Nedzar, if you could please comment what you mean when you say in the opening of your remarks that "EAC's policies accurately reflect the environment in which the agency is sometimes required to act." What you mean by the "environment."

MS. NEDZAR:

Certainly. That was in discussion of the policies that we're in the process of amending. There have been times when either an EAC policy or an administration directive comes out that requires the agency to act in a certain timeframe. And because of the timeframes that were existing in the tally vote policy, the Voting by Circulation policy and the Notice and Public Comment policy, there could have been a situation, there hadn't been yet, where the Commission may have been required to act outside of those timeframes. And so the policies have -- the proposed amendments have been made to assist the Commission in meeting those timelines.

COMMISSIONER HILLMAN:

Okay. And for the policies adopted in the past year, do you have any information to share about whether or not EAC received comments from the public on any of those?

MS. NEDZAR:

Those three were the Information Quality Guidelines, the Privacy Policy Statement, and the Guide to Election Administration and Voting Survey. I will double check, but I believe that we did not receive comments during the comment periods for those three items.

COMMISSIONER HILLMAN:

Okay, thank you.

CHAIR DAVIDSON:

Any questions?

COMMISSIONER BRESSO:

No, I'm fine.

CHAIR DAVIDSON:

You're fine? And I am fine. Thank you very much, both of you, for your reports. I appreciate it.

Next, if we can look around the room and see, Shelly can you join us at the table? We're ready. I'll start and -- Dr. Anderson is here to give us an update on the 2010 Election Administration and Voting Survey. This survey is really the most comprehensive of its kind. And it has data that really is about how, not who, but how people vote, different places they vote and when they vote, whether they're voting absentee or they're voting Election Day or how they really are voting. So, it provides information and this information comes directly from the States, so, it's very valuable. It's not anybody else collecting it. The counties send it to the States and then the States report it to us. So, it's a great interest to election officials and to the public, as well. So, we look forward to your update, thank you.

DR. ANDERSON:

Thank you very much. Can you hear me?

CHAIR DAVIDSON:

I think so.

DR. ANDERSON:

Okay, all right. Good afternoon Commissioners, Mr. Wilkey, Ms. Nedzar.

I come before you today to provide a brief update on the 2010 Election Administration and Voting Survey. This year's contractor for the survey is ICF International. As you may recall, ICF came onboard in June with Dr. Chris Spera serving as project manager.

EAC made initial contact with State election officials in June. A letter from Chair Davidson was emailed to State election officials introducing ICF and Dr. Spera.

Since that time, ICF has communicated with all State points of contact, verifying those individuals who will receive information related to the survey. We are happy to report that all State points of contact have been confirmed.

As you know, the Election Administration and Voting Survey project consists of two parts; the Statutory Overview, and the quantitative section. On August 3rd ICF sent the Statutory Overview templates to the States requesting that information be returned by September 30th. States received prefilled templates with their 2008 text-based responses and were asked to make any changes where necessary. As of last Friday, two States have returned their

Statutory Overview submissions. So, I think we are off to a pretty good start there.

Once the Statutory Overview was released, technical assistance to the States began. Although we are not anticipating any problems with the Statutory Overview section, ICF technical assistance specialists have reached out to all State points of contact to let them know that they are available to help in any way necessary. Once these statutory information -- Statutory Overview information is submitted September 30th, that information will be analyzed and a report produced. And we anticipate a final draft of that Statutory Overview report being ready December of this year.

ICF is currently working on the Excel-based survey data template as well as the accompanying instruction manual, both of which will be distributed to States early next month.

A project website is also being developed for State points of contact to access any information they may need about the survey, as well as to upload their survey data submissions. The project website should be operational later this month or early next month.

In terms of future deadlines, the due date for the States' survey data is February 1, 2011. The data will then be verified with State officials before being analyzed in preparation for writing the first of three reports.

The NVRA report will be released June 30th, 2011, followed by the UOCAVA, and more comprehensive Election Administration and Voting Survey report in the fall.

Madam Chair, that's my update and I'm happy to take any questions.

CHAIR DAVIDSON:

All right, questions for Dr. Anderson. And just for everybody to know, she is our Deputy Research Director in our office, so Shelly, we do appreciate your hard work.

Commissioner Hillman, do you have any questions?

COMMISSIONER HILLMAN:

My question is more general than specific to the survey itself, and that is, with the turnover in election administrators, whether at the State level, whether or not -- and sometimes the turnover does impact lower management employees. Does EAC have any kind of a special outreach to provide technical assistance to States that may have people who would be doing this survey for the first time?

DR. ANDERSON:

EAC, other than our initial contact that we made in June, has not necessarily reached out specifically to the States. But ICF has the intensive technical assistance component, and so their technical assistance specialists have reached out to each of these State points of contact.

COMMISSIONER HILLMAN:

Um-hum.

DR. ANDERSON:

And they all -- each State has a designated point of contact within ICF to answer any questions. And ICF is not necessarily waiting for the States to come to them with questions. They are being proactive and going to the States to inquire about any assistance that might be necessary. And this will be ongoing.

COMMISSIONER HILLMAN:

Okay, all right, thank you.

CHAIR DAVIDSON:

Okay, any questions Commissioner Bresso?

COMMISSIONER BRESSO:

Yes, Dr. Anderson, could you just refresh my memory? I believe ICF, we worked with them before, on a contract. Is that true? They were contracted for one of our studies?

DR. ANDERSON:

ICF was involved in the educational product evaluation...

COMMISSIONER BRESSO:

Okay.

DR. ANDERSON:

...that we did last year.

COMMISSIONER BRESSO:

Okay. And one other question that I have is, you state that the Statutory Overview templates, that you're asking States that they return them to ICF by September 30th. Have any States expressed concern with that timeframe, being that I know D.C. and Maryland have primaries in mid September. I know some other States, like Florida, have theirs next week. Did any express difficulty with that or...

DR. ANDERSON:

No States have indicated a problem.

COMMISSIONER BRESSO:

Okay.

DR. ANDERSON:

Or an issue.

COMMISSIONER BRESSO:

Great, thank you.

DR. ANDERSON:

We're excited about that.

COMMISSIONER BRESSO:

Me too.

CHAIR DAVIDSON:

Okay, it's my turn. Dr. Anderson, I think I recall that we finalized the draft of our survey instrument back in February. And how long did it take to complete the Paperwork Reduction Act process on that?

DR. ANDERSON:

Um-hum, the EAC began the Paperwork Reduction Act process in September of 2009.

CHAIR DAVIDSON:

2009?

DR. ANDERSON:

2009, yes. We developed the instrument, and then we released it for the first 60-day public comment period in September. And that went through November 2009. And once the public comments were received, we reviewed them and made any adjustments to the instrument that were necessary. And then, that finalized version was released for the second public comment period in January. And so that public comment period was January through March of 2010. So, we had our first 60-day public comment period in 2009, and the second public comment period of 60 days in early 2010.

And the final version was posted to the EAC website in May of this year.

CHAIR DAVIDSON:

Okay, another question I have for you is, the Federal Government has a new online clearinghouse for data, at data -- I think it's data.gov.

DR. ANDERSON:

data.gov.

CHAIR DAVIDSON:

Has EAC submitted any of their election administration and voting surveys and data to them...

DR. ANDERSON:

Yes.

CHAIR DAVIDSON:

...or anything else?

DR. ANDERSON:

Yes, EAC has submitted three datasets to data.gov. It's the 2008 NVRA, the UOCAVA and the Election Administration and Voting Survey datasets. All three were submitted to data.gov and accepted, and we look forward to doing the same with the 2010 datasets, once they're available.

CHAIR DAVIDSON:

Okay, all right very good. Thank you for your report, we appreciate it.

DR. ANDERSON:

Thank you.

CHAIR DAVIDSON:

While we're making the change here, I'll go ahead and start discussing NIST discussions on test suites. And we will be talking about our working to develop the test suites that our Testing and Certification Program needs. These test suites are a set of common test protocols that all accredited labs can use when testing voting systems. Through the years of the test suites, voting systems are tested consistently across the labs and within a lab. The consistent testing approach leads to transparency, efficiency in time and in cost.

And every year since 2007, EAC has given money to NIST and specifically tasked them to develop the test suites. Today, EAC yet has not received any of these test suites for the VVSG. Currently NIST has been working on the development of the test suites for the revision of the 2005 VVSG. It is important to note that these test suites only encompass those sections of the VVSG that's being revised. We funded and supported this effort for three years. It's really time now to discuss when EAC is going to receive complete test suites.

Today, we have Mark Skall and John Wack here with us, and I'm going to cut down their bios because I could spend a lot of time on that. So, Mr. Skall is currently a technical reviewer for the EAC, or the Election Assistance Commission, and as a technical reviewer, Mr. Skall is responsible for conducting detailed reviews of technical documents, such as test plans, test cases and test reports submitted by testing laboratories to determine if a voting system manufacturer should be certified by the EAC. The review is to ensure that the test plans are appropriate to test voting systems to

complex voting standards, that the tests were completely developed and performed and that the test results demonstrate conformance with the appropriate voting system standards.

Mr. Skall has his BS in Mathematics from Brooklyn College, and his MS in Information Systems Technology from George Washington University, and a JD from North Virginia -- Northern Virginia Law School .

And John Wack, John is a computer scientist and researcher at the National Institute of Standards and Technology. He has authored and managed various programs of government for security guidance and assistance activity and reports, notable in the area of voting systems, smartcards and network security. His most current work is in managing the technical work of the voting systems at NIST, responsible for developing the next version of the Voluntary Voting System Guidelines.

I'm going to turn, first, to Mr. Skall for his testimony, and then we'll have Mr. Wack give his testimony, and then we'll ask questions. So, Mark if you'll start please, I appreciate it.

MR. SKALL:

Thank you, Chair Davidson, Commissioners Hillman, Bresso, and assembled members of the public, thank you for the opportunity to testify today.

Today, I will discuss the need for voting system test suites and why they need to be both uniform among testing laboratories and publicly available.

As a former employee of the National Institute of Standards and Technology, I say, unequivocally, that standards, by

themselves, are not very useful. Standards are pieces of paper that delineate specific requirements that an implementation, in this case, a voting system, must adhere to. If standards are promulgated without test suites, there is no way to determine whether or not implementers have faithfully fulfilled each and every requirement in the standard. Perhaps more importantly, the implementers themselves, in this case, the voting system manufacturers, cannot determine whether or not they have implemented the standard correctly. Without test suites, any standard remains just a piece of paper, suitable for including in a standards museum, but useful for little more.

In the voting community, the test suites, or test cases, as they are sometimes called, do currently exist. They are developed by a particular voting system testing laboratory, or VSTL, for a specific test campaign. However, as I will discuss later, this scenario is not the most effective or efficient way to test voting systems.

So, first of all, to whom are test suites useful? So, first, the implementers clearly need them. With test suites, implementers can determine if they conform to the standard in question. The implementers of voting system standards are voting system manufacturers. Voting system manufacturers can use these test suites to help ensure that they produce correctly -- that their product correctly implements the requirements in the VVSG. Although test suites cannot be a substitute for their own testing and quality assurance, the tests provide an additional mechanism for implementers to test their own system and discover, and remedy,

needed bugs. By utilizing test suites, voting system manufacturers perform more efficient quality assurance, since the test suites will supplement their own internal tests, and thus, decrease the number of tests that need to be developed by them. This, in turn, saves the manufacturers both time and money.

Secondly, the testers and the certification agency need test suites to determine whether or not the implementer has correctly implemented each requirement in the standard. In voting, the testers are the VSTLs, and the certifier is the Election Assistance Commission. The test suites serve as the primary input for the VSTLs to produce test plans and test reports. The EAC, then, uses the test plans and the test reports in conjunction with the test suites to make a determination on whether or not all requirements in the VVSG have been correctly implemented, and whether or not to certify the voting system.

In the marketplace, testing provides a vehicle for exchanging information between a buyer and a seller. It increases a buyer's confidence in a product, or implementation, and its ability to meet his or her needs. Buyers become users of the implementation. Thus, the third benefactor from the availability of test suites is the voting public, or the users of voting systems. In voting, the public includes voters, election officials, and States and other jurisdictions. Now, in general, advertising that an implementation conforms to a standard is an extremely valuable marketing tool. Without test suites, however, this claim of conformance cannot be verified. With test suites, buyers of an implementation can ask for "proof" of conformance. Of course, for the voting public, that proof is in the

form of a certificate from the EAC, showing that the voting system has been certified based on the results of the test suites. Within the voting program, test suites are used to provide confidence both to election officials and to the entire community they serve, that voting products meet the applicable standards. States benefit, because many States require conformance to Federal voting standards, and the States could not make the determination of conformance without these test suites. Additionally, the test suites increase the quality of voting systems for the States and save States money. States will now be able to determine what requirements have been tested and will not have to duplicate this testing at the State level.

An added benefit of test suites is that, when a requirement is unclear or ambiguous, test suites serve to clarify the requirement. Although standards-writers try very hard to make each requirement as precise as possible, all standards need to be interpreted. It is not always clear what is meant by the wording of specific requirements. The test suites can actually serve to define what is meant by a potentially ambiguous requirement. Since the test suites are used to determine conformance, they, in essence, become the “official” interpretation of the standard.

Now, having a set of uniform test suites is extremely important. Up until now, test suites, usually known by the VSTLs as test cases, were developed by the VSTL who was conducting the test campaign. The test cases were never shared with other VSTLs since they were considered to be intellectual property of the laboratory that developed them. The problem with this approach is

that, since the test cases were unique to a specific VSTL, and thus to a specific test campaign, there was no consistency among VSTLS, and thus, among test campaigns. Thus, the same voting system could pass tests, for the same exact set of specific requirements from one laboratory and could fail those tests from another laboratory. Clearly, this lack of consistency could lead to forum-shopping among manufacturers, where the selection criterion for choosing a laboratory could be the laboratory whose test suites give the manufacturer the greatest chance of passing the test and thus becoming certified. However, having one uniform set of tests will help ensure that the same pass/fail verdict will ensue, regardless of which laboratory is chosen to conduct the test campaign for a given voting system manufacturer.

Now, test suites need not only be uniform, but they have to be public, as well. Up until now, test cases and test suites developed by the VSTLS have been proprietary. VSTLS do not want to share test cases with each other, because they feel this will result in losing a competitive advantage by allowing valuable intellectual property to be implemented by their competitors. Thus, even though the test developed by the VSTLS may be a very high quality, there is no way for the voting public to scrutinize and verify that quality. The tests cannot be scrutinized, except by entities like the EAC, who are bound by Federal statute not to disclose the proprietary information. However, using a set of public test suites will allow anyone in the public to scrutinize these tests, enabling more bugs in the tests to be caught, as well as allowing more scrutiny with respect to the coverage obtained by the tests. Public

availability of test suites will also allow others to suggest new and unique ways to perform voting system testing, thus serving to accelerate innovation in test suite development, which may lead to significantly faster and less costly testing.

Now, NIST has developed a test suite for the VVSG 2.0, often referred to as the “Next Iteration” VVSG. However, this test suite will be of no use until the VVSG 2.0 is promulgated as a standard by the EAC. NIST subsequently used parts of the VVSG 2.0 test suite to produce a conformance test suite for the new requirements in the update to the 2005 VVSG, now known as the VVSG 1.1. The intent is for the NIST test suites to be used by all accredited laboratories. This will enable, at least for the requirements in question, all laboratories to be able to use one set of uniform test suites.

The NIST test suites are not owned by any VSTLs and are, of course, in the public domain. They can be obtained, and scrutinized, by anyone who downloads from the NIST or the EAC website. Thus, they fulfill the second, very important, requirement of being public. Use of these uniform and public test suites will produce consistent results and promote transparency of the testing process.

There are, however, quite a few obstacles still to be overcome in getting a complete set of uniform and public test suites in use by all the VSTLs. First, we would like to see the NIST test suites properly vetted. Although the test suites are available for review on the NIST website, and NIST sent the test suites out for review to the VSTLs, the TGDC, and selected other subject matter

experts, there were very few comments received. My understanding is that EAC staff is planning on meeting with the accredited VSTLs to obtain specific feedback on these test suites. Additionally, discussion is necessary with the VSTLs to determine how best to integrate these test suites with the existing proprietary test cases currently in use by the VSTLs. The VSTLs will undoubtedly be concerned with preserving the intellectual property rights of their existing test cases, even after they are integrated with the NIST tests. Lastly, and perhaps most importantly, we need a strategy to ensure the availability of public and uniform test suites for all of the VVSG 1.1, not just for the requirements that changed from the 2005 VVSG. One possible approach to accomplish this is to convene a meeting of all the VSTLs and encourage them to contribute test cases for the requirements not tested in the NIST test suites, with the hopeful end result of a complete, comprehensive, uniform, and public test suite for all the VVSG 1.1 that can be shared by all the laboratories. There are, however, many roadblocks standing in the way of this objective, both technical and legal.

So, in conclusion, standards are a necessary, but not sufficient, condition to help ensure that voting systems are accurate, reliable, secure, accessible and usable. In addition to standards, a comprehensive, uniform, and public test suite is needed to help ensure that the voting systems correctly implement the standard. The goal is for all testing laboratories to use the same test suite, thus promoting transparency of the testing process and consistency among VSTLs. We've taken a first step toward

this objective by providing NIST test suites that test for a subset of requirements for the VVSG 1.1. However, many obstacles still remain in achieving a full and comprehensive, uniform, and public test suite. We will be striving to overcome these obstacles in the coming months. Only by having a comprehensive, uniform, and public test suite for all requirements in the VVSG 1.1 can we help assure the trust and confidence that voting systems are not only being tested correctly, but are being produced with the quality and rigor expected by the voting public.

Thank you for the opportunity to testify. I will be happy to answer any questions you may have.

CHAIR DAVIDSON:

Okay, John, you're next. Thank you.

MR. WACK:

Thank you. Okay, thank you for the opportunity to testify about the NIST developed test suites for the proposed draft revisions to the 2005 VVSG. I'll provide an overview of NIST's role in testing and how these test suites are going to assist labs and manufacturers in reducing the cost of testing and improving quality and transparency of the testing process. And then, I'll give an overview of the test suites and provide some additional information on the steps. I may cover some of the same ground that Mark just covered, but I'll iterate briefly on it.

To begin with, NIST has extensive experience in developing test suites for a variety of standards and technologies as diverse as electronic commerce, healthcare, and national defense. NIST developed test suites, including XML, the key web standard for

enabling electronic commerce, SQL database standards, and several graphic standards. NIST is also developing test suites to implement the Nationwide Health Information Network. The test suites address the core functionality of these systems as defined in the applicable standards.

There are many different types of testing and testing programs. The type of testing program used by the election community was established in the 2002 Help America Vote Act, or HAVA, and consists of EAC's nationally accredited labs providing testing services and a national certification performed by the EAC. The question remains, though, what kind of tests should the accredited laboratories perform? And how can the EAC and their customers know that every test lab is testing the best and most efficient way possible and the most transparent way possible?

The primary answer to these questions is the development of public test suites that will be used by all accredited laboratories. The NIST-developed public test suites serve several purposes.

They establish for manufacturers exactly what it means to meet a given specification. This helps manufacturers deliver better products.

It reduces the cost of testing, since each test lab does not need to reinvent the same work. It potentially reduces the amount of time spent testing systems that do not meet the VVSG specification, since manufactures can already have run the tests in-house before they submit a product for testing.

It helps ensure consistency between test labs. In some past circumstances manufacturers have been able to “shop” for easier labs, and public test suites help prevent this.

And it promotes transparency of the testing process since all interested parties can see and comment on the test suites.

And additionally, the public test suites can be used by NIST’s National Voluntary Laboratory Accreditation Program, or NVLAP for short, to assess labs’ capability to test voting systems, thus providing a measure of confidence that such labs are capable of performing testing to meet the requirements of HAVA. HAVA requires EAC and NIST to develop this national program for accrediting voting systems, and in June 2005, NIST and NVLAP announced the availability of applications for the voting systems program in the *Federal Register*. And labs that achieve NVLAP accreditation are recommended by NIST to the EAC for accreditation.

And so, as we’ve discussed, the test suites were originally written to address the requirements in the 2007 Technical Guidelines Development Committee, or TGDC, VVSG recommendations to the EAC. The VVSG 1.1 has been updated primarily with requirements taken from the 2007 TGDC VVSG recommendations and, thus, the test suites for VVSG 1.1 correspond directly to those requirements and only those requirements. The test suites do not address any of the existing requirements in the 2005 VVSG. And the test suites address subsets of the new requirements, such as usability and accessibility, security, and core requirements and testing. Several

new requirements in the area of security were added to the VVSG 1.1. and tests were written for those requirements.

There are currently four test suites to address the new requirements added to VVSG 1.1: two test suites to address the added core requirements, a test suit for the human factors requirements, usability and accessibility, and a test suite for the additional security requirements. And why so many test suites? The VVSG encompasses a wide range of technologies, and each demands its own separate test suite. Each type of test suite has to be uniquely designed. For example, the human factors test suites will use expert analysis for some of the requirements. To test some of the requirements in the area of core requirements, a pseudo-election must be run.

So, in order to build the test suites, each requirement was scrutinized and unique tests were developed. Oftentimes, a single requirement results in many tests, or one test can test multiple requirements. Moreover, the tests require an in-depth understanding of the technology being used. Each test needs to be robust, self-contained and correct and usable, with consistent pass/fail criteria. It's necessary to fully understand both the VVSG and what technologies are available at a reasonable cost.

Okay, I'll provide a brief description for each of the test suites. The first one, the Votetest distribution addresses a number of the core requirements added to VVSG 1.1. It defines abstract tests that exercise every phase of the voting process from election definition through report generation. In addition to the abstract tests, Votetest includes the expected results for each test. And, in

essence, Votetest runs a pseudo-election to exercise the requirements.

Secondly, in the area of hardware core requirements, there is an additional test suite for operating temperature and humidity.

The human factors test suite addresses the human factors requirements added from the TGDC recommendations. And they're added to Section 3 of VVSG 1.1, and largely replace that entire section. They address the usability and accessibility requirements with the exception of the usability performance benchmark requirements from VVSG 2.0, which were not added to VVSG 1.1. Some of the requirements require some expert judgment, and thus, must be performed by qualified individuals.

And lastly, the security test suite addresses those cryptographic requirements, electronic reports requirements, software setup validation requirements, and voter-verified paper audit trail requirements that were added to VVSG 1.1. And additionally, several new requirements were added to VVSG 1.1 in the areas of cryptography and setup validation.

The test suites were made available for public review in April 2009. And NIST is now working with the EAC to meet directly with test labs to ensure that the test suites can be integrated into existing lab practices and, eventually, used by the labs when testing voting systems for conformance to requirements in VVSG 1.1.

So, thank you for the opportunity to testify about the NIST-developed test suites. And this concludes my testimony and I think we're both happy to answer any questions you have.

CHAIR DAVIDSON:

Thank you. Would you do one favor for me, first, John, is, would you kind of in a few brief words describe core requirements? I think people -- everybody can figure out what human requirements, you know, the human factors are. But I think some of that needs a little bit of definition to describe that for our listeners.

MR. WACK:

Sure, sure. The way we've described them in the past has been, you know, to describe the other HFP, the human factors, the security, so on and so forth. And we say core requirements is everything else that's left over. It really encompasses requirements for different voting variations, reliability, integrity, requirements that have to do with various aspects of testing, software inspection, things of that sort.

CHAIR DAVIDSON:

Okay thank you, I think that will help.

All right, I will start with Commissioner Hillman for questions.

COMMISSIONER HILLMAN:

Thank you. And actually, my first question, Madam Chair, is to you.

There seems to be an inference, as if VVSG, as it's being called 1.1, has been adopted and I don't believe that's correct, right?

CHAIR DAVIDSON:

No it has not been adopted.

COMMISSIONER HILLMAN:

Okay.

CHAIR DAVIDSON:

It's -- we've taken comments on it, as you're aware, and we're in the process of working through that. That was one of the reasons why we held the roundtable...

COMMISSIONER HILLMAN:

Um-hum.

CHAIR DAVIDSON:

...is to get more information on the disability and usability of the areas.

COMMISSIONER HILLMAN:

So I guess, my first question for Mr. Wack would be that I would hope NIST is prepared to make adjustments to the proposed test suites depending on what the final version of 1.1 is that's adopted by the Commission.

MR. WACK:

Right, exactly, yeah. Right now, we're beginning the process of working more with the existing test labs out there to look at the requirements themselves. But at the same time, when 1.1 is adopted, or when we know that the final version is stable and ready, we're going to have to go back and, I think, a number of the requirements have changed, a few in big ways I think, others not a whole lot. But basically, we're going to have to go back and readjust the requirements and the tests.

COMMISSIONER HILLMAN:

Okay, thank you. So to Mr. Skall, how are you?

MR. SKALL:

I'm well, thank you.

COMMISSIONER HILLMAN:

Good, it's nice to see you two sitting side-by-side together.

With respect to the development and implementation of test suites, are the components of test suites black and white or are there grey areas subject to interpretation?

MR. SKALL:

Yes, thank you, for the question Commissioner Hillman, you know I always look forward to your challenging questions.

There is always interpretation of requirements in the standards. Thus, writing test suites is challenging because you have to read every requirement precisely. You have to make a decision on exactly what each component of each requirement means and then write a test case for each specific component. So, it's not black and white in that sense. It's fairly complex. And unfortunately it's, to some degree, subjective because of the interpretation. We would like the standards, themselves, to be as exact as possible, but especially in areas like human factors, which requires subject matter expertise to actually discern what is meant, there's always some questions, so it's a fairly complex operation and it's not -- it's not a by rote operation at all.

COMMISSIONER HILLMAN:

So, in the specific instance of EAC's test suites for voting systems on the issue of subjectivity, whose subjectivity would be in play?

MR. SKALL:

Well the way it works is the VSTLs write the test cases based on their reading of the standard in question, which in this case would be the VVSG 2005. If in fact the manufacturer, or anyone else, challenges that interpretation and that test case that can become a

request for interpretation, an official interpretation by the EAC which is then issued. There are many requests for interpretation which help clarify any ambiguity in the standard.

COMMISSIONER HILLMAN:

So, EAC has the...

MR. SKALL:

EAC is the final adjudicator.

COMMISSIONER HILLMAN:

Final, okay. What -- generally speaking, what is the expertise of those who develop and then conduct the tests under the suites?

MR. SKALL:

In voting per se or just in...

COMMISSIONER HILLMAN:

Voting, in voting, right. Um-hum.

MR. SKALL:

Well, I mean...

COMMISSIONER HILLMAN:

Well, if it differs greatly from other test suite situations, please comment.

MR. SKALL:

Yeah, let me try to give it first in a general sense, and then apply it to voting. So in general, to write and conduct test suites, in the IT community you need a strong background in IT, in testing technology, because it's a fairly complex subject and in the subject matter expertise in question, which, in this case, is voting systems. So, clearly, the people need to be well versed in IT, they need to be well versed in voting systems and in the technology that's

employed. So, there are many security issues. There are many human factors issues. So, you also need security experts, human factor experts. So, it's a wide range of expertise in technology, as well as in voting systems.

COMMISSIONER HILLMAN:

So, how do folks find their way into the field? Is it happenstance? I mean, does NIST specifically hire people to develop test suites? Or do people sort of get moved around? And do voting system laboratories...

MR. SKALL:

Right.

COMMISSIONER HILLMAN:

...hire special people to do this?

MR. SKALL:

Yes, I can give you my experience when I was at NIST, and I don't think it's changed too much. We, typically, would use mainly existing personnel. There would be some contractors who are hired for specific expertise. And the personnel, again, had all the general expertise in testing. Like John said, people at NIST have tested almost every type of IT system from, essentially, the worldwide web as you see it now, to database systems, to program language systems.

So when I was at NIST, I would use that expertise and then, of course, I would have to get trained in the subject matter expertise. So, when we at NIST would go into a new field like healthcare, we'd have to learn, meet the docs and meet all the people in the healthcare industry. In voting, we have to meet the

voting officials, the testers, and learn as much about that industry. But I believe -- that's not an easy job, as you well know, learning all about voting technology, but it's certainly easier than learning the technology needed to do the testing. So, we start at NIST, at least when I was there, with the basic technology expertise, and then, train within the subject matter expertise.

COMMISSIONER HILLMAN:

Were you at the -- forgive my information overloaded memory -- were you at the accessibility roundtable a couple of weeks ago?

MR. SKALL:

I was not.

COMMISSIONER HILLMAN:

Okay, John were you, John Wack, were you there?

MR. WACK:

No, I was not.

COMMISSIONER HILLMAN:

No? Okay. There has been raised, to EAC, on more than one occasion, that the lab testing should specifically include people with various disabilities as a part of the testing process. And I'm wondering if that type of accessibility testing can be included under the suites, or if they are already contained in the proposed test suites for VVSG 2005.

MR. WACK:

In the -- in the human factors requirements, there are, you know, under the test methods, there are procedures, essentially, for going out and finding a representative sample, you know, of certain populations, and especially those with certain types of disabilities.

And they would actually be involved in testing the systems. I've heard this same comment, you know, over the years and, thus, you know, basically, we've written the test suites to accommodate that need.

COMMISSIONER HILLMAN:

Mr. Skall, to your knowledge, is that happening in labs, now, do you know?

MR. SKALL:

Not to a great extent. It's very difficult, it's very costly, and you have to have, you know, certain types of expertise. So, that's a difficult challenge.

COMMISSIONER HILLMAN:

Okay, thank you. Those are my questions for now.

CHAIR DAVIDSON:

Can I just add onto that? Is that because, really, they're not testing, though, to the iteration of additional information or to the 2005?

MR. SKALL:

Right, they're only testing to the original 2005, not to the iteration. And certainly, when we move to the -- to the next iteration, the usability and accessibility testing becomes even more complex.

CHAIR DAVIDSON:

And a lot more in that area?

MR. SKALL:

Yeah.

CHAIR DAVIDSON:

Okay. Commissioner Bresso?

COMMISSIONER BRESSO:

Mr. Skall, I'll start with you, I have some questions. As a technical reviewer, what have you seen in various test campaigns that can be improved upon by the creation of these test suites that you've described?

MR. SKALL:

Again, consistency. We've seen in test campaigns, at differing VSTLs, because they're only human and because many of the requirements are, in fact, fairly difficult to interpret, they will have come up with different interpretations. So, having one test suite where the interpretation is given will ensure that, in fact, the same result, the same pass/fail result, ensues for every specific test. So, really, the consistency is something that's, to me, of paramount importance.

COMMISSIONER BRESSO:

Okay. And also, in your testimony, you discuss "forum shopping among manufacturers." Can you discuss that a little bit more and what EAC is doing to minimize any potential forum shopping by manufacturers?

MR. SKALL:

Sure. So, I said in my testimony, that, in fact, because of the fact that test cases are developed specifically by a specific VSTL, a manufacturer could try to see which test cases, perhaps, test a little less comprehensively, and forum shop. They can try to do this, but they would not -- they will not succeed, even under the current regime. The reason they will not succeed is because the technical reviewers, with EAC staff, are responsible for overseeing the testing going from the test labs. And we, the technical reviewers,

and the staff, make sure that, in fact, if one lab is perhaps deficient in one place, that we hold their feet to the fire, and make sure that all the testing is as comprehensive as possible. So, if they try the forum shopping, they will not succeed, because what may have started out as, perhaps, tests that may be less rigorous than another lab, will end being just as rigorous after we get through with them.

Now, that having been said, it's certainly better to do it by having a consistent test suite, rather than people, because people, and the technical reviewers, are only human. I know it's hard for you to believe, but we are only human, and, thus, there's still judgment involved, so one set of standard tests is the best way to go.

COMMISSIONER BRESSO:

Okay. And having reviewed test plans and test reports from the VSTLs, how much work do you think EAC will need to do with the labs in order to make these usable for them?

MR. SKALL:

To make the test suites usable, themselves?

COMMISSIONER BRESSO:

Um-hum.

MR. SKALL:

I think there will be quite a bit of work. As I state in my testimony, there will be some degree of work getting the existing test suites, that NIST provided, to be compatible with the labs. But the bigger - the bigger challenge will be getting new tests developed to test for the VVSG 1.1, like Commissioner Hillman says, after it's adopted

because the NIST test suites only test for a subset of those. So, there will be very interesting challenges in getting tests and trying to get them shared among labs that have not yet been written for those other requirements. So, there will be a lot of work ahead of us.

COMMISSIONER BRESSO:

Is it your opinion that EAC would have to -- or more resources would have to be devoted to that specific area to accomplish that goal?

MR. SKALL:

It's my opinion that it will definitely require resources, certainly among the labs. I think the EAC will have to provide some resources, but the labs themselves -- if we as a group, as a community are going to be developing new tests for all the additional requirements in VVSG 1.1, someone has to pay for them. And, you know, so, if we're going to have the labs do it, they're going to have to find a way to pay for them. EAC will certainly need to be involved. NIST will need to be involved to help organize and ensure the quality of those tests. It's a big job.

COMMISSIONER BRESSO:

Okay, thank you. Mr. Wack, how long did it take to produce the partial test suite for what we're, right now, calling the VVSG 1.1, approximately?

MR. WACK:

Well, let's see. The test suites, basically, are a subset of the test suites that were developed for...

COMMISSIONER BRESSO:

2.0?

MR. WACK:

...you know what we -- 2.0 or, you know, what we've been calling the 2007 VVSG. And those were developed approximately over the course of roughly about a year-and-a-half, if I remember correctly. And we took, I think, several months in addition to that, when it came time to look at the requirements that were being added to 1.1 from 2.0 and making some adjustments. We did make some small changes to the requirements in some areas, and we came up with a couple new requirements in the area of security and developed some extra tests for those. So, it took an additional several months to actually put them together.

COMMISSIONER BRESSO:

Okay. And as a follow-up, why wasn't a complete test suite for VVSG 1.1 produced rather than test only for the requirement that changed from 1.0?

MR. WACK:

Well, that's a good question, and, you know, Mark has answered some of it. I think a number of the requirements in the 2005 VVSG are subject to interpretation, more subject to interpretation than we would like. What was done by NIST and the TGDC was to write this newer VVSG that we're calling 2.0. And I guess, I like to think of a standard as kind of a workbench, really, in a lot of ways, the way it's laid out, the precision of the language, consistent usage of terminology, how easy it is to find certain items and things of that sort, you know, kind of like a workbench that, then, you can then perform work on, in this particular case testing. So, a lot of effort

was put into taking the requirements from the 2005, in some cases, and making them more precise. And so, when the requirements are more precise, it's much more simple to develop tests for them. When the requirements are not precise, when there's some ambiguity, the test necessarily has to be very specific. And, in the test, then, what you're doing, the test writer is, basically, making an interpretation at that point.

Again, it's a good question. There was some opinion that the number of, let's say, interpretations might be so great that it might be faster and easier just to move to a rewritten standard with more precise requirements. I'm not sure that's totally necessary. It may be possible to kind of go back and develop test suites for the existing requirements that are going to be -- for the existing requirements in 2005, that will be part of 1.1. But, as Mark was saying, that will require some work and it will require some interpretations. Ultimately, I think it would be well worth it, though, to have a test suite for the entire standard. I think that would be a very good thing.

COMMISSIONER BRESSO:

Okay, thank you.

CHAIR DAVIDSON:

Okay, I think I'll start off, Mark, you mentioned one thing in your testimony that I questioned. It was on the next steps when you were really talking about how do we get you know -- what's our options in the future and how do we move forward. And you talked about, possibly, bringing the labs in and working with us and, you know, working with, possibly, NIST and EAC and everybody to

bring in information that they are doing now. But you mentioned that there was roadblocks in trying to do something like that. Can you elaborate on that a little bit?

MR. SKALL:

Right, yeah, I mentioned there are possible technical and legal roadblocks.

CHAIR DAVIDSON:

Right.

MR. SKALL:

From a technical standpoint, again, it's a challenge. If we're going to ask the labs to voluntarily write tests, we need to have a good review process for the test. We have to make sure that one lab writes a test that doesn't create an advantage for them, precisely, so hopefully, we'd want other labs to review it. So, we really need quality assurance and a good review process from a technical standpoint.

From a legal standpoint, I believe, there are possible -- and I think we can get around those -- possible antitrust issues, because anytime you have companies getting together to create a product which affects the price they charge, there could be antitrust violations. And that's why, essentially, a lot of this work is done through standards committees to avoid that. I think, if the EAC or NIST convenes the meeting, that's probably a way around it, but hopefully, the legal staff would look at that to make sure there are no problems with that. But we just need to make sure there are no antitrust violations when you get companies together, working together, to produce something that affects their pricing.

CHAIR DAVIDSON:

Okay, all right. John, as I said in my opening, you know, I think there's, myself personally, there's some frustration that we haven't received them yet, because I do think it's going to take quite a bit of time before, you know, once we get things finalized, from the Commissioner's standpoint, on what the next iteration is, and whether it's 1.1, or whatever we name it. But, in trying to get it done, and obviously, having to go back to NIST to make sure that everything is correct, in that, from policy decisions that the Commission will be making, how much time do you think that will take once we make those decisions that, if there is policy decisions that have to be made, how much additional time will that take NIST to be able to accomplish that?

MR. WACK:

Well, first of all, I think when you're talking about the EAC receiving them, I think you're talking about in final form. Is that...

CHAIR DAVIDSON:

Right.

MR. WACK:

Yeah, yeah, they were -- they've been out for public review since April of 2009. Recognizing that, you know, basically, it takes a lot of time and effort to review these things and, you know, we didn't expect that people would be able to devote a lot of time to it, so we talked a number of times about convening some meetings with all the labs. And I think, basically, last fall we may have even had something tentatively scheduled. So, we're going through that process right now, which, you know, I'm really happy about

because it's been awhile and, you know, there are a number of things that have to be done to the tests to make them a little more consistent.

How long will it take to update them after policy decisions and things of that sort? I guesstimate that it's not going to take very long. I don't anticipate, you know, I'm going to say off the top of my head, a month or so. I don't think there are going to be that many changes.

Really, what may take a little bit longer is working with the labs and making sure that the tests are, I'd say, suitable, and, you know, can be run well, by the labs themselves. That may take a little bit longer because we have to work with the labs. Depending on the things they may find or may bring up that may take a little bit longer. But, I think we recognize it's a very high priority item, you know, that getting this new standard out with more precise requirements and tests associated with them is a really good thing. So, it's definitely one of the highest priority items at NIST.

CHAIR DAVIDSON:

Well, I guess, my next question is kind of -- it's kind of a two-part question, is validating the test, what effort has NIST put into it? But tying it to that I think you could tie it to my other question, which is you've had these out for comments since April of 2009. And there's been comments from manufacturers and comments, I understand, from the VSTLs, the labs. Have those been incorporated into, you know, their issues? How have you worked with that in moving forward?

MR. WACK:

A number of the comments have been incorporated. And I don't think there was a formal process in place, at that particular point, but a number of the comments have been incorporated. So, you know, basically, at this particular point, I guess, I consider the tests as not a finished product and still somewhat in draft form. So, I anticipate that, you know, the process we're going through now with the test labs, or that we're at least starting right now, is going to require more changes. But...

CHAIR DAVIDSON:

Well, let's drop into my second part of that question then. How will you validate a test to make sure that it's workable? How will you go about doing that?

MR. WACK:

Well, there are a number of different ways. The NVLAP program allows a number of different things, but I don't think there's any substitute for actually, you know, getting voting systems actually running the tests against the voting systems. And also, I think that we need to be, you know, observing more what the labs are doing and, you know, ensuring -- watching what they're doing, you know, when they're developing tests and when they're actually running them. So, we've begun that. We've -- we've acquired some voting systems. We are doing some contracts to actually test the tests. And, you know, that's underway, right now, and it will be underway during the next year, as well.

COMMISSIONER BRESSO:

I have a follow-up to that.

CHAIR DAVIDSON:

Okay, go right ahead.

COMMISSIONER BRESSO:

I guess, I'd like to get some clarification. How are the VSTLs testing to the 2005 VVSG, then, if these test suites have not been or not able to be created for that at this point?

MR. WACK:

How are the VSTLs currently...

COMMISSIONER BRESSO:

Testing to the 2005.

MR. WACK:

...testing to the 2005? Mark talked a little bit about that, you know. Basically, they have developed proprietary tests, their own test suites, and they're using those. I think the EAC has taken a look at those test suites.

If you don't mind, Mark is more of the expert in this area.

Could I defer to Mark...

MR. SKALL:

Sure.

MR. WACK:

...to answer that?

MR. SKALL:

Sure, yeah, John is exactly right. I mean, each VSTL develops their own test cases. The EAC reviews all of those test cases for completeness, for comprehensives to make sure they're a correct interpretation of the requirement. But again, each VSTL does their own and they are not going to, necessarily, be the same as other

VSTL's test cases. But, right now they're done specifically and uniquely by each VSTL.

COMMISSIONER BRESSO:

Okay.

CHAIR DAVIDSON:

And so, by doing that, my understanding is, if we had test suites it would take less time because they would already -- part of that would be done and, obviously, it would cost less.

MR. SKALL:

Yeah, I mean, the perfect world is we have a complete set of test suites that it would take a lot less time, because during the test campaign they would only have to tailor those test suites to their unique test campaign, because test suites can only be written kind of at a higher level and you have to apply them to the voting system there. But that would certainly take a lot less time and it will result in much faster testing and turnaround time.

COMMISSIONER BRESSO:

But are you confident that test suites are able to be created then for 2005 for the future?

MR. SKALL:

Well again, if we can get the VSTLs to cooperate and contribute test suites that we can review and look at, then we could have a complete set of test suites. Up until that time, they will continue to be done the way they're done now by individually being developed by each VSTL.

COMMISSIONER BRESSO:

Okay. Because, I think from what Mr. Wack was saying, and correct me if I'm wrong, you don't -- is it NIST's position that they are not able to be created for the 2005 in its entirety?

MR. SKALL:

Can I just take a stab at that?

COMMISSIONER BRESSO:

Yes.

MR. SKALL:

I think what John was saying is -- the question to Mr. Wack was, why didn't NIST develop a comprehensive test suite for 2005 and he gave his answer having to do with, you know, some of the requirements being vague...

COMMISSIONER BRESSO:

Right.

MR. SKALL:

...and hard to write. The question I was addressing with you is, can they be done, not necessarily by NIST...

COMMISSIONER BRESSO:

Right.

MR. SKALL:

...by the voting community. These would be the VSTLs would be doing them. So, that's the difference. In his answer, he was talking about why NIST didn't do them. I was talking about the feasibility of doing them by having different labs develop them and cooperate and share them.

COMMISSIONER BRESSO:

Okay, so then NIST wouldn't be a part of that then? They would be...

MR. SKALL:

In my opinion, both NIST and the EAC would have to be a part, at least, to review and to perhaps contribute test cases. NIST might want to contribute or fill ones in. But at the very least, both NIST and the EAC would have to be there to monitor the quality.

COMMISSIONER BRESSO:

But NIST, being the agency that provides the guidance, do you believe -- is it your opinion that they can be creative?

MR. WACK:

Oh wow, you're asking me. I think it would definitely require some work and we'd have to work pretty closely with the EAC, yeah, directly with the EAC, a lot, because of, you know, various interpretations that would need to be made.

COMMISSIONER BRESSO:

I mean, because if this is something that we're going to pursue, you know, as a Commission, you know, we want to make sure that NIST, you know, is a partner with this and want your opinion...

MR. WACK:

Sure.

COMMISSIONER BRESSO:

...whether or not this can be accomplished and not waste any time.

MR. WACK:

And there are also...

COMMISSIONER HILLMAN:

Can I just ask a different -- just a slight -- I can't even imagine why we would hear they can't be done. Test suites can be done. I'm not sure why we're having a conversation about whether or not they can be done at this stage of the game. And I'm concerned that NIST has invested substantial amount of time developing test suites for a set of guidance that hasn't yet been agreed to or adopted. So, I'm not even sure what the hesitation or uncertainty is.

MR. WACK:

Well, speaking kind of as an engineer, and trying to figure out, you know, what's the most direct way and the most cost effective way, there will be a number of requirements in the 2005 that are going to have to be made more precise in some way or another, either the requirements themselves made more precise, or common agreement upon the test that's used to test the requirements. And that part is the part that, you know, in my opinion is going to take time because, you know, you're going to have to work with the different test labs. Manufacturers may, you know, may be okay with certain interpretations, may not be okay with certain interpretations. They may involve the EAC in that and, you know, there would be a certain amount of time involved in that. So, certainly they can be done. Certainly they can be done. And, you know, if you had various engineers and test people in a room, they could go off and do it. It's just that they would be making interpretations in some areas, and then resolving those is the thing that really takes time.

I did want to add one other thing, though, that in creating tests for these requirements, the EAC did something that I thought was a good thing, and actually, kind of -- is a different approach in some ways. There was an interpretation that came out, and I want to say roughly a year ago, in the area of operating system security, that basically recommended using a checklist, which is basically an operating system configuration. And, in a sense, it was basically saying, "Do this." You know, "Just follow these guidelines for your operating system and, you know, compare the current state of a particular operating system for a voting system against this checklist." So, that, I thought, was creative. And there may be a number of other areas within the VVSG where one can do things like this. In a sense, you know, just basically say, "Do -- just do this." And, you know, it makes it easier to test.

COMMISSIONER BRESSO:

And, I guess, this stemmed from some of my confusion. If the labs are already developing test suites, why hasn't NIST done it already? And I think that goes along to Commissioner Hillman's question, too.

MR. WACK:

Yeah, well, some of these decisions are made above my pay grade. It would certainly involve a significant amount of work. A decision was made, years ago, after HAVA came out, you know, that basically, the TGDC was going to go off and work on a different standard as opposed to continuing to work on 2005. So, you know, basically those decisions were made and, you know, that's where the resources went, you know. Potentially, NIST could do this

work. Again, those decisions are made above my level. It would be a significant amount of work. I do believe, though, that a good solid test suite is needed and, you know, there are lots of benefits to having a good public test suite out there. I think it makes it easier for everybody involved.

CHAIR DAVIDSON:

Well, I -- in my memory, as I think back, one of the things when 2005 was done, it was done in nine months, and so there was very little time to really rewrite, and it wasn't rewritten. So, that was what this next iteration is to do, is, to rewrite the whole thing, and encumbrance, obviously, the other things that's been added that needed to be added; more security, more accessibility and usability and other areas. So, I mean, that's one of the reasons why I know from my memory why it was moved forward and -- because it needed to be completely rewritten, and it's just taken this kind of time.

I have -- my last question for you, though, is when you're doing a test suite, are there clear -- or the ones that you done, I guess, is the way I should put it, are there clear pass/fail criteria in those suites?

MR. WACK:

Well, there are now. There were a number of requirements where that wasn't so clear. And so we, you know, we went through a process of making them more clear.

CHAIR DAVIDSON:

Okay. Commissioners, do you have anything else?

COMMISSIONER HILLMAN:

I do, I have two follow-up questions. And I'm not sure...

CHAIR DAVIDSON:

And then, I'll turn to Mr. Wilkey, I don't want to forget that, so don't let me forget it.

COMMISSIONER HILLMAN:

Sure. I'm not sure who this question is directed to, whether it's to you Madam Chair or to Mr. Wilkey. But when adopted, the test suites, are we to adopt them? Yes?

MR. WILKEY:

I would think so.

COMMISSIONER HILLMAN:

Okay, I'm going to just operate on the assumption that the Commission adopts the test suites. Is use of the test suite voluntary on the part of the lab or is that a requirement?

CHAIR DAVIDSON:

That it would be a requirement, is the way I understand it, totally a requirement that the labs would have to use it. So, that's why we would have to work with each one of the labs to make sure they were using it in the correct way.

COMMISSIONER HILLMAN:

Okay. And my question for Mr. Wilkey, which may or may not have been answered today, but given what I have heard from, both, Mr. Skall and Mr. Wack, we could be looking at, what, another 18 to 24 months before the test suites are ready? And that would assume, and I don't ever make a decision based on an assumption, that the Commission adopts the upgraded iteration of 2005 this calendar year. So, if that iteration is available come December of 2010,

when do we anticipate the test suites will be available? Because, if I was a lab and you gave me a set of upgraded, expanded guidelines, and I had to go out and develop test suites to those guidelines because machines were coming in, I mean, we got pressure from election officials and the public to hurry up and certify more machines, and the manufacturers are out there playing, you know, "Who's on first, who's on second" and so, there's pressure to certify machines, and the labs need test suites, but EAC doesn't have its test suites, so they have to expand their money and energy to develop the test suites, and here we come several months later with some test suites and say, "Okay never mind what you've done." And so, then, I would imagine they're going to double hit the manufacturers with costs saying, "Okay, you're going to pay for what we paid to develop test suites and what the EAC is imposing on us." And then, the election officials say, "Gees, EAC you're making this a pretty expensive proposition." I don't believe all of that is necessary, but it feels like that's where we will be.

CHAIR DAVIDSON:

Mr. Skall, in your testimony -- or your questions that you answered, you said that the labs would be continuing to write the test plans until the test suites were done. Can you add to Commissioner Hillman's question and maybe clarify some for us?

MR. SKALL:

Yes, thank you Commissioner Davidson. I guess, two points. Number one, right now, the test labs already write their own test cases, so we would be in no worse shape than we are currently. We would like to have a uniform set to promote consistency, but

until we do, we are no worse than we were. No better, but no worse. So, labs will continue to write them.

What was the second question?

COMMISSIONER HILLMAN:

Except that if I am writing test suites and you come along two months later and say, "Here."

MR. SKALL:

Well, yes, but the new requirements -- I guess the question was imposing new requirements on test labs and manufacturers and thus they'd have to develop new test cases. The test suites that NIST is providing are exactly for the new requirements. So, the new things we are putting into 1.1 they will have test suites for. Now, these test suites still have to be vetted, they still have to be integrated with the current test suites, so there will be a cost. But I think we can answer any criticism we may get by saying, "We are providing you test suites, at least, rough test suites for the new requirements we are putting in."

COMMISSIONER HILLMAN:

What would you envision the lag time will be from when EAC adopts, for the sake of conversation, 1.1 VVSG, and when the test suites for 1.1 will be ready for EAC action?

MR. SKALL:

We're hoping that will be fairly soon thereafter. That's the reason we are now starting to meet with the labs and get feedback on them. And I think we've worked closely with NIST, and they know that it's a very aggressive schedule and we'd like the test suites to be available as soon thereafter as they can be.

COMMISSIONER HILLMAN:

Yesterday...

MR. SKALL:

Within months I would think, not years.

COMMISSIONER HILLMAN:

Yesterday, I had some driving directions that said right under the bridge, and a mile later I got to the destination. So, everybody has a different definition of "soon."

MR. SKALL:

Right.

COMMISSIONER HILLMAN:

And months could be two months, it could be 12 months, it could be 18 months, it could be 36 months.

MR. SKALL:

Yes. I would hope it would be in the order of three or four months. Again, that's -- but again, I have to first know when 1.1 is approved.

CHAIR DAVIDSON:

Do you have any other questions?

COMMISSIONER BRESSO:

No, I'm fine.

CHAIR DAVIDSON:

Mr. Wilkey, did you have any questions?

MR. WILKEY:

Yes. And as I begin, let me make it clear that Commissioner Hillman and I did not rehearse this dialogue that we're having here, but I've got some questions that relate to something that she said.

In your testimony, I think, Mr. Skall, you said that there were very few comments made to, it might have been John, I'm not sure, to where we are, that there wasn't many comments that you received during the comment period that NIST provided, particularly from the VSTLs. What sense do you get as to why? Is it a proprietary thing? Is it a business decision? Is it a technical decision? This is going to greatly affect the work that they do. I can't understand why they're not providing all kinds of comments...

MR. SKALL:

I mean, most of...

MR. WILKEY:

...on what's out there.

MR. SKALL:

Yeah, I mean, most of the comments that I believe NIST did receive were from the VSTLs. I don't believe -- and you can correct me if I'm wrong John. We sent it out to the TGDC, I don't believe they received any from the TGDC, and some other subject matter experts. They did get some from the VSTLs. They were not nearly as many as I would have thought, nor as comprehensive.

I think it is a business decision. I think it takes an awfully long time to review these test suites thoroughly, perhaps months. And they probably were in the middle of test campaigns and didn't have enough resources to provide a very, very comprehensive review.

But like I say, we did get some comments, but I would have expected much many more.

MR. WILKEY:

How long was the comment period, John?

MR. WACK:

Well, it started in April of 2009. So it's been, you know, well over a year. And -- yeah.

MR. WILKEY:

Did they provide any?

MR. WACK:

The VSTLs?

MR. WILKEY:

Um-hum.

MR. WACK:

Yes, we got -- we got comments from, I think, two of the VSTLs.

MR. WILKEY:

Significant? How would you categorize them?

MR. WACK:

Well, I wouldn't call them insignificant, but not a lot, not a lot. And as we're going through this process coming up, you know, working with each of the VSTLs, we're going to get a lot more comments than we got previously.

And, you know, I'd also agree with Mark. I think it's -- reviewing takes a long time, and I suspect, labs weren't sure of when 1.1 would be out or what shape it would be in, whether the requirements were going to change. And so, I think it's, you know, it's a significant expense, basically, to review and incorporate things of that sort. So, I always felt that we really need to just sit down directly and have one-on-one meetings with the labs and really work, you know, work hard together to actually get all the

comments and, you know, all the changes we need. And that's what's happening now.

MR. WILKEY:

Okay, because it's directly affecting them and I would have thought that they would have overloaded you with comments within a period of over a year. So, I find that kind of questionable.

You also mentioned, in your testimony, John, that you do -- that your tests -- the Votetest distribution test, that you mentioned on page two of your written testimony, here, includes the expected results for each tests, the means to derive the expected results and so on. What's the volume? Do you do a great volume when you do that? In other words, if you're running an op scan system, what's the number of ballots you would run through it? Does it kind of match what the VVSG provides for, in terms of volume testing?

MR. WACK:

Well, that's the test suite I am least familiar with, so -- I can answer in general terms though. It expects a fairly high volume of ballots run through, I think a lot higher than what labs are doing right now. The amount of volume it expects is in keeping with the requirements in 2.0. It may not be -- in fact, I don't think it is in keeping with the current requirements in 2005 and current lab practices.

Now, we've looked at those requirements and, you know, a decision is going to have to be made, you know, basically, how much volume versus how much time that's going to have to involve, what additional expense and things of that sort. And I think there is some things that can be done to, potentially, you know, require less

volume which would reduce costs, but still maintain, you know, a good sense that the systems are operating accurately and with integrity.

So, I don't have the exact figures for the amount of volume, but it's significantly high compared to what I think is probably used today by test labs.

MR. WILKEY:

But do you see when the tests scripts are finally completed that there will be a specified volume as part of that test?

MR. WACK:

I would think so, yes. Yeah, I would definitely think so.

MR. WILKEY:

Okay, just one last question, and again, it's a follow-up on something Commissioner Hillman addressed. And it had to do with human factors and the use of -- or having people from the disability community participate in those tests that are conducted at the lab. I know that's a major issue for them. And, frankly, I just don't understand cost -- I don't understand it even being cost. I know where these vendors are -- I know where these VSTLs are located, and I'm sure they are in large enough places where anywhere in that area there are community service agencies, agencies that serve the disabled that would be more than willing to participate in any kind of level of testing that's done. So, I just don't understand that.

I had my own test of that kind of thing when I checked in last night. In my profile, they have a note that I like a lower floor and I like to be near the elevator. It's because I got caught in a hotel fire

one time. And they put me in a handicapped room. And I was going to go down and change rooms and I thought, you know, I'm tired, I just want to stay here, and what difference does it make? And I'm glad I did, because within the period of time from last night and this morning I thought to myself, I'd like to meet the designer of this room, because there is no way that a person that is disabled and in a wheelchair can use what are some significant costly improvements they made in that room. I mean, they went to the expense of doing a lot of things thinking that they were accommodating the disabled, but yet shelves were too high, you know, you basically had to get down on the -- they made the dresser's level lower, but yet you would have to get down on your hands and knees to get to the bottom thing. There were a lot of small issues that I thought to myself, wow, I can tell you, right now, in designing this space, they never brought anybody in that was in a wheelchair, or was disabled to the point that they needed to utilize some of these things. It was very telling.

And so, when I hear that VSTLs cannot, and I hope some of them are either listening, or in the room, cannot give an opportunity to people who are going to utilize this equipment the ability to participate in some of the testing, is just mindboggling to me. And I don't know if you have any comment on that, Mark, maybe.

MR. SKALL:

I have no comment.

MR. WILKEY:

Okay, thank you. Thank you, Madam Chair.

COMMISSIONER HILLMAN:

Hear hear, Mr. Wilkey, hear hear.

CHAIR DAVIDSON:

Is there any other questions? I'm sure that we're going to think of several things once we close the meeting. And obviously, it sounds like there's a lot of work yet to do.

The labs -- one of the questions I do have, I mentioned that I was sure that you got some comments from manufacturers. Did you get very many comments from manufacturers?

MR. WACK:

We got some comments from some of the VSTLs. My memory is kind of hazy. If we got comments from manufacturers, very few, very few, if any.

CHAIR DAVIDSON:

Okay, all right. There again, that's a little disappointing. I wish they would have commented. So, we will move on. If there's nothing else, then, on this portion of the meeting, I would like to have a motion to adjourn.

COMMISSIONER HILLMAN:

I'm ready to move...

CHAIR DAVIDSON:

Oh sorry.

COMMISSIONER HILLMAN:

...adoption of the minutes. No, that's all right.

CHAIR DAVIDSON:

We're finished. You gentlemen can take a seat if you would like.

Thank you, Commissioner Hillman.

COMMISSIONER HILLMAN:

I'm prepared to do two motions. One is to move adoption of the minutes of the June 28th public hearing. And then, also, I would like to move an amendment to the minutes we just adopted, because I belatedly noted something was missing.

CHAIR DAVIDSON:

All right.

COMMISSIONER HILLMAN:

So, I would move adoption of the minutes of the public hearing of June 28th on voting system pre-election logic and accuracy testing and post-election audit grants.

CHAIR DAVIDSON:

Okay, is there a second?

COMMISSIONER BRESSO:

I second.

CHAIR DAVIDSON:

All those in favor say aye.

[The motion carried unanimously.]

CHAIR DAVIDSON:

Motion passes. Okay, so, your next motion on...

COMMISSIONER HILLMAN:

Okay. And I've just -- I've scribbled out the wording to the amendment that I wish to offer. And it's on the minutes of the June 28th meeting, and it addresses the issue of consideration of MOE policy. And so, I move the following amendment. Commissioner Hillman pointed out that the MOE policy will not inform States as to the specific possible consequences of not meeting maintenance of expenditure. She expressed that she believed EAC has a

responsibility to provide that information before any such situation should occur. Dr. Abbott stated that EAC could include that information in its cover letter to States.

And I offer that because I did ask that the record reflect my concern, and it does not.

CHAIR DAVIDSON:

Okay. Is there a second on the motion to amend the minutes?

COMMISSIONER BRESSO:

Second.

CHAIR DAVIDSON:

All those in favor say aye.

[The motion carried unanimously.]

CHAIR DAVIDSON:

So, the minutes will be amended to reflect that. Now, do I have a motion to approve the minutes as amended?

COMMISSIONER HILLMAN:

So moved.

COMMISSIONER BRESSO:

Second.

CHAIR DAVIDSON:

All those in favor?

[The motion carried unanimously.]

CHAIR DAVIDSON:

Thank you very much, it passes. So, we've got that we'll add to the minutes.

COMMISSIONER HILLMAN:

Thank you.

CHAIR DAVIDSON:

So now, could I have a motion to adjourn this portion of the meeting?

COMMISSIONER HILLMAN:

So moved.

COMMISSIONER BRESSO:

Second.

CHAIR DAVIDSON:

All in favor?

[The motion carried unanimously.]

CHAIR DAVIDSON:

The meeting is adjourned. And we will take about a 15-minute recess to set up for our hearing, so we'll be just a few minutes to give everybody a break.

[The public meeting of the EAC adjourned at 2:47 p.m. EDT.]