# United States Election Assistance Commission
# Public Meeting & Hearing


1225 New York Avenue, NW

Suite 150

Washington, DC  20005


Held on Wednesday, September 2, 2009



VERBATIM TRANSCRIPT

The following is the verbatim transcript of the Public Meeting & Hearing of the United States Election Assistance Commission ("EAC") held on Wednesday, September 2, 2009.  The meeting convened at 10:06 a.m., EDT.  The meeting adjourned at 3:38 p.m., EDT.

## **PUBLIC MEETING**

CHAIR BEACH:

> The September 2nd public meeting of the EAC will now come
>
> to order.  I ask that all of you please turn off your cell phones or turn
>
> them to silent, and that goes for your BlackBerries and pagers as
>
> well.
>
> And would you please join me in the Pledge of Allegiance?

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[Chair Gineen Bresso Beach led all present in the recitation of the Pledge of

Allegiance.]

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CHAIR BEACH:

> Executive Director, may I get a roll call please?

EXECUTIVE DIRECTOR WILKEY:

> Chair Gineen Beach?

CHAIR BEACH:

> Present.

EXECUTIVE DIRECTOR WILKEY:

> Vice-Chair Gracia Hillman?

VICE-CHAIR HILLMAN:

> Here.

EXECUTIVE DIRECTOR WILKEY:

Commissioner Donetta Davidson?

COMMISSIONER DAVIDSON:

Present.

EXECUTIVE DIRECTOR WILKEY:

Madam Chair, there are three members and a quorum.

CHAIR BEACH:

Wonderful, thank you.  Now we'll turn to the adoption of

today's agenda.  I actually have two changes to the agenda.  For

our COTS hearing this afternoon, we'll be having Jack Cobb from

Wyle Labs presenting in Frank Padilla's place and we'll also be

having Max Peterson from Dell who will be replacing Eric Godsey.

Is there any further discussion of the agenda?

COMMISSIONER DAVIDSON:

I move the agenda be approved as amended.

VICE-CHAIR HILLMAN:

Second.

CHAIR BEACH:

All in favor of adopting the agenda as amended?

[The motion carried unanimously.]

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CHAIR BEACH:

The motion is adopted and the agenda as amended carries as adopted.

Okay, I want to thank everybody for joining us today. As you can see from our agenda, we certainly have a lot to cover. We'll be conducting the business portion of our meeting this morning, breaking around noon for an hour, and then returning at one o'clock for a COTS -- for a hearing on commercial off-the-shelf products.

EAC has had a busy summer. Commissioners and staff have attended several conferences. In July we had attended the IACREOT conference and the conference of the National Association of Secretaries of State. Last month we've also attended conferences for The Election Center and for NASED. In addition, the Standards Board convened a meeting in Phoenix, Arizona, on August 6th and 7th to discuss the VVSG 1.1.

Any of you who are interested in reviewing our -- the Standards Board resolutions, they are up on our Website for review. And I also want to mention that the comment period for the VVSG 1.1 will close on September 29th. And I urge any of you who still want to provide comments please do so.

Also, while we were in Phoenix we were advised that Premier Assure's 1.2 voting system received full accreditation from the EAC. The EAC's Testing and Certification Division is working

very hard and I appreciate all their efforts that they are doing to get these systems through our program.

And as I've also stated as Chair, one of my priorities is in the area of UOCAVA, and we will be hearing later today an update and progress on what EAC is doing in this area.

Now I'd like to turn to the Vice-Chair for any opening remarks.

VICE-CHAIR HILLMAN:

Thank you, I do. I want to take this moment to acknowledge and remember and respect Senator Kennedy for the many, many fabulous and supportive things he did, not only for the Help America Vote Act, but for voting rights issues throughout the years, for civil rights issues, he was certainly a champion. And while he may have been the master of compromise to move legislation forward, he never, ever compromised on his values. And that was deeply appreciated by millions and millions of Americans who have benefited, not only from the Civil Rights Acts and the Voting Rights Acts over the years, but also from the Help America Vote Act. And so, I want to take this moment to publicly state my longstanding appreciation, being a native of Massachusetts, having grown up in my whole adult life never knowing the United States Senate without Senator Kennedy. So it's -- I respect another chapter closing and another one opening.

Thank you.

CHAIR BEACH:

Thank you. Commissioner Davidson do you have any opening remarks?

COMMISSIONER DAVIDSON:

You know, the one thing that I think that we need to remember that many of the NASED has deemed September as National Voter Registration Month, and I think we need to keep that in mind and hopefully that we move on it also. I think it's very important that we remember that September is National Voter Registration time for everybody, and we never want to forget it, even with it being a off year, we might say, but don't want to forget that.

And also, I think that everybody agrees with Commissioner Hillman in remembering Senator Kennedy. He did a lot for a lot of people, and we all have our favorite times and our favorite stories I'm sure.

So, thank you.

CHAIR BEACH:

Okay, great, thank you. Okay, now we'll be moving to Old Business. The first item on the agenda is the correction and approval of the minutes from the July 14th, 2009, meeting and hearing. Is there any discussion?

VICE-CHAIR HILLMAN:

I just have one correction to make, minor, in language, but significant. And that is…

CHAIR BEACH:

Okay.

VICE-CHAIR HILLMAN:

…on page two under Welcoming Remarks, under the paragraph where I was extending thanks and congratulations to Mr. Wilkey, it indicates that I acknowledged a letter of congratulations submitted by the Board of Advisors. I also acknowledged the Standards Board. So, I think that first sentence should read, "Acknowledging letters of congratulations submitted by the Board of Advisors and the Standards Board."

CHAIR BEACH:

Well, the Standards Board also recently sent me a proclamation that they have done, for Mr. Wilkey, which will be up on our Website later.

Do I have a motion?

VICE-CHAIR HILLMAN:

I move as corrected.

COMMISSIONER DAVIDSON:

I second it.

CHAIR BEACH:

Okay, wonderful.  Motion to adopt our minutes from the July

14th public meeting, all in favor say aye.

[The motion carried unanimously.]

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CHAIR BEACH:

The minutes are accepted, and the motion carries and the

minutes are adopted.

Okay, now we will turn to the Executive Director's report.

EXECUTIVE DIRECTOR WILKEY:

Thank you Madam Chair.  Let me also add to the comments

expressed by Commissioner Hillman on the passing of Senator

Kennedy.  Having lived in the western part of New York for 25

years near the Massachusetts border, we also considered him as

our third Senator.  And we know the great service that he gave to

this country in the 47 years he served in the U.S. Senate and many

of the things that he accomplished for millions of Americans.  And

we certainly acknowledge that today, and our deep sympathy to his

family and his staff here in Washington.

I want to thank all of you for being here today.  We've had a

busy several weeks, as the Chair has indicated, since our last

public meeting in July.

In Voting System Testing and Certification, we recently certified two additional voting systems; the ES&S Unity 3.2.0.0 and the Premier Assure, as was mentioned, 1.2.

We've posted many related documents, including the final test reports, the Certification Conformance and EAC's final decision to grant certification. I strongly encourage election officials and members of the public, particularly those who are interested in this process, to review all of this material. It contains important information regarding the nature of the system certified and the functionality it supports. I know, having to review these reports when they come to my desk, that it takes many, many long hours to do that, but I think it is well worth a read of, particularly, those jurisdictions who use these systems and those who are considering using these systems or have an interest in them. They contain a great deal of information.

We also recently posted the Unisyn OpenElect Voting System Draft Test Plan revision A; the Unisyn OpenElect Voting System Test Plan revision B; and EAC's approval of revision B of the OpenElect Voting System Test Plan.

Everyone Counts has successfully registered to participate in EAC's Testing and Certification Program.

The online comment tool for the revision to the 2005 VVSG, the Voting System Guidelines, Version 1.0 is available now. We are accepting comments through September 28th, 2009.

We issued a Request for Interpretation for the 2005 VVSG regarding alternative languages.

We have also posted an updated list of states that require some degree of testing and certification to federal voting system standards and that is on our Website.

Under Requirements Payments, we recently distributed $2.5 million of the FY 2008 and $1.7 million of the FY 2009 funds to Arizona; $1.1 million of the 2009 funds to Iowa; $4.4 million of the 2008 funds to Ohio; $812,771 of the 2008 funds and $706,757 of 2009 funds to Utah. Those are the new payments that went out. So we have disbursed a total of $39.3 million of the $115 million of the 2008 funds and $9.1 million of the $100 million in 2009 funds. And since this list is growing every month, I'm not going over the past disbursements. They are listed in my report, which is posted on our Website, and all of this information is posted on our Website.

I also want to acknowledge that we are seeing more activity of states now coming in for these payments after their legislatures have done the required five percent match, so we are seeing some -- a lot of increased activity in that area.

States can now apply for both the '08 and '09 HAVA funds and they can go to our Election Official Center on our site for more information.

We recently issued two Funding Advisory Opinions, 09-006 and 09-007, dealing with voter education programs and voting system maintenance training.

Under Grants, we're reviewing applications for the College Poll Worker Grant Program and will soon announce awards for the Mock Election Program. And I would like to add an aside to that, that we had some remarkable applications this year. These programs are so very well received out there, I wish -- you know we have a limited amount of money to spend on this, but it's just very encouraging, the number of very, very good applications that we got. It makes the selection process so much more difficult.

Yesterday we announced a 45-day comment period for grants to fund research on accessible voting technology and the development of pre-election logic and accuracy testing and post-election audit procedures. This is for a new grant program that was authorized by Congress. The comment period began September 1st and will continue through October 15th. For information on how to submit a comment, visit our Website. We will also be holding a roundtable at Gallaudet University on October 13th to discuss accessible voting technology in relationship to that grant program.

The meeting is open to the public and we will be providing more information about it shortly.

Under Research, Policy and Programs, we will be holding a virtual public forum from September 9th through 18th to accept comments from our Standards Board and Board of Advisors on five new Election Management Guidelines chapters. The five chapters are: Building Community Partnerships; Canvassing and Certifying an Election; Communicating with the Public; Conducting a Recount; Provisional Ballots. This is five in a series of Management Guidelines that we've released. They have been very, very well received by the election community, and we hope to continue putting more of these out. The documents and comments are open to the public for viewing during and after the virtual meeting.

Under NVRA, the FEC voted during their July public meeting to transfer the NVRA regulations to us, and we published this transfer notice in the *Federal Register* on July 29, 2009. And the transfer became effective on August 28th.

On Other News, we are seeking qualified scientific and technical experts to serve on our Technical Guidelines Development Committee. Information about the positions and the process is posted on our Website.

We held, as the Commissioner noted, the meeting of our Standards Board in August in very, very hot Phoenix, Arizona,

where we discussed the VVSG Version 1.1.  Resolutions from that

meeting are posted on our site.

And finally, the EAC has launched a YouTube channel at

YouTube.com/helpamericavote.  It features educational and

training videos on polling place management and accessibility,

contingency planning, and the federal voting system testing and

certification program.  These resources can be used to train

election workers and educate voters and other stakeholders about

the Testing and Certification Program.

That, Madam Chair, is my report for this month.

CHAIR BEACH:

Thank you.  Do we have any discussion or any questions for

our Executive Director?

VICE-CHAIR HILLMAN:

I do have a couple questions.

CHAIR BEACH:

Okay, sure.

VICE-CHAIR HILLMAN:

Mr. Wilkey, at our last meeting we had quite a discussion

about the reaccreditation of iBeta and SysTest Labs, and as a

result of the discussion we did agree that the recommended items

for improvement, and forgive me if I'm not using quite the right

language, would be posted on the Website and that the

Commissioners would get an update as to where we were on that.

So I'm wondering if you have any update for us that you could

share at today's meeting.

EXECUTIVE DIRECTOR WILKEY:

I don't, Commissioner, but I certainly will get that to you as

soon as possible, and I'll be sure to give you an update at our next

meeting.  And I thank you for bringing that to my attention.

VICE-CHAIR HILLMAN:

Okay, yes, I think it would be important to do an update at

the meeting because we had quite a discussion of it, and there

were a number of items, we didn't know at that time, specifically,

what those items were, and even though Commissioners may have

received that information since the last meeting, we don't -- we

didn't share it yet with the public…

EXECUTIVE DIRECTOR WILKEY:

Yes.

VICE-CHAIR HILLMAN:

…and I think we should.  Do you know is that information

posted on the Website yet?

EXECUTIVE DIRECTOR WILKEY:

Not yet, I am informed.

VICE-CHAIR HILLMAN:

Okay, do you know is there a problem?  Is there…

EXECUTIVE DIRECTOR WILKEY:

Not that I'm aware of. And I'll check with our division

manager and we'll see when we can get it up there.

VICE-CHAIR HILLMAN:

Okay. And then, my other question is, I notice that EAC is

calling the proposed revisions and updates to VVSG Version 1.1.

Is that because the draft document is listed 1.1? Or has a decision,

somehow, been made that the revision is going to be called 1.1?

You'll recall that the Board of Advisors made an alternate

recommendation, and we also received at least one

correspondence concerning the naming of the document to at least

recognize the 2002 VSS. So, I'm wondering is that going to be a

decision made once the public comment period is over or where

are we on that?

EXECUTIVE DIRECTOR WILKEY:

That's what I understand, that once the -- because the

document had already been developed to that version that we

would go ahead and release it. It was out there already.

VICE-CHAIR HILLMAN:

Um-hum.

EXECUTIVE DIRECTOR WILKEY:

When it comes back, we go through the comments and we make the final adoption of it, then we will -- we can consider that change then.

VICE-CHAIR HILLMAN:

Okay.

EXECUTIVE DIRECTOR WILKEY:

Okay?

VICE-CHAIR HILLMAN:

Thank you.

EXECUTIVE DIRECTOR WILKEY:

Thanks.

CHAIR BEACH:

Do you have any further?

VICE-CHAIR HILLMAN:

No I'm done, thank you.

CHAIR BEACH:

Commissioner Davidson, do you have any?

COMMISSIONER DAVIDSON:

I don't have any questions today, thank you.

CHAIR BEACH:

Okay, I don't either.  So thank you very much.

EXECUTIVE DIRECTOR WILKEY:

Thank you Madam Chair.  Thank you.

CHAIR BEACH:

We'll be moving to our next item under New Business. It will be an update on UOCAVA activities, and we will have Brian Hancock, the Director of our Testing and Certification Division, here, to give us an update.

And I also wanted to recognize Bob Kerry, the Director of FVAP, who is here at our public meeting. We look forward to working with you. Thank you.

MR. KERRY:

Thank you.

MR. HANCOCK:

Thank you Madam Chair, Commissioners, Executive Director Wilkey.

As the Chair noted, I'm here today to provide you with an update on the activities of the Certification Division and the EAC's partners to assist uniformed and overseas citizens voting by absentee ballot.

As a reminder to those listening who may not necessarily be familiar with all of the acronyms we use here, UOCAVA is how we generally reference voters covered under the provisions of the Uniformed and Overseas Citizens Absentee Voting Act. It's important to remember that the uniformed service personnel are not the only individuals covered by this Act, but that their dependents,

U.S. Government employees and contractors and all citizens temporarily living abroad are also considered UOCAVA voters.

This is also a particularly timely topic, given that we have current legislation, and that's S 1415, the Military and Overseas Voter Empowerment Act introduced by Senator Schumer, which, if passed, would provide additional assurances that UOCAVA voters are made aware of their voting rights, have an increased opportunity to register to vote, and have additional guarantees that their absentee ballots are counted as cast.

This legislation includes a section entitled "Technology Pilot Programs." The language of this section allows the Presidential designee, who is the Secretary of Defense, operating through the Director of the Federal Voting Assistance Program, to establish one or more pilot programs under which the feasibility of new election technology is tested for the benefit of UOCAVA voters. In conducting a pilot program established under this subsection, the Presidential designee is permitted to consider the following issues:

The transmission of electronic voting materials across military networks, virtual private networks, cryptographic voting systems, centrally controlled voting stations and other information security techniques, the transmission of ballot representations and scanned pictures in a secure manner, capturing, retaining and comparing electronic and physical ballot representations, utilization

of voting stations at military bases, document delivery and upload systems and, finally, the functional effectiveness of the application or adoption of the pilot program to operational environments, taking into account environmental and logistical obstacles and state election procedures.

In addition to these current legislative efforts, we should also remember that the National Defense Authorization Act, for fiscal year 2005, repealed the requirement on the Federal Voting Assistance Program to conduct an electronic voting demonstration project in the 2004 general election until the first regularly scheduled general election which occurs after the Election Assistance Commission notifies the Secretary that the Commission has established electronic absentee voting guidelines and certifies it will assist the Secretary in carrying out the project.

In 2006, Congress required DOD to report on plans for expanding its use of electronic voting technologies and required the general accountability -- or the Government Accountability Office to assess efforts by the EAC to develop Internet voting guidelines, and by DOD to develop an Internet-based demonstration project.

Finally, in 2007, GAO issued a report entitled "Action Plans Needed to Fully Address Challenges in Electronic Absentee Voting Initiatives for Military and Overseas Citizens."  Among other recommendations, GAO charged the EAC to develop and execute,

in conjunction with its major stakeholders, a results-oriented action plan that specifies, among other things, goals, tasks, milestones, timeframes and contingencies that appropriately address the risks found in the UOCAVA voting environment, especially risks related to security and privacy.

With these recent and current action items outlined, the EAC is working with its partners at NIST and at the Federal Voting Assistance Program on a number of projects.

The EAC, along with NIST and FVAP, are just beginning to explore concepts, potential implementations, the development of testable requirements and the development of special certification requirements to assist state and/or local election jurisdictions who wish to pursue pilot projects to allow various methods of remote electronic voting for its UOCAVA voters. The initial concept is to develop a manageable, small-scale effort that would be usable for UOCAVA voters, perhaps as early as the 2010 federal general election, with further larger scale pilot projects in the 2012 federal election. The most likely initial system implementation would be a manned kiosk type system, similar to that used in the Okaloosa County Florida pilot project undertaken last year.

Our partners at NIST are also doing a considerable amount of work in this area. At the present time, NIST is working on three separate documents related to these UOCAVA issues. The first

document is entitled "Security Considerations for Remote Electronic UOCAVA Voting Systems."  This document will characterize systems which use telecommunication lines to return voted ballots to election officials, including Internet voting via Websites or email. It will consider both, at home, and kiosk-based systems, with a discussion of the security issues related to each type of system. This document is scheduled for delivery in December and will be a high-level discussion but will not, at this time, contain specific testable requirements.

NIST is also working on two other documents; one on electronic blank ballot delivery, the other on best practices for IT security.  These were originally combined into one document in our project plan, although they've since been split into two separate documents.

The first of these two documents is tentatively titled "Best Practices on Electronic Transmission of Election Materials.'  This document will provide best practices for using fax, email and Websites to allow voters to request blank absentee ballots and to deliver blank ballots to overseas voters.  It will also include election procedures aimed at handling and processing these materials and security controls for these systems.

The second document is tentatively titled "IT System Security Best Practices for UOCAVA Supporting Systems."  The

goal of this document is to take the vast information already at

NIST, computer security documents and the like, and to summarize

the important information for people making decisions about

UOCAVA voting systems.  This will include material for election

officials, as well as for voting system manufacturers.  These two

documents are currently scheduled for delivery by NIST to the EAC

in the first half of 2010.

We know that numerous states are planning to initiate

remote electronic or Internet-based pilot programs over the next

several years to allow their UOCAVA voters to more easily and

efficiently cast their ballots.  The EAC and its partners are in the

very early stages of conducting some important work to explore the

best ways we can assist these states and their UOCAVA voters.

As the various aspects of this work progress, I'll keep the

Commissioners updated on what the EAC is doing in all of these

areas.  And perhaps, at some point I will also be able to hear

testimony from our partners -- directly from our partners at NIST,

and most importantly at the Federal Voting Assistance Program, on

the efforts of those agencies in these areas.

With that, I'd be happy to answer any of your questions.

Thank you.

CHAIR BEACH:

Thank you, Mr. Hancock. Vice-Chair Hillman, do you have any questions?

VICE-CHAIR HILLMAN:

Actually, I'd like to ask if Commissioner Davidson would like to go first, and then I'll follow-up.

CHAIR BEACH:

Sure. Commissioner Davidson?

COMMISSIONER DAVIDSON:

I really don't have any questions. I have been attending, I think, every meeting that has been held so far with our own staff and just reviewing, and with others, and I will tell you tell that this is a very big fact gathering process, currently, as we move forward in, you know, working with NIST and also with FVAP. So, where we're at right now is a very beginning stage, I would say, of gathering information from our three committees that we have and with other partners, as Brian has mentioned, with NIST and with FVAP.

So, it's a bigger process than what I thought it would be. I think that we're all aware of how big this process can be. And obviously, we know there is states that would like to move forward and have moved forward, so time is imperative and we are really working very hard to try to address some of these things and concerns.

CHAIR BEACH:

Thank you.

VICE-CHAIR HILLMAN:

I have a couple of questions, Mr. Hancock.  Could you explain the timing of the work that EAC is doing versus what the Federal Voting Assistance Program has been directed to do under the appropriation?  It's a little unclear to me as to whether there are simultaneous activities, or if we do something first, and then they do something after we've completed.

MR. HANCOCK:

Right.  We certainly are, you know, to a point where we're including I think each other, both agencies, in the discussions we're having on this.  I don't think it's possible to get to where we want to go without doing that.

That said, certainly the Federal Voting Assistance Program will be the lead federal agency on this.  It's their voters, you know, who will be affected by this legislation.  But, as you know, the EAC is required to do certain things.  As we have in the past, in our Guidelines project, you know, we want to work with NIST to get their best academic and scientific input into this.  We know what has happened in the past, and the concerns about remote electronic or Internet voting systems, so while we're working through this we want to be very careful to do the job right.

VICE-CHAIR HILLMAN:

But does EAC have to finish something before FVAP can get started on its pilots?

MR. HANCOCK:

I don't know that we necessarily need to finish. I think, given some of the time constraints and perhaps some of the needs of the Federal Voting Assistance Program, it's probably best to do things in parallel as much as possible. I think the key is, if a system -- if a voting system, whatever that system might look like, needs certification -- federal certification, in a state that it might be implemented in, that we do need to have a process in place to do that.

VICE-CHAIR HILLMAN:

Okay. A working group was convened a week or so ago to sort of discuss, you know, what a pilot project might look like. Were there any interesting observations made by the individuals who participated in the working group that you could share with us?

MR. HANCOCK:

Well, I think we spent almost the entire day, it was a one-day meeting, almost the entire day discussing what the scope of the project should be. Certainly, we are aware that a lot of individuals want to go as far as they can to help UOCAVA voters, you know, whether that's, you know, at-home voting, you know, voting on a laptop or PC. Certainly, others are more comfortable going with a

smaller scale project, such as the manned kiosk type system that

we talked about.  I think it will depend a lot on the timeframes,

which states perhaps want to do such pilot programs in 2010.  As

you know, we're almost there.  We're getting very close to that, as

opposed to states that might want to do longer term projects.

Certainly, the right now, technologically more palatable and feasible

option would be a kiosk type system, as was used in Okaloosa

County.  But I think in the long term, the Federal Voting Assistance

Program is likely thinking behind that, certainly.

VICE-CHAIR HILLMAN:

Okay, and I just need to loop back to my earlier question

because I want to make sure that when I answer questions about

this, I'm answering them accurately.

So, the language in the Defense appropriation says, "After

the Election Assistance Commission notifies the Secretary of

Defense that the Commission has established electronic absentee

voting guidelines and certifies that it will assist the Secretary in

carrying out the project."  And I'm taking that the project is a pilot

project for UOCVA voters, so that sounds to me like we have to do

something before Defense can carry out its pilot project.  Is that

accurate?

MR. HANCOCK:

I think we need further discussions on that.  That wasn't

necessarily the crux of the conversation that we had at that meeting

last week.

VICE-CHAIR HILLMAN:

Um-hum.

MR. HANCOCK:

You know, because it's actually language that was in some

federal legislation, we may want to bring the attorneys, the legal

departments from the EAC and FVAP in on that to make an exact

determination.

VICE-CHAIR HILLMAN:

Okay.

COMMISSIONER DAVIDSON:

On that matter, can I add something?

VICE-CHAIR HILLMAN:

Sure.  And then I just want to ask the Executive Director a

question.

COMMISSIONER DAVIDSON:

Okay, I think that we need to keep in mind when that was

passed.  And I, personally, this is only personally, but I looked at

that as FVAP doing a full process once we deliver it, the guidelines

to them.  With the HR 1415, the new legislation that has been

moved forward, it really is the one that talks about pilot.  The other

one did not discuss pilot.  So, what we really feel, as we move forward now, being cautious, that we feel that a pilot needs to be accomplished, I think we even felt that way because we didn't have the guidelines that we needed from NIST to be able to pass on and certify to FVAP for their program to proceed.  So, we felt that even before the legislation came out, the only way we could really start our process is with a pilot, because a pilot is a learning project.  And that's the reason why we wanted to scope it small the first time, and obviously once we started seeing the legislation, what we felt like we were in tune with was this new legislation coming forth.  So that's my personal opinion.  What it's worth is a cup of coffee and maybe 10 cents.

VICE-CHAIR HILLMAN:

You can get a 10 cent cup of coffee?

COMMISSIONER DAVIDSON:

No, plus the ten cents.

VICE-CHAIR HILLMAN:

Oh, okay.  Mr. Wilkey, then, I would ask if you could please follow up on a couple of things.

Number one, clarity on whether the more recent legislation supersedes the language in the Defense Authorization Act for fiscal year 2002, which has apparently been changed because it struck the language "November 2004" and just refers to, "The first

regularly scheduled general election for federal office which occurs after the EAC notifies the Secretary," et cetera. So, does more recent legislation supersede this? And to the point of a pilot project, you're right Commissioner Davidson, but the legislation talked about a demonstration project, and I suppose -- I'm sure in Federal Government somebody has split hairs and defined a pilot project one way and a demonstration project another way, but they sound pretty darn similar to me. So, I just want to make sure because we do, on occasion, get questioned about this and criticized about this. And as we head for the 2010 election cycle, I'm sure it's going to come back up again as to which came first, the chicken or the egg or, you know, is the cart before the horse, or where are we on that?

For the record, shaking your head means?

EXECUTIVE DIRECTOR WILKEY:

I will be happy to follow-up on that Commissioner.

VICE-CHAIR HILLMAN:

Thank you so much.

EXECUTIVE DIRECTOR WILKEY:

All right.

CHAIR BEACH:

Okay, is that all?

VICE-CHAIR HILLMAN:

Yes, thank you.

CHAIR BEACH:

Okay.  Mr. Hancock, you mentioned the NIST guidelines that will be due or be available for review in December.  Can you explain in a little more detail how they would better serve UOCAVA voters, those guidelines that are coming out?

MR. HANCOCK:

Yes Madam Chair.  I think that document, as I said, will be at a fairly high level and, you know, not be at the level of necessarily testable requirements that you would want to see if you had a specific voting system in, but they will give the EAC, election officials, voting system manufacturers and frankly, you know, everyone out there, all the stakeholders, a good idea of what NIST thinks these systems should look like, some of the security requirements of these systems, and perhaps how they should be implemented.

CHAIR BEACH:

So more or less providing a roadmap for states that elect to move forward in this area?

MR. HANCOCK:

Exactly, and I think the other two documents will follow along.  They're, you know, I would term sort of more best practices in IT management and IT security, that type of guidance.

CHAIR BEACH:

Okay. And also, with these three projects that you're

working on, to the extent how are you involving election officials or

other stakeholders for that matter in this process?

MR. HANCOCK:

We will invite as many stakeholders as possible. Again,

we're at the very early stages, but at the meeting that we discussed

last week we did have David Wagner from our TGDC there. We

had members of our Standards Board and Board of Advisors, as

well. And we will continue, certainly, to have election officials and

all others participate in the process.

CHAIR BEACH:

Okay, thank you. Is there any further discussion? Okay,

thank you.

MR. HANCOCK:

Thank you.

CHAIR BEACH:

We'll move to the next item under New Business. It will be a

panel discussion of the July 19, 2009, NASS Resolution on the

Help America Vote Act of 2002 Grants and Payments Distinction.

As I said, in July this was passed unanimously by the

National Association of Secretaries of State. This Resolution

concerns the EAC's treatment of HAVA funds, particularly the

characterization of requirements payments as grants.  Since this Resolution was passed unanimously, it demonstrates the importance of this issue, and I felt it would be prudent for EAC to be informed of the basis for this resolution and have a public discussion.

Before we begin, the Commission has previously taken steps and had made decisions on this matter.  And I would like to now turn to our Executive Director, Tom Wilkey, to maybe provide some background and history on this issue.

EXECUTIVE DIRECTOR WILKEY:

Thank you Madam Chair.  I just would like to go through a series of a chronology, if you will, of going back to the very beginning, even before the Commission was functioning, to talk about this issue and some of the things that have come down the pike, so to speak, regarding this whole issue.

First of all, in the very beginning, the General Services Administration distributed HAVA funds prior to the function of the EAC.  They were the agency under the statute that was required to distribute the initial funds that went out to the states.  In 2003, GSA, the General Services Administration, sent award letters to the states, and the letter stated that the OMB Circular 87-A102, or the Common Rule, and OMB Circular A133 Single Audits, applied to the requirements payments.  The Common Rule is a uniform set of

rules applied by the Federal Government to grants, with the exception of a few types of block grants. Then again, on June 11, 2004, the Commission took a tally vote agreeing to apply the OMB Circulars to requirements payments. Consistent with GSA's letter to the states and the 2004 tally vote, EAC sent award letters to states reaffirming that the OMB Circular applied. EAC made the application of these circulars a part of the information provided concerning this funding program in the Catalogue of Federal Domestic Assistance 90.401 covering the Help America Vote requirements payments. And then, in September 2008, the General Accounting Office, the GAO, issued Opinion B 316915 regarding the obligation of requirements payments. In this opinion, GAO confirmed that the EAC was correct in obligating HAVA funds upon the passage of appropriations, since requirements payments are formula grants. In the 2009 Joint Explanatory Statement, requirements payments were referred to as "grants."

And that's kind of the chronology of some of the things that have come down over the years, that form the basis of the opinions that the Commission has relied on, and the actions that the Commission has taken.

CHAIR BEACH:

Okay, thank you. Okay, at this time I'd like to invite our two panelists. First, we have Mr. James Kennedy, the Assistant

Attorney General for the New Hampshire Department of Justice.

And second, we'll have Mark Abbott, who is our Director of Grants.

And Mr. Kennedy, today, is representing the Secretary of State of

New Hampshire's Office and will be discussing the background

concerning the Resolution and New Hampshire's perspective.

You will each have ten minutes to provide your oral

comments and then be available for questions from the

Commission.  You can start Mr. Kennedy.

MR. KENNEDY:

Thank you Madam Chair, members of the Commission, and

Executive Director Wilkey.

My name is Jim Kennedy.  I'm an Assistant Attorney General

with the New Hampshire Department of Justice.  I serve in the Civil

Bureau of the New Hampshire Department of Justice, which means

I work primarily in civil litigation, and also serve as Counsel to New

Hampshire Secretary of State William Gardner.

I come here today to express support on behalf of the State

of New Hampshire, with respect to the NASS Resolution that was

passed in July of 2009.  With that, I'm going to request that this

Commission affirm, support, or otherwise, respect the decision that

was made, or the Resolution that was passed by NASS in July of

2009, and respect or observe the significance of the decision,

which required that the EAC distinguish the terms "grants" and

"payments" in correspondence or letters that it issues on its

Website, or otherwise, to the states, regarding grants and

payments.  My second request will simply request that the EAC, in

operating under HAVA, specifically with respect to its auditing rule,

operate in the confines of what HAVA requires the EAC to do.

Now, I have a brief statement relating to both of those

requests and will address those, each in turn.

First, as you mentioned Madam Chair, in July of 2009, the

NASS organization passed a Resolution distinguishing the terms

"grants" and "payments" as they exist in HAVA.  Now, the

fundamental distinction between a grant and a payment, under the

Help America Vote Act, is the discretion, the discretion that applies

to the EAC in issuing a grant or a payment.  The former, the grant,

the EAC has discretion as to whether or not to award the grant to

the applying entity, in seeking that grant fund from the EAC.  As we

see under Section 271(a), relative to the Research and Voting

Technology Grant, the EAC has discretion as to whether or not they

provide that grant to any applicant.  You, actually, have to apply to

this -- to the EAC, in order to be awarded the grant, the same as

under Section 281(a), with respect to that grant offered by the EAC

under HAVA, the Pilot Program for New Technologies and Voting.

You have to apply to that -- to the EAC, in order to be awarded the

grant.  Here again, the EAC has discretion as to whether or not it's

going to issue the grant.  The third is under 295(a), the National

Student and Parent Mock Election Grant Program, under the EAC,

which again, the EAC has absolute discretion whether or not it's

going to award the grant to the applicant.  The third I won't get into,

but that's generally the Department of Human Services' grant that's

available through that -- through that department and it's cited as to

the applicable statute that DHHS has with respect to awarding

those grants under the DHHS statute.  But again, that cites a

statute outside of HAVA relative to that Department's authority to

issue the grant there.

Payments; payments are non-discretionary.  The EAC has

no evaluative role as to whether or not to issue a payment, under

HAVA.  We learned this, and this was supported, actually, in a

September 25, 2008, letter, I believe, cited by Executive Wilkey

here, by the GAO.  And in that letter, the GAO actually states that

the EAC has no evaluative role relative to issuing payments or, as

they call them, requirements payments, under HAVA.

Requirements payments are called requirements payments,

because they are required to be paid or disbursed to the states.

Now, in 2003 and 2004, as Executive Director Wilkey has

already explained, the GSA, actually, issued the payments, the first

two payments going out to the states.  Those were required to be

paid to the states under the Help America Vote Act.  There was no

evaluation on behalf of this agency, the EAC, or the GSA for that

matter, as to whether or not the states were entitled to those

payments.  Those were required to be paid.  And look very closely

at that September 25, 2008, GAO opinion, which absolutely

expressly states that the EAC contains no evaluative role

concerning requirements payments under HAVA.

So, thus, the fundamental difference between a grant and a

payment, under HAVA, is discretion.  The former, the EAC, as I

said, has discretion as to whether or not to "award" the applicant

the grant that they seek.  The latter, the GSA, in distributing the

funds under Title I and Title II to apply Title III of HAVA, the GSA

had no discretion as to whether or not to award those.  So, again,

the issue there, between payments and grants, and grants and

payments, is discretion.

Why is this significant?  Why is it important that there is a

difference between grants and payments?  Well, for the State of

New Hampshire, we're considering this important with respect to

auditing, the auditing power under Section 902 of HAVA.  Now

under Section 902 of HAVA, it explains the EAC's role with respect

to auditing, other entities that may issue grants with respect to

auditing, and the Comptroller General's role with respect to

auditing.  The first thing that I note with respect to the EAC's role, or

other entities' roles with respect to auditing, is that it's permissive.

The EAC has no mandatory role to conduct any audit in disbursing any funds whatsoever under HAVA. It says, "The agencies which grant funds under HAVA may," that's permissive, "may conduct an audit." And then, it expressly states what kind of audit it can do. The language in 902 is expressly clear. They can review the books relevant to the payments or the grants that are disbursed to the state or the entity that has applied for the grant. They have no authority, whatsoever, under HAVA, to go outside the bounds of HAVA, to determine -- in conducting an audit or examination of the states.

Now, when states receive payments under Title I or Title II from the GSA in 2003 and 2004, they're entitled to know what rules apply. And when we determine that states -- to determine what rules apply to the funds that we receive, we look at the Help America Vote Act. And that Act expressly defines what auditing power the EAC has, or any other entity, that may distribute funds under HAVA relative to conducting an audit.

The second point that I'd like to make, with respect to issuing audits by the EAC, is that they not exceed their statutory mandate in conducting these audits. That is, that they stay confined to the Help America Vote Act when conducting these audits. Why is that that they must -- that I stress that they must stick to their statutory mandate? The fundamental reason is is that the EAC, perhaps

unlike any other executive agency, that certainly I have encountered, has no rulemaking authority. This is absolutely paramount to the discussion, and should be paramount to the discussion of the EAC's permissive, not required or mandatory, but permissive auditing role.

Now, let me just step back a minute under 902. There is a mandatory audit that's required, with respect to payments or grants that are issued by the EAC or awarding agency, and that's the Comptroller General. The Comptroller General has a mandatory audit that's required, but not the EAC, or any other. It's permissive.

Now, as I stated, with respect to the EAC conducting the audit, they ought to, and are actually required to, stay within the confines of HAVA. They have no rulemaking authority, and have no basis, statutory or otherwise, to go outside HAVA to conduct this permissible review of the states spending money.

Now, why is it significant that they have no rulemaking authority? It's fundamentally significant, because for the EAC to take, as Executive Wilkey has expressed, for instance the A-87, into its auditing -- permissible auditing review, the reason that it's significant is because the EAC would actually have to enact rules to apply the A-87, or any other agency would have to apply rules to determine how the A-87 applies to the specific instances under HAVA.

Now as I say, I'm using A-87 as my first example, because under requirement number seven of A-87, it's very important that the Commission understand this, a fundamental requirement that the Office of Management and Budget set forth with any agency applying A-87, is that the agency issue regulations to apply A-87. Look at requirement seven. I have it here for the Commission to review, I would be happy to submit it, but it's very fundamental under A-87, requirement number seven, is that the agency applying A-87, issue rules. And we know that under Section 209, the EAC cannot issue rules, and therefore it cannot apply A-87.

The same as through A-133 -- OMB Circular A-133, the agency is required to issue rules prior to enacting that OMB Circular. Because the Commission cannot do that, it cannot apply the A-133. The same, respectively, I would say apply to the Common Rule. And while I'm not -- don't think that we're going to down this road today, the same would apply to 31 U.S.C., and also for other reasons, that 31 U.S.C. wouldn't apply to the EAC's auditing role here.

Now, even if the A-87 were to apply to the EAC or another auditing agency or authority that has provided funds to states or other entities, even if A-87 were to apply, it would not apply to payments or requirements payments under the Help America Vote Act. A-87 applies to awards. And if you look at the definition

sections of A-87, you'll see that awards means "grants" -- and we've already had this discussion about what grants is -- grants, a difference between grants and payments and the expressed differences set forth in HAVA.  Congress made very clear that grants are grants and payments are payments.  They did not intermingle the two terms.

The second would be cost reimbursements.  There's no cost reimbursement here, to states.  That is not applicable and that's what the OMB Circular applies.  The third would be other agreements.  And that may pause you for a moment, but actually, if you look at what the EAC has done with the issuance of payments, or the GSA in the EAC's administration of the issuance of payments to states, is that they've not engaged in any agreements with states with respect to issuing payments.  In fact, the Executive Director Wilkey, on August 21, 2008, stated in a letter to the United States Department of Justice Bradley that the EAC has historically treated requirements payments as non-discretionary formula grants.  Now, while I don't agree with the term "formula grants," he states, relevant to this conversation, is that he never entered -- that the EAC has never entered into "agreements" with states to obligate funds or to issue payments.  And so, here again, A-87, even if applied to requirements payments, or if the EAC even had the authority to do so, of which the State of New Hampshire asserts

that it does not, because it has no rulemaking authority, it wouldn't apply to payments, because it's not a grant, payments are not grants, they're not cost reimbursements and they're not other agreements.

CHAIR BEACH:

I'm sorry Mr. Kennedy, your time's expired. Could you wrap up please?

MR. KENNEDY:

Certainly. And so, fundamentally, to kind of recap, Chairman and members of the Commission, is that the fundamental difference between grants and payments is discretion. That is important because it goes to the EAC's evaluative auditing, permissible role that the EAC may take, but by no means Congress required that the EAC take, auditing. Auditing for the EAC is expressly defined in the Help America Vote Act under Section 902, and the State of New Hampshire respectfully requests that the EAC confine itself to that conduct, and that the EAC hereto affirms, endorses, or otherwise observes the significance of the Resolution passed by NASS in July of 2009.

Thank you.

CHAIR BEACH:

Thank you. Mr. Abbott?

DR. ABBOTT:

Thank you Madam Chair, Commissioners, Executive

Director Wilkey. I am, notwithstanding my title, Director of Grants,

Management and Oversight here at EAC. I arrived in April of this

year and took a look at this very issue. And I thought I would

speak, first, about the chronology that Executive Director Wilkey

talked about and some of the bases for the decisions we made in

that chronology.

I think the first thing we do, and did, is look at the statute to

see what it says. And it's arguably ambiguous. It does talk about

payments. That's not the only place we have to look to figure out

how we need to administer these funds. So, our role, and my role

in particular, is the wise stewardship and oversight of the federal

dollars that go to states. So, we look at a couple other places as

well, to see if we can figure out what intent here is, and the main

place we look is to the statutory language in the appropriations law.

So, the statute is the vehicle that we drive to implement HAVA, but

it doesn't provide any money. Our financing for HAVA comes from

yearly appropriations, and in that appropriation law you can glean

an intent for how we're supposed to administer these funds.

And since 2004 up through 2009, the conference reports, the

public laws have been unambiguous about what the payments are.

They are, in fact, grants. And they talk to us as if they are grants.

And I can quote a few. In conference Resolution 95, "Funds are

provided mostly for grants to states -- states and localities to improve voting technology and election administration." And they're talking about the requirements payments, in particular. In FY 2005, we said further, "This appropriation finances grants for requirements payments." So, when I look at that language, and we're talking about the appropriators here, the folks who give us our yearly budget, they are telling us we're making grants for payments. We cannot ignore that.

We go to the next place that we look, that's OMB. OMB, they're the folks who put our budget forward. Without OMB's approval, there is no EAC budget each year. In that language they tell us very specifically we will be making grants for requirements payments. Again, it's hard to ignore the language from the President, since they are the ones that in the end approve and send our budget forward to Congress. I have some other budget interpretations that we can talk about, but I don't think I need to here.

And then, of course in terms of audit requirements, A-133 says pretty specifically, that if a state spends more than $500,000 it's subject to a federal audit. And we do follow A-133. We actually get audited ourselves by A-133. So, when the auditors come in to look at how we administer the federal funds, and then report to Congress on how we do that, they follow A-133, which says pretty

specifically anyone that we give funds to, in terms of over $500,000, is subject to a federal audit. And those audits are the audits conducted by our Inspector General.

Now, in terms of the kinds of grants we make, we make formula grants. I would stipulate that the requirements payments are a formula grant. And this year, after my arrival, one of the first things we did is we changed a little bit how we talk about the payments. We started calling -- we started issuing Notice of Grant Awards. Those grant awards have very specific requirements, that if you accept the funds you agree to follow. That was probably a little -- not as explicit in our earlier communications with states, though we did communicate definitively on the fact that we're following the Circulars. And the reason we did that is, and the basis for doing that, is quite simply the definition of a formula grant. And I'll read it to you now. This is from the CFDA, which is responsible for telling the public all the types of federal assistance available to states and other individuals, and the forms that it takes. This says, "A formula grant includes allocations of money to states, or their subdivisions, in accordance with distribution formulas prescribed by law, or administrative regulation, for activities of a continuing nature not confined to a specific project. Examples of this type of assistance include transportation infrastructure grants

designated by Congress, such as community development block grants," et cetera.

There is probably not a better definition of what a state plan is to administer HAVA. State plans are put together at the state's discretion. They're intended to be ongoing. They don't cut off at a certain point in time. And the states have a tremendous amount of discretion of what they do within their plan, as long as they follow what is prescribed in the statute or the HAVA. And they're not time limited, which would be the difference between a project grant and a formula grant. So there is a formula. It's based on voting age, population. The money does go out. We are required to give them those funds, but if they actually don't do what's required in the plan, in the statute, we won't issue the funds, because we have a responsibility to make sure the money is spent in accordance with HAVA.

Now -- and you can also argue this by looking at the other types of definitions of federal assistance. This is the universal federal assistance, and there are two kinds of payments that are made. Neither payment, in the universe of federal assistance, are made to states; they're made to individuals and private entities. Social Security payments is a payment that is unrestricted. You get your check; you can spend it how you want. Right? Direct payments for a specified use might be, arguably, what a

requirements payment is if we're specifying a use, except for the

fact that that goes to individuals and private entities. And probably

a good example of that would be the "Cash for Clunkers." If you're

an orchard and they got wiped out in Katrina, there was money

made available under TAP, which was a program in the

Department of Agriculture that allowed you to replace your orchard.

But it didn't say you had to follow A-87 or A-110 or any other

federal regulations that we use to administer funds and assistance

to states. You get the money. You do that. It would be

unreasonable for an individual to have to follow those kinds of

guidelines. Those are the definitions in the usage for payments

under the CFDA and that's what we've been following here.

I will stop there and take questions, if you have any.

CHAIR BEACH:

Okay, thank you. Vice-Chair Hillman, do you have any

questions?

VICE-CHAIR HILLMAN:

I sure do. First of all, I need to say that I find it odd and I'm

somewhat troubled that we are discussing a Resolution passed by

the National Association of Secretaries of State and yet NASS did

not see fit to designate an authorized spokesperson to come and

speak about the Resolution. My experience with the Association

over the past several years is that when they are fired up about something, we know it.

I did get a copy of the Resolution but I did not see a letter. Was there a letter from NASS accompanying the Resolution?

CHAIR BEACH:

No, there was not a letter.

VICE-CHAIR HILLMAN:

So, they did not even write a transmittal letter to inform us about the Resolution.

Secondly, I'm a bit disturbed -- well, let me ask this to Mr. Kennedy. Secretary Gardner, is he well? Is his health good?

MR. KENNEDY:

He is. Thank you.

VICE-CHAIR HILLMAN:

Okay. So, I am very disturbed that Secretary Gardner, who advanced this Resolution and who has been on this point for a long time did not even respect enough to be here himself to speak to his own concern. And I understand that he wanted to have his Counsel speak to it and he could have come with a whole entourage, and I see that the state election director is here, but that Secretary Gardner, himself, would not be here to speak to his own Resolution, troubles me.

I believe in humane treatment of animals, and on this issue we are definitely beating a dead horse.  It's come up time and time again, but since I approved the agenda, I am more than happy to ask questions.

So, to you, Mr. Kennedy, are there other state Counsels, whether from whatever structure states might have, Counsels to Secretaries of State or Attorney Generals of others, who have written opinions that are similar to yours about this issue, are you aware?

MR. KENNEDY:

Not that I'm aware of.

VICE-CHAIR HILLMAN:

Okay.  And we have not, as I've stated earlier, received anything from the National Association of Secretaries of State on this issue, so I will have to confine my questions to the State of New Hampshire.

What is the fundamental, bottom line, blow through all the legalese and interpretations, and beat up on EAC all you want, about stick within HAVA and do what you're supposed to do, what is the bottom line for New Hampshire about this?  Is there something we're doing that's preventing New Hampshire from spending its HAVA funds?

MR. KENNEDY:

Thank you, that's a very good question, Commissioner Hillman.  Actually, New Hampshire was audited last year by its state auditor, and in doing the state audit, the Legislative Budget Assistance who came in and audited the Secretary of State, reviewing the HAVA function that the Secretary of State performs, raised questions concerning A-87 and its applicability.  With respect to that audit, the LBA cited, as authority, the EAC's Website…

VICE-CHAIR HILLMAN:

The LBA?

MR. KENNEDY:

I'm sorry, the LBA is the New Hampshire auditing legislative oversight -- auditing organization that audits state agencies throughout the State of New Hampshire, and so, that's the Legislative Budget Assistant for the State of New Hampshire.

So, in the audit of the Secretary of State last July, that was released to the public, the LBA cited the EAC "Frequently Asked Questions" portion of its Website, referring to the A-87, and that it enforce and applies that to payments under HAVA.  Now, of course, we took exception to the LBA's reliance on the EAC's citing that A-87 applies, and actually stated that it does not apply, for the reasons that I presented here, orally, today, and also in my written communication with this committee, absolutely demonstrate that

there is no authority for the EAC to apply A-87, fundamentally,

because it can't create rules, which is a requirement of the A-87.

VICE-CHAIR HILLMAN:

So, Mr. Abbott, since he's put that first issue on the table,

can you respond to his contention…

DR. ABBOTT:

Sure.

VICE-CHAIR HILLMAN:

…that we're out of bounds here?

DR. ABBOTT:

We, probably, can respond in two ways.  First of all, it's not

entirely clear, at all, that we can pass a rule about how we

administer our funds.  HAVA does talk about not impinging on any

rules that affect, arguably, how states administer elections, but

that's not what we're doing here.  We're following tried and true and

following the requirements of OMB.

Now, as to whether or not we can follow A-87 without

publishing a rule, OMB is actually pretty clear on that, we can.  It's

better to have a rule.  It's better to cite the Common Rule in a small

paragraph that we publish and go through, but it's not necessary.

When you do not have that rule it defaults to the one published by

OMB, and by reference to OMB's rule that they publish, we can use

that reference, and that is what we have done in our grant awards.

VICE-CHAIR HILLMAN:

Has New Hampshire ever asked Congress to clarify any of the ambiguity that has been cited in today's presentations?

MR. KENNEDY:

Commissioner Hillman, members of this EAC, no, because we find no ambiguity in HAVA. We find HAVA to actually be expressly clear and absolute with the terms that it provides. We find -- actually respectfully disagree with Mr. Abbott concerning what Section 209 says relative to the EAC not enforcing any rules relative to any requirements that it would put upon states. And this is adding a rule and a requirement upon states with respect to its, as I say, permissible auditing rule here. I mean, the Comptroller General is the one who does the mandatory audit, not the EAC.

VICE-CHAIR HILLMAN:

Mr. Kennedy, what is your reaction that in all these years no federal entity, whether in Congress or in the Administration, Treasury, OMB, GAO, or any other entity, has said, "EAC stop auditing the states?"

MR. KENNEDY:

Well, the EAC, certainly, as I said, Commissioner Hillman, absolutely has a permissible auditing rule. So, I don't think it would be appropriate for any of those entities that you mentioned to state

that the EAC stop auditing states because, as I stated, they have a permissible role under Section 902…

VICE-CHAIR HILLMAN:

Are you asking us?  But it sounds like New Hampshire is asking us to stop.

MR. KENNEDY:

Absolutely not, I'm just asking -- the State of New Hampshire is respectively requesting that the EAC, when conducting its permissible audit, stay within the bounds that Congress intended it to be within in…

VICE-CHAIR HILLMAN:

Which is?

MR. KENNEDY:

Which is 902, if you look at reviewing the general data relative to disbursements of payments or grants under the Help America Vote Act.

VICE-CHAIR HILLMAN:

But give me a "for example."  What experience has New Hampshire had where EAC has -- and we're only speaking about New Hampshire now.  There are 54 other entities that are, as of today, silent on this issue as a result of this Resolution.  So, again, I'm only speaking to New Hampshire.

MR. KENNEDY:

Well first, with respect to New Hampshire, but also with respect to the Resolution that passed by unanimous consent, which I take is a very expressly clear Resolution, but that being said, with respect to New Hampshire it is -- we are expecting the EAC to stay within the bounds of HAVA and to do -- and to act in accordance with payments and to act in accordance with grants, and to understand the difference. Formula grants is not -- is not an appropriate definition for payments. If Congress had intended payments to be called "formula grants" under this definition cited by Mr. Abbott, that's what they would have done, but instead they called them payments. And I would -- New Hampshire would respectfully submit that the direct payment definition, although we didn't cite it, certainly provides more guidance and in line, absolutely, with the authority for the EAC to conduct a permissible audit.

Something there too, I mean, if you look at Section 902 of the Help America Vote Act, let me just get it here for you, you'll see there's a requirement for the states, in receiving -- or other entities receiving funds under HAVA, and that's a recordkeeping requirement. And we're required to keep, you know, diligent records in line with…

VICE-CHAIR HILLMAN:

In accordance with what?

MR. KENNEDY:

> In accordance with HAVA.  And so, you can actually…

VICE-CHAIR HILLMAN:

> No, I'm saying you would keep your records in accordance with what?  As your interpretation of 902, you would keep your records in accordance with what?

MR. KENNEDY:

> With exactly what 902(a) says.  There's a recordkeeping express requirement…

VICE-CHAIR HILLMAN:

> Right, but how would you…

MR. KENNEDY:

> …under 902(a).

VICE-CHAIR HILLMAN:

> …keep those records?  By state -- I mean, obviously, the State of New Hampshire has, I'm sure, regulations it imposes on its state agencies about how they keep records.  So, your interpretation under 902, the states would keep their records according to what format?

MR. KENNEDY:

> In accordance with general accounting principles.

VICE-CHAIR HILLMAN:

I see.  All right, I just want to switch over, so I don't take up too much more time, and I want to go to Mr. Abbott.

Assuming that we said, "Okay, fine, let's call a grant a grant when it's a grant and a payment a payment and -- under HAVA a payment."  What would that, substantially, mean?

DR. ABBOTT:

Setting aside the fact that -- the practicality of doing that, which would require, if not notification, then certainly -- if not permission, then certainly, notification from our appropriators who give us money to make grants each year, it would -- the implication would be, we would not have a standard -- a normal standard on which to audit the funds against.  The Federal Assistance has a set of standards which are encapsulated in the Circulars, which are common to all federal assistance, that ensures wise stewardship of taxpayer dollars.  Absent that we would not have one single standard to apply across all of the states.  That's the short answer.

VICE-CHAIR HILLMAN:

I want to go back to, you were referring to CFDA, and if you could just read that again, and then explain what CFDA is.

DR. ABBOTT:

It's the Catalogue of Federal Domestic Assistance.  And it's charged with making available and showing the public where taxpayers' dollars are spent.  And it includes, basically, every

program where funds are appropriated -- authorized and
appropriated because you can find programs in there that do not
have an appropriation for a given fiscal year and it will say zero
dollars available.  But if there is a program in there that was signed
into law and eventually was funded, it will be in the CFDA, if it's a
domestic assistance program.  They have a series of types of
federal assistance available and they have definitions and
examples of those -- each of those types.  I think I started to read to
you some of the definitions earlier; the formula grant, the project
grant, the direct payments for a specified use, which I think they're
arguing they want to be included under.  Direct payments for
unrestricted use, direct loans, guaranteed insured loans and
insurance, and there's a few other small ones that are even less
applicable.  But those are the categories for federal assistance as
we know them as administered by federal agencies.

And I may have lost the thread of your question in that
explanation.

VICE-CHAIR HILLMAN:

Well I was just trying to get to definitions.  You gave some
examples of direct payments when certain Circulars have to be
applied and not, the difference between a direct payment of
assistance going to an individual versus awards being made to

entities.  And I'm just trying to get clear in my head where these different definitions might be…

DR. ABBOTT:

Right, so these…

VICE-CHAIR HILLMAN:

…and whether, you know, are we the first agency to come into a situation where a state believes the way the responsible federal agency is administering the funds is…

DR. ABBOTT:

I couldn't speak to that directly, but I can speak to the notion of formula grants, and I have direct familiarity with several types of different formula grants which look exactly like the grants that we make as payments.

Formula grants usually have a plan associated with them. Formula grants usually do not require approval, because it goes to kind of a state's right issue here where the state knows best what they want to do within the confines of the law as prescribed by Congress.  So, they set forth a plan and then we put money against that plan, but we don't approve those plans.  That's actually fairly commonplace.  And those plans can be very, very general, where there's almost no detail, or they can be very specific.  In this case, the plan has to be fairly specific in order to qualify to get the funds, because HAVA lays out a lot of different things you have to do.

But back to the definitions, the first part of your question, these are encapsulated definitions, so it's not a legal citation. I'm sure that there's a lot more behind this that we could spend time on, but I'm sure that these are accurate. "Direct payments for a specified use includes financial assistance from the Federal Government provided directly to individuals, private firms and other private institutions to encourage or subsidize a particular activity by conditioning receipt of the assistance on a particular performance by the recipient." I can tell you that in no way do we condition a specific piece of performance on the states under HAVA; it's the exact opposite. We give general guidance. As a matter of fact, after they've met Title III of HAVA, they're free to do whatever it is they want to do to improve federal elections, and there is no definition of what that is. So, that is the exact opposite of a payment definition.

An example of that would be a Section 8 housing voucher. So you get a flavor for the kind of things that we're trying to shoehorn a payment for HAVA under. A direct payment with unrestricted use might sound better, but that has a very specific purpose as well, and that's to individuals. And that's for things like I mentioned earlier, your Social Security payment, Medicare payment, other things that go directly to you, as an individual. Well, actually, Medicare would have a specific use. Department of

Agriculture uses those primarily for subsidies for farmers and other

things like that.  So again, it's kind of an apples and oranges

comparison to what it is we're trying to do here.

In terms of whether or not we should be auditing, I don't

think that we could ask anyone on the Hill whether or not it's a good

idea not to do audits.  And if it's permissive, that means you may do

them.  And to what standard we should do them is abundantly

clear; we need to do them to the OMB Circulars.  That is the

opinion of the IG, the Inspector General, that has its own set of

requirements in the statute that they follow in doing audits of us and

of our grantees.  It's the opinion of OMB.  It's certainly the opinion

of our appropriators who give us the money every year to do this

program, without which there would be no payments to the states.

And GAO has been fairly clear on this as well.  And GAO lawyers,

we have asked for opinions on this, in the chronology that

Executive Director Wilkey mentioned, because there was some

ambiguity about this, and so, we did due diligence and we have the

opinions.

VICE-CHAIR HILLMAN:

Okay, and just my final comment before I end this round.  In

closing, I guess I want to say, first of all with respect to an Inspector

General, the Help America Vote Act requires that the Commission

have an Inspector General.  So, it's not like we elected to have an Inspector General.

Secondly, never in my wildest imagination could I see Congress appropriating over $4 billion, that the Election Assistance Commission is responsible for, without expecting us to do every bit of due diligence and follow every bit of both common sense and established law and procedure to make sure that those funds are properly accounted for.  And that is what we have been doing without infringing on the right of the states to proceed with improving elections, as they see fit.

And that was my earlier question, Mr. Kennedy, as to -- and you didn't directly answer it -- what is it that the administration of these funds has done to prevent New Hampshire from improving the administration of federal elections?  And so far as I hear, the answer is, none; that there has been no infringement on New Hampshire's ability to do this.  And so, I just have to say that as a Commissioner, I am responsible for making sure that EAC can remain fully accountable to our appropriators, and that this accountability is as transparent as it can be, and I know Congress had a very good intention as to why it instructed in the law that we have an Inspector General.  And so, I do appreciate the perspective, but I'm not hearing what has happened that the way we have either described the HAVA funds, made them available to

the states, has stopped New Hampshire from improving the administration of federal elections.

Thank you.

CHAIR BEACH:

Okay, before I turn to Commissioner Davidson, I just wanted to make a correction. Leslie Reynolds, who is the Executive Director of NASS, did transmit an email to me that contained the NASS Resolution after it was certified. So, EAC did receive, as would be comparable to a transmittal letter, a copy of the Resolution.

VICE-CHAIR HILLMAN:

But did the letter speak to the Resolution? I know it said it passed a Resolution, here it is, but did they speak to the essence of the Resolution?

CHAIR BEACH:

No.

VICE-CHAIR HILLMAN:

Thank you.

CHAIR BEACH:

Okay, Commissioner Davidson?

COMMISSIONER DAVIDSON:

And I also want to say that I received a phone call, I believe it was on a Saturday or a Sunday, from, at that time the President, Pedro Cortes, telling me there would be a Resolution…

CHAIR BEACH:

Okay.

COMMISSIONER DAVIDSON:

…saying that it would be coming to us.  He didn't go into great details of the Resolution, but he told me there would be a Resolution.

CHAIR BEACH:

Okay.

COMMISSIONER DAVIDSON:

I believe I reported that at one of our staff briefings.  But anyway, I'll try not to go over the same thing, but just for the record, I think it's important to note that also, probably, it was over two years ago, and I don't have the dates of it, but Commissioner Hillman was there, along with myself, and two other Commissioners that is no longer with us at the EAC, we kind of took this issue to OMB, to really clarify it, because we were hearing from states that they felt that grants and payments were the same thing.  And in reviewing it -- and so, we went to OMB and discussed it and basically my memory, because I was -- coming from the state area, I was kind of fighting in the state area of, "Well, okay, let's look at it

separately." But basically, in that meeting we were told no matter whether you call it a grant or you call it a payment, it's the same thing. You've got to report it, it all falls underneath the federal requirements, that you have to record the obligations and you have to do the accountability of it and that it is auditable, and so -- that it falls under the Common Rule, all of the regulations that were set forward.

So, at that time I felt like I lost the battle, that fight, and we proceeded to carry forth. And, as we move forward, seeing that our -- not only our grants management section of the office and our attorneys at that time, but also the Inspector General, what they were all telling us is, "Okay, this is the way the facts are," and as Mr. Abbott has suggested today, we followed those to the point.

And I think one of the things that I think is important for Mr. Kennedy and NASS and the Secretaries to know, that we're also audited. And we went through our first really in-depth, full-phased financial audit a year ago. And we flunked, to put it bluntly. And in that process we learned that there was many things that we didn't have in place; rules and procedures, how states you know -- that they had to follow these. So, whether you want to call it, that we have rulemaking authority, or whether we have procedures and policies, whatever you want to call it, we were -- that was one of the items where they marked us down in, that we didn't have those.

So, I think that it's a problem if we -- we're audited the same way

that you're audited, and when we're found to be guilty of not having

those procedures and policies in place, that makes it really, I guess,

troubling when I come to make sure that our states know that we do

have to follow that.

But when your state audit was done, Mr. Kennedy, and you

said that the state audit found you to be not in compliance, can you

go into that just a little bit more? I mean, that was your state

auditors, it wasn't -- we didn't have anything to do with that audit.

Our IG didn't go out and do that audit. EAC has not asked, you

know -- we have the authority to ask for an audit if we thought there

was something wrong with your reports. We have not asked for an

audit on your state. Can you tell me what your state audit found?

MR. KENNEDY:

Our state audit found that there may have been a non-

compliant issue concerning the A-87, that's the OMB A-87, relative

to a capital expenditure in excess of $5,000 without getting

preapproval. Again, as I've expressed here today, as we

expressed to our state auditors, that the A-87 does not apply to

payments, and we made it very clear as to why the A-87 doesn't

apply to payments. First and foremost, and I think it's -- you know,

the EAC has tremendous authority here, and the State of New

Hampshire is not saying, "Don't audit us." I mean, we are open and

notorious as to how we've spent the HAVA money. We are proud of how we've spent the HAVA money. We want to be an example to the United States, if not the world, as to how we've spent our HAVA payments. We are very proud of our performance, absolutely. But when an auditor comes in citing a rule that we don't think applies, just as I expect the EAC to argue on its behalf if they're audited, if a rule doesn't apply, then it doesn't apply. When you play a game of basketball, you follow the rules of the game. I mean you're not going to follow the rules of football. And so, we're saying, you know, we're playing here and we're playing very fair, we're proud of what we've done, everything that we've done has been through legislation, it's been through committee, it's been through notice. Everything is open and notorious. We're very proud of our performance. But when our state auditor says, "You're not following this rule," we say, "Wait a minute. That's a rule that applies to grants, if it even applies at all to the EAC." My first argument is certainly that the EAC doesn't have rulemaking authority to make it apply.

And there's something else, bear with me for just a second. The EAC is a very unique agency, unlike, as I said, any other federal agency. It cannot make rules. When Congress enacted this very helpful Help America Vote Act, which I think has had tremendous benefits to what I've seen in the State of New

Hampshire, tremendous benefits from what I've seen throughout the United States, in going to the NASS and NASED conferences, very positive. And the EAC has tremendous responsibility under HAVA. One of them, under auditing, is not to go outside and create these rules that don't apply. That's all we're saying.

COMMISSIONER DAVIDSON:

I appreciate your comments. But I will tell you that when our audit was done, and our audit goes to the Hill, and there wasn't a member of Congress that felt sorry for us and said, "A-87 doesn't apply." We didn't get any comments like that, and we're audited the same way you are. So -- and not having the procedures in place, we took some hits on.

So, I understand where you're coming from, but I think there's a difference of opinion and I, you know, hope that you understand that.

MR. KENNEDY:

Absolutely.

COMMISSIONER DAVIDSON:

I guess that, in a way, I see that what we're doing is we're going back and creating the same thing. I mean, you know, we've asked for written opinions and -- with OMB. We've asked for -- you know, we've taken our attorneys and any other attorney.

Answer this. Do you have any organizations within your state, that your financial people can go to to see how other agencies that receive federal money, how they handle their reporting of their obligations and how they handle being prepared for audits and what do they fall underneath?

MR. KENNEDY:

Well, they would fall under any appropriate state law or federal law that applies to any appropriation that was made to that agency.

COMMISSIONER DAVIDSON:

I think every -- if you check, every agency that receives federal money, they fall underneath the very same rules and regulations.

MR. KENNEDY:

Absolutely, and they would apply to whether or not they received a direct payment or a grant. In the OMB Circulars, depending on what they received, would apply. But, as I said, EAC is unique here. Congress had…

COMMISSIONER DAVIDSON:

We understand that.

MR. KENNEDY:

…created a very unique agency here.

COMMISSIONER DAVIDSON:

We understand.

MR. KENNEDY:

One other point I'll make, Commissioner, is that to the extent that, you know, any agencies or legislative body within the State of New Hampshire has a question as to a rule or statute under the State of New Hampshire, we have in New Hampshire what we call advisory opinions to our New Hampshire Supreme Court where we can get their comment. I'm not sure if they have that here at the federal level, but it's very helpful when a court can construe the meaning of a statute for the legislative body.

COMMISSIONER DAVIDSON:

I appreciate your comments. Obviously, we think we've taken it as high as we can, and so, thank you for coming here today and presenting on behalf of the state.

MR. KENNEDY:

Thank you for having me.

CHAIR BEACH:

Thanks. I have a question for you, Mr. Kennedy. We've talked a lot about audits here and the EAC's role. If not for audits, what oversight role do you envision EAC playing with respect to HAVA funds?

MR. KENNEDY:

If not for audits, what role?

CHAIR BEACH:

Right, I mean, is there another oversight role?  Or what role, if any, do you see the EAC playing?

MR. KENNEDY:

Absolutely, they have a permissible auditing role under Section 902, and disbursing the funds in accordance with what they've just now done.  The GSA had taken that responsibility for the past two disbursements, but as Executive Director Wilkey, you know, in his opening described recent payments that have been disbursed to the states, and the EAC absolutely has that role.  And -- but all I'm saying is that with respect to standards that apply to the EAC, in reviewing whether or not the states are doing good with the money -- the federal money that they're receiving, they ought to be reviewing that in accordance with HAVA, or in accordance with the rules that apply to the expenditure of those funds.  And a grant is a grant and a payment is a payment, and rules shouldn't be interchanged and terms shouldn't be interchanged, but grants and payments should be treated as separate and distinct concept and terms.

CHAIR BEACH:

Okay, thanks.  Mr. Abbott for argument sake, say payments are not viewed as grants in this statutory scheme or perspective, how would that impact other provisions in HAVA, for example,

maintenance of effort or a five percent match?  Does it change or do the Circulars still apply?  Or how does that work?

DR. ABBOTT;

For the sake of argument, setting aside the policies and procedures and things you have to have in place to follow the Circulars, we would still hold states accountable to every other part of the statute.  So, they would still need to meet a maintenance of effort.  They would still need to meet the Title III requirements.  They would still need to do their certifications as required.  And we would still be providing oversight to those areas of the statute through monitoring, you know, site visits and the usual monitoring that we do.  So, none of that would be affected by whether or not we follow the Circulars.

CHAIR BEACH:

Okay and just another question.  I know with your experience in federal funding assistance programs, have you ever come across a piece of legislation like HAVA, where you have, you know, defined payments, and then you have grants, but then maybe, perhaps, didn't fall under a grant of a cooperative agreement or a contract?  Have you ever seen another category for federal funds?

DR. ABBOTT:

In my personal experience, I have not. I've talked to you about the categories of funding that I know that are available; grants, cooperative agreement, or contract, or the other forms of payments to the individuals. I think the State of New Hampshire is right in pointing out a discrepancy that's, by and large, out of our hands. Our appropriators give us money for grants and that is unambiguous. And to do any -- to not follow appropriation law and to do something other with the money sets off another chain of repercussions for the Commission that I don't think we would want to go down that road. So, if there is a conversation to be had, it's between the appropriators and the authorizers. And, you know, until that happens, and that's not something that we would necessarily be involved in, but until that happens we are bound to follow the annual appropriation law which is unambiguous.

CHAIR BEACH:

Thank you. Do my colleagues have any follow-up questions?

VICE-CHAIR HILLMAN:

I just want to make a couple of statements, first of all, Commissioner Davidson, I want to thank you for your perspective and comments, it reminded me of discussions and things I had forgotten about it two or three years ago, as we've gone around on this issue before, but also, to follow up on the last comment that Dr.

Abbott made, and particularly with respect to standards.  Now I know, Mr. Kennedy, you referred to generally accepted accounting principles as one standard for keeping the records, and I know the Federal Government calls it something different.  It's meant to be GAAP, but it is referred to by a different acronym, and I don't, Dr. Abbott, if you know what that is, but I can remember having that discussion with OMB, because it's meant to apply to all the federal rules and regulations with respect to the accounting for and recordkeeping.  And we didn't write those rules, you know, we just follow them.  We were put here to follow the rules and we don't write them.  And, so long as this is not stopping, and so far it doesn't appear to be, any state from working diligently to meet the requirements of HAVA to improve federal elections, that's always a good thing.

And then, with respect to the issue about getting clearance, if you will, to make capital purchases, I mean, every other state does it.  So, I respect New Hampshire's opinion.  There are certain things about IRS rules I wish I didn't have to follow as an individual, but that certainly isn't going to exempt me when I find myself faced with an IRS audit.  So, you know the rules are there and we follow the rules.  But I appreciate it.  And please tell -- give Secretary Gardner my regards and I hope the next time he'll be here because I'd love to have the conversation with him.

Thank you.

MR. KENNEDY:

Thank you Commissioner.

CHAIR BEACH:

Thank you very much.  With no further comments, we will

now take a recess and reconvene at one o'clock for our hearing on

commercial off-the-shelf products.

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[The public meeting of the EAC recessed at 11:46 a.m., reconvening at 1:05

p.m.]

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## PUBLIC HEARING ON COMMERCIAL OFF-THE-SHELF

## HARDWARE/SOFTWARE

CHAIR BEACH:

Now we will begin the afternoon portion of our public

meeting which will be a hearing on commercial off-the-shelf

hardware, software and other products, otherwise known as COTS.

The issue of commercial off-the-shelf products and

certification is extremely important and impacts almost every

election jurisdiction.  EAC staff raised the issue to me as something

that needed to be discussed at a public meeting because of the

wide-reaching impact of COTS and the need to discuss these

challenges in an open and transparent nature.  The discussion

today is the first conversation in what I think will be a much needed

and ongoing dialogue about these issues.

The participants here today represent people directly

involved in EAC's program as EAC reviewers, manufacturers,

election officials and experts.  It is my hope that by starting this

discussion today members of the public will understand the issues

presented and offer their comments, either through the public

comment period for the VVSG 1.1, which is open until the end of

September, or by submitting information to the HAVA info box at

havainfo@eac.gov.

And now, I would like to turn to Brian Hancock, our Director

of Testing and Certification, which will provide the background on

this for us.

Thank you.

MR. HANCOCK:

Thank you Madam Chair, Commissioners, Executive

Director Wilkey.  I will give you a very brief, as the Chair said,

background today, so we can kind of set the scene, if you will, for

our distinguished panels of speakers that are about to follow.

The 2005 EAC Voluntary Voting System Guidelines defined

COTS, or commercial off-the-shelf, as "Commercial, readily

available hardware devices, such as card readers, printers, or

personal computers, or software products, such as operating

systems, programming language compilers, or database management systems."

Although card readers, printers and operating systems are significant COTS components of voting systems, for the purpose of the discussion this afternoon I'm going to try to limit the discussion to the use of COTS personal computers in voting systems.

Let's discuss the issue, a little bit, in how we kind of came about the decision that this needed to be brought before the Commission in a hearing format. Let me first say that this issue is by no means limited to one voting system manufacturer, but what I will say is that the EAC's recent experience during the latter stages of our certification effort with Election Systems & Software, or ES&S, will be used just to illustrate the issue that we're talking about here. The ES&S Unity 3.2 voting system, certified by the EAC on July 21, 2009, contains, in its system configuration, several Dell COTS PC's. The specific models listed in the certification document are the Dell Latitude 600 laptop, and the Dell GX 260 and GX 270 desktop computers. In addition, the voting system manufacturer lists minimum specifications for COTS PC's in their accompanying documentation. EAC research found that Dell no longer manufacturers any of the three PC's tested with the Unity 3.2 voting system.

Because we understood that the Unity certification was particularly important to Cayahoga County Ohio, who implemented this system immediately upon EAC certification, the EAC did ask ES&S which models of this PC were being used in Cayahoga. ES&S responded that Cayahoga would be using the Dell OptiPlex 745 PC's. In addition to the 745 being a different model from those that we certified in our effort, we also found that the 745, like the Latitude 600, is no longer actively manufactured by Dell.

Because of the volatility of the commercial COTS PC market, the EAC is concerned that, one, the utility of an EAC certification might be questioned if we certify systems that are literally unable to be built as certified; and, two, that jurisdictions purchasing COTS PC's meeting the minimum specifications outlined by the manufacturer, but not tested with the system during the EAC certification, may, in some instances, be faced with compatibility issues when an unknown COTS product might be integrated into the certified voting system.

You will hear from our speakers, today, the challenges that are faced by the use of COTS in other industries, so I won't go into that, but I think it will be a very interesting discussion.

Let me finish by saying, in attempting to deal with COTS PC issues in the EAC testing and certification of voting systems, a number of options may be worth exploring that would mitigate

potential obsolescence and incompatibility issues, while keeping

testing and certification costs to a minimum. EAC practices in this

area might include:

Permitting manufacturers to certify a voting system with a

specific model of PC used in system testing. Allow those models to

be used in the future with more memory and larger hard drives, but

not less, and remain EAC certified.

For other models of PC's from the same vendor, be they

Dell, HP or whomever, a new model might be added to the certified

voting system based on a letter from the PC manufacturer.

Finally, PC's from other vendors that are equivalent to the

PC tested with the voting system could be added to the certified

system based on a couple of items.

One, perhaps a declaration of conformance from the PC

vendor that the PC meets the same requirements as the PC tested.

And I believe that is done in other industries; and, two, a simple

regression test by the VSTL running perhaps one election on the

PC.

That, in a nutshell, is sort of the basis of how we came to this

hearing. And I'd be happy to answer any questions, or I can also

answer them in conjunction with the panelists. However you prefer.

CHAIR BEACH:

Do you have any questions?

VICE-CHAIR HILLMAN:

Not at this time, thank you.

COMMISSIONER DAVIDSON:

I'd just as soon wait to hear the other panelists...

CHAIR BEACH:

Okay.

COMMISSIONER DAVIDSON:

…and then I might have some.

CHAIR BEACH:

Okay, wonderful.

MR. HANCOCK:

Thank you very much.

CHAIR BEACH:

Okay, great. At this time I would like to call up our first panel. We have, first speaking, Bernie Hirsch of MicroVote. Mr. Hirsch is the Director of Software Development at MicroVote General Corporation. He has an extensive background as an IT professional and is a former Senior Technology Manager with Weight Watchers International.

Second, we have Steve Pearson of ES&S. Mr. Pearson is Vice-President of Certification with Electronic Systems & Software. He has overall responsibility for all federal and state certification testing, as well as international certification testing.

And third, we have Max Peterson of Dell Federal.  Mr. Peterson is Area Vice President for Civilian and Independent Agency Sales for Dell Federal.  He is responsible for serving the IT needs of federal clients and federal systems integrators using Dell's products and services.

I would just like to let all of you that you will each have ten minutes to make your presentations, and then, I ask that you remain on the panel so the Commissioners then can ask their questions.

And first we will start with Mr. Hirsch.

MR. HIRSCH:

Thank you.  Good afternoon Madam Chair Beach, Commissioners, Executive Director Wilkey, members of the EAC, ladies and gentlemen.  I am pleased to be here not only to represent the MicroVote General Corporation, but also as a citizen interested in the continued viability of voting systems in the United States.

I have handed out a photo of a device invented by Thomas Edison in 1869.  It's not widely known, but Edison's first patent was for a vote recorder, which is now located in the Edison Museum in Fort Myers, Florida.  The machine was rejected by both the Congressional and Massachusetts legislative committees.  I find it interesting that after this experience Edison decided to confine his

efforts to inventing products that were certain to be of "commercial value." And 140 years later, we're still confronted with the same challenge.

MicroVote has been an industry leader for almost three decades, known throughout the election community for innovative, electronic voting solutions and superior customer service. Although we have, at times, had voting product in more than a dozen states, when you call our company for support on Election Day, you are connected to people you've known for years, names like Mandy, Bill, Dennis, Jim. These are some of the most experienced election workers on the planet. Although we are a small company, we have large ideas. We are proud to not only have been the first to achieve federal certification by the EAC, but we remain the only election system in the United States to be certified to the latest 2005 Voluntary Voting System Guidelines. But this outstanding accomplishment has come at too great a cost, and like Edison, we find ourselves at the top of the mountain grasping a superior product with too little certainty of commercial value.

Examples have been used comparing the use of COTS products in voting systems to those in the Department of Defense, with lessons learned and possible strategies mentioned to lengthen the viability of certified systems. The elephant in the room is that unlike the heavily funded US military industrial complex, the handful

of voting vendors that are left comprises little more than a cottage industry, dominated by small stand-alone companies, like ours, and a few relatively small subsidiaries. Where only a few years ago there were over a dozen healthy companies vying for business, now backdoor politics, regulatory burdens and economic hard times have driven all but the most resilient players from the table and into more productive and profitable ventures.

Those few of us that are left are not grabbing bigger pieces of the pie that remains, for the pie has disappeared. Counties and states cannot afford new systems or justify fixing systems in place that are not now broken and never have been in any major significant way, although like all of us, their equipment is aging at an alarming rate. Yes, incremental improvements have been made. Certainly operations are faster, more secure, better audited and functionally superior. And we have reams of documentation, comments and reports that few will read to back up our claims. Our certified system is better than the ones we seek to replace in many ways. But the plain truth is that we as Americans pride ourselves on conducting free, open, secure elections where every vote counts, and with few exceptions, whether it's paper and pencil, or computer and smart cards, every vote does count and has counted. But elections dominate the news for a few weeks or months and then we pile the paper in boxes, we put the equipment away and

mostly forget about it for another four years.  We are so burdened

with paying our mortgages and healthcare costs, and so fearful of

increased taxes, that the last thing we think we really need is new

and improved voting equipment, despite our public outcries and

posturing politicians.

Congress allocated funds for HAVA, which certainly provided

a shot in the arm, but overall has been much too little, and much

too late.  Where is the direct funding of election equipment,

research and development, buried in the HAVA bill?  Significant

funding is routinely given to military equipment research and

development.  We as an industry are expected to design and build

equipment that is subjected to similar levels of testing and scrutiny.

Products that once took months or a year or two to reach the

market are now taking four to five years, if they make it at all, and at

a cost that's 15 to 20 times what it was before.  It should come as

no surprise to anyone in this room that counties have not budgeted

enough money to support the increased costs of certification, which

must be eventually passed on to the American people, and private

investors are not willing, or able, to take considerable risks on a

perilous financial future.

So, the reality we face today is that the voting public will be

voting on existing old obsolete equipment with limited replacement

parts availability, or highly expensive new obsolete equipment with

limited replacement parts availability.  The choice is less than ideal.

We must have changes in public priorities with direct research and

development funding and grant initiatives, as promised by HAVA.

There needs to be a fundamental change towards expediency and

common sense in the testing and certification process.  Speaking

as a simple American with some extensive inside information, the

situation needs to change, quickly.

This brings us to the subject of today's hearing, the use of

COTS hardware and software in voting systems, with an emphasis

on PC's.  The topic is of intense interest to MicroVote, because

we're not only the first and only company to achieve 2005

certification, but we are currently the first company to attempt a

revision to an EAC certification.  We obtained a quote from iBeta,

which almost lead to a seizure.  Then we turned to our good friends

at Wyle Labs.  At least, I thought we were good friends.  Then I saw

their quote.  Seriously, the extraordinary cost and time to

independently test and certify 300 lines of minor code changes in

our management software and a few insignificant document

revisions is unprecedented, and in my opinion, unwarranted.  I can't

blame Wyle.  They're doing their best to efficiently test our system

under the present circumstances at the going rate for their services.

And I can't blame the EAC.  They're carrying out their duty as they

understand it to bring credibility and transparency to the certification process.

Keep in mind these 300 lines of code changes took a single individual, me, about one week to modify and test. Most of the modifications were simple fixes or enhancements to existing functionality. This type of ongoing coding is a routine and necessary part of the development cycle of most software applications. We understand the need for independent testing and verification of changes made to ensure the integrity of the system, but fail to see the value in requiring what has become months of further review and paper pushing. By the time our minor revision is recertified, the opportunity will have passed to use it. Instead of improving our system, the process will have impeded innovation and prevented much needed, identified fixes and enhancements from reaching our customers.

One such change to our system, that we seek, will allow the use of an equivalent or better COTS PC to manage the election. The Dell desktop and laptop PC's chosen to test and certify were top sellers two or three years ago when certification began. By now they have been replaced by several generations of improved models, all with more RAM and storage, and faster processors. Our system was certified with the Windows XP operating system, but soon Windows 7 will be the standard OS, shipping with most

COTS PC's.  We have no objection to reasonable and common sense regression testing, when necessary.  We have every objection to testing that quadruples the cost of a system and delays or prevents implementation, while adding very little value.

We employ COTS hardware and software products throughout our system, some of which are many generations removed from current offerings.  It distresses us that the simplest of changes to our system couldn't be certified in a month, much less three, four or five.  We do not dare introduce a new operating system or even a simple service pack, for fear the additional time and money to test and certify will crush any hope of implementation and viability as a business venture.

In short, ladies and gentlemen, despite the good intentions that will be expressed in today's hearing and strategies proposed to extend the useful life of our products, our experience of the past several years has taught us to be highly skeptical.  It is the position of MicroVote that the current environment is not conducive to invention and innovation, and like Edison, we realize that our superior product and efforts may yield little commercial value.  We are at the pinnacle of the success, yet we stand facing a great precipice.  We realize and propose that there needs to be a fundamental change in thinking as a community, not just about

commercial off-the-shelf products, but about our voting systems as well.

Thomas Edison was one of the world's greatest inventors and a personal hero of mine. He quickly came to realize the truth that we too need to grasp. One must invent things of commercial value. We will emerge from this time stronger and more prosperous if we have the courage to go forward. As a commercial pilot, I sometimes like to say, "expedite your climb." We must maintain our high ethical standards while expediting the testing and certification process. We desperately need significant public or private funding to continue our research and development of current and new products. In order to do that, all of us in this room must start thinking more like Edison, stop pushing paper around, and get to work for the American people.

Thank you.

CHAIR BEACH:

Thank you, Mr. Hirsch. Next, I would like to turn to Steve Pearson.

MR. PEARSON:

Good afternoon. On behalf of Elections System & Software, I appreciate the opportunity to talk with you today on this important topic. ES&S has a long history of delivering jurisdictions' voting systems that meet all established standards for security, accuracy,

reliability and durability. Our systems have been rigorously tested and evaluated for many years by independent experts as part of national and state-level certification programs. ES&S recognizes the importance of the federal certification process and are fully committed to work with the EAC to better the needs of voters and election officials. Our company currently provides voting systems and support services to a client base in 39 states with more than 4,000 election offices.

We also recognize the importance and the challenge of providing these secure, accurate, and reliable voting systems that have sufficient design characteristics to support this broad and diverse customer base in the fast moving and ever changing computer technology environment we are all in. For this reason, ES&S has made great efforts to ensure our election management system computer environment has the hardware independence that offer our clients the flexibility to use their current platforms as long as they meet or exceed our published and certified minimum specifications, and in accordance with the Federal Election Commission's 2002 Voting System Standard, and the Election Assistance Commission's 2005 Voluntary Voting System Guidelines.

VSS Volume 1, Section 9.3 and VVSG Volume II, Section 1.6, Voting Equipment Submitted by Vendor, both state the following language:

The system submitted for testing shall meet the following requirements:

(a) The hardware submitted for certification testing shall be equivalent in form and function to the actual production version of the hardware units or the COTS hardware specified for use in the TDP.

(b) The software submitted for certification testing shall be the exact software that will be used in the production units.

These standards make a clear distinction of the differences between the management of software and COTS hardware. Software submitted for certification testing shall be the "exact" software that will be used in production, while the hardware submitted for certification testing shall be "equivalent, in form and function," to the actual production version of the hardware units or COTS hardware specified for use in the TDP.

There are a number of key points we encourage the EAC to consider when making a final determination:

1.  The EAC should recognize that jurisdictions desire to use the computing equipment they currently have.  Counties and states are virtually all financially burdened.  With the advent of

HAVA, most jurisdictions across the country have made major

investments in their IT infrastructure in the past two to three years.

Adoption of an EAC requirement to only permit specific PC brands

and models that were used in certification testing will likely obsolete

their current equipment.  It is our opinion states and counties will

not adhere to this requirement and will be left with no choice but to

certify these systems for use in their states on PC equipment

meeting the minimal specifications identified in the voting system

manufacturer's tested configuration.  We are concerned that this

will have a negative effect between the EAC Testing and

Certification Program and the state election directors.

2.  The number of brands and models of PC's is a very,

very long list.  To try to qualify all brands and models is

overburdening to the certification process with little or no benefit.  It

is important the value of the task is commensurate to the effort in

cost, time and risk.

3.  Should the EAC determine only specified PC brands and

models used in the certification testing can be used in county

deployments, how would each respective PC manufacturer be held

accountable for ongoing hardware engineering change orders, or

ECOs,  to the certified models?  Given the fluid nature of

electronics manufacturing, hardware change orders are very

frequent, primarily due to end-of-life components, step changes in

components by the sub-component suppliers, and suppliers going out of business. Would COTS hardware manufacturers be obligated to report such changes as they occur? Who would they report them to? What would the validation process be for such changes? Should the EAC adopt this approach, we believe it should be the responsibility of the EAC to perform such validation. It is our opinion this approach opens up another set of expensive and difficult to manage procedures for a low risk, low reward concern.

And at what point does it stop? If the EAC chooses a path that certifies only the specific makes and models, are they also going to specify each of the peripherals, for example, keyboards, monitors, mice, CD brands, routers, switches, USB hubs, power cords, power strips, and even mouse pads?

4. For our election management software environments, ES&S utilizes Microsoft Windows, and only Windows compliant COTS drivers, to be run on only Windows approved platforms. The Microsoft Windows operating system is the insulator to the hardware. Windows is the insulator to making the hardware all operate the same way.

ES&S's approach uses well behaved applications with no direct access to registers, I/O ports, et cetera, using only standard Windows features, standard Windows device drivers from approved

providers, and common industry data formats such as PDF. By taking this approach we allow our county customers the maximum flexibility to choose to use their existing equipment or even acquire newer PC technology, as long as it meets or exceeds our published minimum specification for the EMS environment that was certified.

5. The length of time required to complete a certification is another key factor for the EAC to consider regarding this matter. The certification of ES&S's Unity 3.2.0.0 required 28 months from the time of application to the date of issuance of the Certificate of Conformance. What was considered a state-of-the-art PC technology at the start of the certification is most likely no longer considered state-of-the-art or the most efficient, both in cost and performance nearly two-and-a-half years later.

6. We are also concerned of where an EAC policy that specifies makes and models of COTS PC's, servers and peripheral equipment, would lead us. Such a policy would force us to abandon the COTS PC solution and leave the voting system providers producing proprietary designed and manufactured PC's, which would allow us to control the hardware and engineering change orders. But this is how you get the $500 hammer. A custom ES&S PC would be a $10,000 PC.

Thank you for the opportunity to offer our input and participate in this discussion.

CHAIR BEACH:

Thank you.  Now we have Max Peterson.

MR. PETERSON:

Good afternoon Madam Chair, Commissioners, Executive Director Wilkey, panelists, and members of the hearing audience. My name is Max Peterson.  I'm responsible for Dell's Civilian and Independent Agency business, here in the Washington, D.C. area.

I would like to take a brief second to let everybody know that I brought a colleague with me, Mr. Daniel Payne, who is a Dell client technologist who actually is a resource for all state, local and federal governments in the public sector to assist with client technology decisions.  And Mr. Payne's contact information can certainly be made available for election officials and others who need that sort of assistance.

We believe the mission of the EAC is very important and we appreciate the opportunity to serve here with some perspectives on COTS technology.  We believe it would be useful to draw a parallel between other industry models use of commercial off-the-shelf technology, because of the benefit that it has derived for those other industries.  And a simple one that we see every day is the retail industry.  For the purpose of giving everybody a frame of reference, there are a number of different independent software vendors, or independent solution vendors, who develop

applications specific for retail, or, in the case of today's hearing,

specific to voting systems.  They're experts in these areas and they

understand how the business and the process needs to work.  They

leverage commercial off-the-shelf technology to make sure that

systems are flexible, high performance and affordable.  In those

models, you find that the end user gets the benefit of high volume,

current technology, solid, reliable, state-of-the-art equipment, and

the best that the industry has to deliver in terms of function, in this

case voting systems.  And we believe that model has applicability

to the considerations that the panel is looking at today for COTS

use in voting systems.

Perhaps it's important to understand that one of the biggest

drivers of using COTS is, in fact, low cost, so it provides the end

user of these devices with a very low cost alternative to a custom

developed system.  It has the additional benefits of providing a

great degree of flexibility and high performance.  In these ISV

examples, typically, the independent software or solution vendor

provides some minimum compatibility specifications, and they are

the ones that do the testing.  What their goal is is to ensure good

system performance on commercial off-the-shelf technology.

Typically, the ISV applications and the COTS technology, though,

are driven by individual market dynamics, and so, you don't have

those systems, the COTS PC's in this example, and the voting

systems in this example, necessarily developing in lock-step.

What's important, in our opinion, is that the application receive the

test and certification, and that the COTS hardware have a sufficient

delineation in its use in the voting systems to allow it to progress

with the pace of technology. And so, you can test the application

and the operation of the application on a current model of machine,

but if a new model of machine is available, that has the same

function or provides more current capability, we believe that a

simple compatibility validation would be sufficient.

Those in different industries, again, to draw a parallel, they

have developed conventions that are satisfactory to those various

industries, where either the ISVs themselves perform some

independent verification or validation, consortiums of industry do

that, or third parties, in other cases. Those different models, again,

may be applicable to the voting system arena, and that's part of

what the panel here is hopefully providing good input for you today

on.

The reason that COTS PC's, we believe, offer significant

value to the buyers is because it gives the buyer the ability to

control decisions about what "optimal" means for them. And so, for

a very small district or a voting organization, it may mean that they

want a small, compact, simple device. For larger districts or larger

election offices, they may want a very sophisticated system that

also can interoperate with their other IT systems.  So, by using
COTS and separating the hardware from the voting system
application, they have the flexibility to do things, like select systems
that will give them long-term stability, select systems that have
manageability and serviceability attributes that allow them to retain
those systems for a long time, and have them serviced and
maintained for a sufficiently long time.

And I will -- in just a moment, I will get to a specific example
that was referenced by the Commission with respect to the old Dell
systems that the ES&S solution had been tested on, and how -- just
to give you some example of how that product lifecycle evolves so
that you can understand it.

Finally, the last major driver behind use of COTS hardware
is, in fact, the ability of the buyer to buy at the lowest cost that's
appropriate for them.  And so, by leveraging COTS, you also
leverage that ability to continue to drive down price.

For the purposes of description today, I'm going to give you
a quick explanation.  Dell refers to its business class notebooks as
OptiPlex and Dell refers to its current business class -- pardon me -
- refers to our current business class desktops as OptiPlex, and
refers to our current business class notebooks as Latitude.  So, in
the following two slides I'll use those terms.

In the context of the question asked by the Commission, the GX 260 and 270 are desktop computers. The current version of those computers is known as the Dell OptiPlex line, and the direct replacement for those older computers is now known as the Dell OptiPlex 760.

When Dell designs business class computers, we have several objectives in mind. The first objective is to provide a long product lifecycle. So typically, lifecycles will run up to 36 months. And that means that that system or model will be in production in various versions for that period of time. Those systems are also designed so that they can be supported in customers' offices for a longer period of time. So, Dell provides service, support, maintenance options for those systems to extend their life to three years, typically, but as far as four and five in the cases of many of our federal customers. Some customers go beyond that lifecycle as long as the system still meets the performance products.

The second thing that Dells' design and technology roadmap provides is global standard platforms. So, unlike consumer PC's, which change very rapidly, and which tend to have a relatively shorter lifecycle, Dell business class systems, and other OEM business class systems, will have this attribute of a longer lifecycle. So, we believe that that's an important guideline for the election offices that are requiring these types of equipment to consider.

The final point about designing for a business class system that's important is you design for serviceability. And two of the points made by my other panelists today here, this equipment is often acquired, used for the election purposes, and then, may be sent to the side. You want to know that when those are pulled back out again for the next election that you can still get service on them, that you still have parts availability, and that those systems can still be repaired. And, in fact, for security reasons you also want to know that the manufacturer provides refreshes to things like drivers and BIOS to bring them up to the current revision.

Speaking for a second about the notebook question, there was a question about the Dell Latitude 600. That was an older notebook system. The current Latitude line for business class systems that would be a direct replacement for that is the Dell Latitude 6400.

Again, part of the way that Dell designs these business class systems is that we provide roadmaps. We provide roadmaps for customers. We provide roadmaps for our ISV partners, so that they can understand when they're moving from an older system that's been discontinued to a newer model exactly what that recommended roadmap is. That helps to ensure continuity of service for our customers and also for our ISV partners. It also

gives people a planned path forward when they need to upgrade their systems or when an older system has been discontinued.

Some interesting additional attributes in the notebook arena that are important are that those devices are typically used in mobile situations, and so they need to be designed for durability, for serviceability and for ruggedness. So, those systems, in particular, again it's important that buyers consider the business class attributes of the COTS hardware, as opposed to just the lowest price meets minimum computer. And the final point that is important is that when you're developing these business class COTS products you also consider things like security. And, so Dell, into our systems, incorporates specific security capabilities that our software ISV partners can use in order to further secure their applications.

The last item that I'd like to note, because it's of assistance to the software developers, is that there are offerings available from OEMs, Dell included, that helps the ISV developers track changes to systems. In Dell's case, there are two specific offerings called ImageWatch and ImageDirect. Those are tools that Dell provides to its system developers and to its customers to make sure that they understand the impact and how to migrate from older systems to newer systems.

In summary, I would like to just be able to share what we believe the benefits are of using COTS in the case of voting systems. We really think it gives the buyers of these systems the ability to leverage industry scale. By using open systems standards you get value, you get flexibility and you get high performance. By leveraging technology competition, you're able to work on a steadily improving price/performance curve. Prices go down, computing power goes up. And, finally, by using COTS it gives the buyer control of picking the best fit for their different situations, so large scale operations versus small scale operations, CONUS operations versus OCONUS operations. So we think those are important benefits of being able to use COTS.

The considerations that we would like to leave with the committee are a couple. The first one is we believe that a clear delineation between voting system application and the COTS platforms is very helpful. And we understand that the committee is working on that in the VVSG 2005 and 2007 drafts. So, we think that's important and useful. We believe it would be useful to allow the ISVs to validate compatibility versus a recertification when just the underlying COTS platform is changing.

CHAIR BEACH:

Excuse me Mr. Peterson, your time has expired. Could you summarize?

MR. PETERSON:

Yes, thank you very much Madam Chair. And the final item is, simply, we think it would be useful, for the purpose of the panel, to establish a periodic market research exercise. That allows you to understand what the current trends and directions are in terms of technology and how it may apply to voting systems.

Thank you.

CHAIR BEACH:

Thank you very much. Now I'd like to turn to our question portion. Vice-Chair Hillman, do you have any questions?

VICE-CHAIR HILLMAN:

I do, thank you very much. One of the things that I find a bit frustrating and difficult is when there are references made to huge increases in costs, but there are no comparative years and dollar figures associated with it.

So, Mr. Hirsch, if I could just ask you, you referred at one point in your testimony at outstanding accomplishment at too great a cost. I think voters would say, you know, the integrity of democracy in our voting system, and probably should be costly, it deserves what, you know, other exercises get with respect to, you know, certification and reliability and accuracy and so on and so forth. But can you put that in perspective for me? What's too great a cost? What do you mean by that?

MR. HIRSCH:

An example would be when MicroVote certified under the NASED program, when last they certified, I believe the total cost was about $40,000 and took about three months. The current certification process, I believe, has exceeded $650,000, and has taken about the same as ES&S, about two-and-a-half years. And that's not including the cost of personnel to handle that certification. So, that's just -- I would say we've well exceeded a million dollars, for a relatively small company with a small installed base, relative to maybe $100,000, if you factor in the personnel costs of the last certification, and the time spent.

VICE-CHAIR HILLMAN:

Was it for a comparable system? Were all things equal?

MR. HIRSCH:

It was almost the identical system.

VICE-CHAIR HILLMAN:

Um-hum.

MR. HIRSCH:

With the exception of us having to comply to all the guidelines, you know, it was an identical system. It was a mature system. It had been out in the field for at least five years, gone through dozens of elections.

VICE-CHAIR HILLMAN:

And you said you estimated, you thought it might have been $40,000 when the National Association of State Election Directors was doing the testing and certification. Give me an approximate year as to when that might have been.

MR. HIRSCH:

I think around 2002.

VICE-CHAIR HILLMAN:

2002. So, in today's dollars, that $40,000 might be $100,000?

MR. HIRSCH:

Perhaps.

VICE-CHAIR HILLMAN:

And you're saying your cost today, for what you said is almost the exact same system, is about $600,000?

MR. HIRSCH:

But that didn't include personnel so…

VICE-CHAIR HILLMAN:

Did the first figure include…

MR. HIRSCH:

But the cost of certification was, I think, somewhere north of $650,000.

VICE-CHAIR HILLMAN:

Without personnel?

MR. HIRSCH:

Without personnel.

VICE-CHAIR HILLMAN:

And the prior…

MR. HIRSCH:

And the $40,000 without personnel.

VICE-CHAIR HILLMAN:

Right, so we're still comparing apples…

MR. HIRSCH:

Right.

VICE-CHAIR HILLMAN:

…and apples here, okay.  When you referred to the term

"commercial value," what do you mean?  Is that profitability?

MR. HIRSCH:

I mean, just like Thomas Edison referred to.  To spend the

time and money to develop a product, to research it, and bring it to

market, you would hope, as an investor in a company in a capitalist

society, that you would make your money back and maybe a profit

on that.  So, in order for something to have commercial value, you

want your investment to be better spent on voting equipment than

just putting it in a CD.  So, you have to compare the costs of the

money with other ventures that you could use your money.  So, in

order for there to be commercial value, you have to have, at the

end of the process, some, as Thomas Edison put it, certainty of commercial value. There needs to be some kind of guarantees, if you will, and there's nothing that's totally guaranteed, but some way of knowing that the money that you're investing is going to, at some point, pay back a dividend to you, or you won't go in that business.

The problem we're facing is that with the ramped up costs of everything, certification being our major cost at this point in time, relative to the past, the counties haven't budgeted extra money and aren't -- even though everyone wants the more, better system, they haven't budgeted the money to pay for that better system. And if it was totally broken out in the field, remember we're using a system that was previously certified and is in use, we don't have, you know, screaming protests from our counties wanting us to replace everything. If anything, we're pushing as hard as we can to get them to replace it, but they're all saying, "Well, you know, it pretty much works fine. And, yes, we know you haven't -- this wasn't certified by the EAC, but it works pretty good."

VICE-CHAIR HILLMAN:

Is -- is MicroVote General Corporation, is its work limited to voting systems?

MR. HIRSCH:

Yes.

VICE-CHAIR HILLMAN:

Okay.

MR. HIRSCH:

It's a family-run business for 25 years.

VICE-CHAIR HILLMAN:

So, if it were a larger company, if you were a division of, say, Dell, then maybe, it might be more commercially interesting to invest in a smaller market of product, because there would be other products and activities that would be bringing in the commercially interesting revenue.

MR. HIRSCH:

Well, I can't speak for the -- my competitor's business decisions of other aspects of their company, other than what I hear, about their subsidiary having to do with voting. It's my understanding that the voting sections are sort of the "dogs" of the company. They are sort of the least profitable parts of the company that are the smaller ones that are divesting themselves of. One of the problems with some of the larger companies that have 39 states, or whatever, is that they have a very diverse field of installed base of equipment out there. There's equipment of all kind of generations that would need to be upgraded, replaced. It's a huge undertaking, compared to our base, which is pretty standardized, across, you know, our states that use our equipment. We've had a pretty stable product and not a large variety of products out there.

VICE-CHAIR HILLMAN:

Okay. You did say something that struck close to home for me, and it was about the funding of research and development for voting system and election related. And that was something that I have had -- that is something that I have had discussions with some members of Congress about and have gotten two kinds of reactions. One is, it's a good idea and it should be done. And others who are saying, "Well the money should not be -- Congress should not be appropriating money that would benefit a commercial enterprise, an enterprise that's going to eventually make money off the money; that the commercial enterprise should be doing its own research and development." And I took a different position and I likened it to the Orphan Drug Act, which was the pharmaceuticals needed a carrot, and a pretty big carrot, to invest in the development of products/pharmaceuticals to treat illnesses that maybe a very small portion of the population gets, and so, therefore, isn't going to be a "commercially interesting enterprise." But, nonetheless, it's a service that's needed. And so, I would agree with you, and I personally think it would have been, and still can be, an important investment for the government to make in the research and development of, it's obviously future, the next generation voting system, because the demands on that system aren't in sync with the, as you say, the small enterprises who

produce that. And I'm wondering if you or anybody from your company has had any similar conversations with anybody in Congress about research and development needs.

MR. HIRSCH:

Well, the HAVA bill contains language that allocates $20 million to research and development directly to be given to voting equipment manufacturers to do just that. And when I, after one particular meeting with the EAC in Denver, went back to my company to suggest that maybe this is something we could do, I pretty much was laughed out of everybody's office, because no one believed it would happen. And I've heard it mentioned for several years now, and to my knowledge there's no -- there's no way to apply for that money. There's no system in place to get it.

VICE-CHAIR HILLMAN:

There's no money to get. That money was never appropriated. It was authorized under the Help America Vote Act, but only recently has Congress appropriated any funds, and that was a relatively small amount, and Mr. Wilkey, correct me if I'm wrong, $5 million to specifically look at ~~accessible~~ accessibility issues. So, you're absolutely right, that line is there but it was never appropriated.

MR. HIRSCH:

It's so far out of whack with the importance of voting in this country, what is actually put forward in public funding of the research and development of voting equipment. Now, they have no problems spending money in the military sector, with private companies, to develop the next fighter jet or the next weapon. And I have nothing against great weapons and fighter jets. I think we should have those things. I think we need a good national defense. But I also think we need good election systems, and I think that's a fundamental part of being an American. And for us to just turn our backs on it and say, "Oh, well, we'll just leave it up to the counties to figure it out," it's not working. And it hasn't been working for a long time. And we're now at the breaking point with it

VICE-CHAIR HILLMAN:

Well, I just want to make sure that the record is correct that it's not that EAC doesn't have a system in place for people to apply for that money, there is no money to apply for, although that very small $5 million will be coming out soon. I think we're going to put out for public comment the process by which those funds could be competed for the 5 million, but it does specifically address accessibility.

So, I'm going to guess the answer to my question about whether you or members of your company have had any

discussions with members of Congress about this, the answer is

probably no?

MR. HIRSCH:

The answer is no.

VICE-CHAIR HILLMAN:

Okay.  Suffice it to say, you can connect the dots, no

appropriation for recognized needs, maybe at some point there

could be some conversation.  EAC has some restrictions on our

ability to be able to lobby in advance what we believe is important.

We can make the conversation, but we can't lobby on it.  But other

people can.  Enough said.

What is the most expensive -- for Mr. Peterson, what is the

most expensive laptop that Dell produces and what is it used for?

MR. PETERSON:

Well, that's an interesting question.  Dell's highest end

notebook computers are probably our Precision line of computers.

Those are really high-performance work stations that are very, very

portable.  And depending upon how you configure those, they could

be $10,000.

VICE-CHAIR HILLMAN:

Okay.  So for Mr. Pearson, was this the $10,000 computer

that ES&S -- that it would cost ES&S to make?

MR. PEARSON:

It could be.

VICE-CHAIR HILLMAN:

But, seriously, I mean, it goes back again to the question, because there is a certain amount of angst and concern that election officials are saying, "But we are never going to be able to afford what the manufacturers are telling us it's going to cost us for voting systems."  And so, I sort of come from a place where I know when you want to drive your point home exaggeration can be a very useful public relations tool, but at some point I think we really do have to have a very transparent -- and I want to use the term honest and I don't mean that the conversation is dishonest, and I'm struggling for another word that's not coming right now -- but a conversation about what the costs are and what is it that EAC can be expected, because it's not fun to have election officials throwing, you know, tomatoes and shoes at you saying, "You're just doing these things and you're driving up the cost and the money isn't there and don't you understand that every time you, you know, improve your guidelines," while another constituency is saying, "The guidelines have got to be very tight.  These voting systems receive and count and process ballots and we need those to be nothing but accurate and they should be accurate; there's no reason why anybody manufacturers anything that's not accurate and as secure as possible."  And then, the flipside of that saying,

"You're driving the costs up and you're just making it impossible. We can't deliver the product to our voters that you are saying we need to because we can't afford it."

So, you know, I appreciate the conversations but I'm hoping at some point the real dollars -- in fact, the EAC Board of Advisors, at its last meeting in June of this year, discussed wanting an assessment done, not of the guidelines that are out for comment right now, but the next iteration, which would be out for comment, maybe next year, to include an assessment of what the increased costs are going to be.  And so, we're going to have to get down to that level of detail at some point.  And I understand, you know, business competitiveness, but we can't win if we don't know the real numbers we're dealing with, and what drives those numbers, you know.  If the Federal Government controlled payment to the labs, would that control the cost?  It's a little bit like this healthcare discussion we're having.

But thank you gentlemen very much for your input.

MR. HIRSCH:

Can I make one other comment?

VICE-CHAIR HILLMAN:

Sure.

MR. HIRSCH:

It was -- I heard several times in both Brian's presentation and that of Dell, if we can perhaps conduct simple regression testing, and the word "simple" was used several times. There is, in my experience, no such thing as simple any kind of testing. So, as soon as we get the government involved in what should be a common sense, simple thing to do, it's no longer simple. So…

VICE-CHAIR HILLMAN:

No, really? Thank you.

CHAIR BEACH:

Commissioner Davidson?

COMMISSIONER DAVIDSON:

Thank you. My first question is, I think I need to understand a little bit more. You got your 2005 certification, which we're all aware, underneath the EAC. And if I remember right, in Florida, you stated that you thought it was a reasonable process that you went through with that one. What is making your update, or, you know, the 300 lines of change so much more difficult? Can you explain to me? Because that's still to the 2005.

MR. HIRSCH:

Well, that would probably be a better question to ask of Jack Cobb at Wyle. We submitted the 300 lines of code, very clearly documented what we did, why we did it. There were about a dozen changes, you know, functional or fixes. Some of them -- half of

them, were very, very minor.  And I don't why it's taking this long.

We try and keep tabs on it.  We hear things like, "Well, there's been

a lot of back and forth with EAC.  You're the first.  There's not really

some procedures in place that need to be there.  We weren't quite

sure how extensive of a test plan there needed to be."  Just sort of

on and on it's been going.

And another thing, I think back in Florida, I think I had the

expectation that we had accomplished a great thing, especially for

a small company.  You know, we're the fast, agile people and we

really focused all of our attention on getting that certification, and I

had hoped there would be more of a ground swelling of need and

desire for that certified product in the marketplace, and what we're

hearing is that, "Well, you know, that's great that you did that, and

congratulations, but we're still pretty happy with what we have."

And so, unless there's some kind of mandates or legislation or

something that requires what we've done, then it's difficult to just

turn around and get people to buy it.

And then, some of the changes that we -- keep in mind,

when we got our certification, we have yet to install that certification

anywhere.  So…

COMMISSIONER DAVIDSON:

Okay, can I interrupt you?  Because I know our time is short.

And I wanted to ask a couple more questions.

How long did it take you to get through that first process to

the 2005?

MR. HIRSCH:

It took almost two years.

COMMISSIONER DAVIDSON:

Okay.

MR. HIRSCH:

We started in April of '07, and we finished in January of '09.

COMMISSIONER DAVIDSON:

Okay. My other question to both of you, when you are

selling a system, because I know that -- Mr. Pearson, I know that

when you sold to Cayahoga, it's not exactly the same hardware, the

PC that you had tested. So, when you sell to a county or to a state,

either one, do you check with the manufacturer to see what the

lifespan of that system still is expected? I guess, first Mr. Pearson.

MR. PEARSON:

To answer your question, Commissioner Davidson, I would

say no. You know, generally, we don't dictate to our customers

which PC platforms, towers, servers that they are required to

purchase. We provide them with a minimum set of specifications,

such as a one gigahertz processor, or with a minimum of 40 gig

hard drive and 512 gig of RAM.

COMMISSIONER DAVIDSON:

Okay.

MR. PEARSON:

Or meg of RAM…

COMMISSIONER DAVIDSON:

Okay.

MR. PEARSON:

…we'll say in a Windows-compliant environment. Generally

-- these IT -- these counties, the large ones, they have their own IT

infrastructures. They're big. They're far bigger than little ES&S.

COMMISSIONER DAVIDSON:

Sure, I…

MR. PEARSON:

So, we give them -- we don't do anything very unique. It's

just a standard Windows platform.

COMMISSIONER DAVIDSON:

Platform.

MR. PEARSON:

And so, we really don't try to drive that and dictate to them.

We try to keep up with and stay ahead of the curve, with new

operating systems that come out, and changes with different

service pack releases. And that's another challenge, in itself, in this

fast-paced environment we're all in. And that's where it comes

back to, the time from the initiation of the certification to the time of

deployment, the window is wide, and it's very difficult, because it's -- there's moving -- parts moving all the time and once you enter into a certification, and there's been hundreds of thousands of dollars invested on testing, we're not going to change out the platforms, you know. It's just -- it's too fast paced.

COMMISSIONER DAVIDSON:

Okay.

MR. PEARSON:

The counties they need that latitude, that flexibility to keep their systems for awhile. I mean that's the bottom line.

COMMISSIONER DAVIDSON:

Mr. Hirsch, is it the same thing for you? Do you, you know, just give them the specifications that is needed? Is that what you do?

MR. HIRSCH:

Yes, that actually was one reason for our revision, because in our original certification we didn't have that specified. We just simply specified the model -- make and model of the PC. And one reason when we reapplied for certification, we took that language out, because it was not practical. And it's not -- it's not good for the counties. It's not only not practical for our certification, but it's not good to hold them to a PC that's years old.

COMMISSIONER DAVIDSON:

Right.  Mr. Peterson, do you have -- in your testimony, as I was trying to understand it, and part of it, I have to admit I'd like to hear it again, so I'll go back and review the tape, because I think if I hear it a second time I will understand it better, but is there a solution by hearing what these gentlemen are saying that you have to suggest?

MR. PETERSON:

I apologize for perhaps not being as clear on the technology pieces, and so I'll do my best to…

COMMISSIONER DAVIDSON:

No, it's my problem.

MR. PETERSON:

If you draw a parallel from another industry, it really is around understanding the technology roadmaps, and then compatibility.  And so, to expect the exact same machine, as perhaps tested and certified, to be the device that every election office would acquire is probably unrealistic.  And that's why it's important that you separate the COTS component from the voting system testing component, and in our recommendation, as is done in other industries like retail, that software developer is the one who does a compatibility verification.  So, they look at our roadmap, we suggest to them that this old system is now replaced by this newer system, and then they take it and test compatibility.

COMMISSIONER DAVIDSON:

And they certify that they have done that testing?

MR. PETERSON:

Yeah typically it's, you know, whatever is appropriate for that

particular industry.  In most industries, or many industries, it is

simply perhaps a published compatibility test on their Website.

COMMISSIONER DAVIDSON:

Okay, all right, I appreciate it.  Thank you very much and

thank you for being here today.

CHAIR BEACH:

Okay, thanks.  I just want to get a basic clarification and

primarily for our public.

So, when we talk about COTS, are we talking about

software, firmware and hardware as it relates to voting systems?

MR. PEARSON:

Yes, there are those components.

CHAIR BEACH:

All those components?

MR. PEARSON:

There could be far more components that could be

considered COTS components, yes, all three of those that you

described, yes.

CHAIR BEACH:

Okay. And when you have, for example, patches, whether they're regular patches or emergency patches or upgrades, like Windows XP to Vista, what type of considerations do you take into place when you manufacture a system?

MR. PEARSON:

Well that would be a major upgrade for us, and we typically don't make those very often, you know. We'll stay on that XP platform until we have migrated our systems very carefully through a quality control process to evaluate, say, Vista. That is a very long process to ensure that our systems are upgraded properly, before we would even consider going into a certification. So, it is a challenge, for instance, on an XP. You know, with Windows they'll offer service pack one, service pack two, service pack three. They're always making fixes and enhancements to their systems. And the challenge we have is when you enter into certification at the service pack two level, there might be additional patches released by Windows. And then, how do you deal with that? You know, in today's world the rules say, you know, that would require additional and -- more additional regression testing, which is time and money.

The other challenge we have is the time it takes to get certified. When you're certified, when you start to deploy your systems, and you have counties go out to purchase systems, they

can't even buy platforms any longer that have those operating

systems loaded on them.  It becomes a challenge.

So, we've got to find a way to narrow the window, make it a

little more efficient to get these -- to accommodate these types of

changes from the COTS providers out there.  It's difficult for us

vendors to keep up with that pace.  I don't know if I answered your

question.

CHAIR BEACH:

No, no, you did.  Do you have anything to add, Mr. Hirsch?

MR. HIRSCH:

I think it's important -- when Mr. Pearson mentioned the

difference between what the VVSG or the VSS talks about, the

software being identical to the hardware, which should be, like form

and function -- I think it's important to distinguish COTS software

from proprietary software.  We're all in agreement, I think, that any

changes, minor or otherwise, to a proprietary application should be

thoroughly reviewed and tested and all that.

I would highly disagree that we should take that level of

scrutiny to COTS software changes.  As an example being, if you're

going to a different model, even of, just an updated model of the

same Dell computer with one -- a 520 to a 530, it's going to have

different software on there that comes with it.  At the very minimum,

you're going to see some updated drivers or different drivers.  The

software that comes with that PC is going to be different.  So, I

don't think we should apply the same standard to the COTS

software that you would apply to proprietary software, regardless of

what -- you know, how we might interpret the VVSG to be read.

And that's where we always seem to get into problems.

If left to their own devices, the VSTLs will give the most

restrictive interpretation of the guidelines.  So they'll say, "It says

software.  It says identical, you know.  We're going to write you up.

You've got to address that.  You've got to figure this one out."  Now

we're sending Requests for Interpretations back and forth and

everyone is getting all --  so it's important for us, I think, to sort of

keep practical and common sense about this.  Does that make

sense?

CHAIR BEACH:

Yes, that does.  Thank you.  Mr. Peterson, at what point

does Dell no longer provide support for end-of-life for a PC?

MR. PETERSON:

It's going to depend a little bit by the model and the machine.

But typically, what Dell does is provides customers significant

advance notice, in terms of end-of-life, and then with our warranty

and our support programs significant service, warranty,

maintenance and support, even after the product is not a current

model.

CHAIR BEACH:

Okay.  And I know you talked a lot about, and you mentioned in your testimony, the roadmap.  With the constant software and hardware upgrades, you know, that occur in this industry, how does Dell go about providing good customer support in such a fluid atmosphere, if you could just elaborate on that a little more?

MR. PETERSON:

Sure, that's a very good question.  I mentioned, briefly, two different tools that Dell provides for customers, one called ImageWatch.  In particular, what those tools do is it allows our customers to actually track changes that would be image impacting, which means, essentially, software or function impacting, so that they can identify, in advance, what's happening and so that they can work jointly with us to test any changes that they feel, you know, might have an impact on their software.

And I can certainly, for the record, provide details around those different tools from Dell.

CHAIR BEACH:

Thank you that would be helpful.  At this point, I know our Executive Director had a question that he wanted to ask of the panel.

EXECUTIVE DIRECTOR WILKEY:

Yes thank you, Madam Chair, and I'll try to be as quick as possible. I'm looking at this piece of equipment and I think, if I recall, we were probably using it in New York, when I started out in this business, but I'll have to check that out.

I just want to make a comparison here if I can, and if you can't answer it I don't want to put you on the spot Mr. Hirsch, but I -- and it's because I know that you are a commercial airline pilot. And we were recently on a flight that had a little problem at the gate, or as we were leaving the gate, and the pilot began telling us that there is an incredible number of individual computer systems that it took to make this airline take off and fly. I think it was 60, 70, I can't remember. They even had one specific system onboard that controlled the flushes between the first-class john and the aft john, which I felt rather interesting.

My question is, is there a comparable process? Does the FAA or the Civil Aeronautics Board, for example, have a similar process to what we have put you through in the voting system industry to validate? Because I am sure that every time they turn around they are updating a piece of hardware or software that they buy from Dell or from some other company. Who does this validation? And is there a set of criteria similar to our VVSG that they use? If you can't answer, I'll understand. I can probably ask one of our experts on the second panel. But I've always wondered

about, for example, the airline industry and the healthcare industry,

which uses enormous technology these days, which has

implications on life and death, what do they use?  And is there a

framework?  And how do they keep up with the changes that go on

every day?  If you can offer anything, I'd be grateful.

MR. HIRSCH:

Well, they do have a system, and I'm not necessarily

suggesting that the voting systems use that system.  I've also been

an aircraft owner for 15 years, and it's incumbent upon the aircraft -

- when an airplane is first manufactured, it must be in an airworthy

condition, and it's certified to be airworthy with the original parts

that are created by the manufacturer at that time.  In my case, my

airplane was built in 1969, so it was certified in 1969 to those

standards.  Any change that I make to that aircraft, and that's me, I

have to go through a certified repair station to have that change

done, they have to log the change that was done, and then any

discoveries that are made in the field about the airworthiness of my

airplane.  So, if a particular part is found to wear out sooner, the

FAA will issue an airworthiness directive, or an AD, and they will

send that notification out to all of the registered owners of the

airplane.  And then, they will have a scope when you will have to

comply with that airworthiness directive.  So, it might be sometime

before the next annual is done. It might be within 30 hours of flight. And then, they'll tell you what has to be done and who applies.

So, I mean, if you wanted to compare that system to voting, it would be incumbent, then, upon the counties, or whoever purchased the voting system, to be notified by the regulatory agency, which would most likely be something like the EAC, of any anomalies that were noted in the field with their equipment. And if that individual county or jurisdiction wanted to make a change to their system that was not originally certified, you can -- at least in an airplane you can go and make that change, as long as you go through the proper channels, yourself, and have it certified in the field. So, that's all coordinated with, you know, the certifying body and it's between them and the owner, so they don't go back to the manufacturer after the plane is sold.

EXECUTIVE DIRECTOR WILKEY:

But is this -- are these regulations through the FAA or Civil Aeronautics Board or some entity?

MR. HIRSCH:

These are regulations with the FAA.

EXECUTIVE DIRECTOR WILKEY:

Okay.

MR. HIRSCH:

They're federal regulations.

EXECUTIVE DIRECTOR WILKEY:

Could you hazard a guess, and again, if you can't, fine -- the airline industries they're not, supposedly, making a profit these days, but if they were making a profit, what percentage of that profit would be just to continually test all the design and systems -- the new systems that they're bringing in every day?

MR. HIRSCH:

I have no more knowledge of that than you do.

EXECUTIVE DIRECTOR WILKEY:

I think that some day we should pose that question to one of those companies, because I think it would be very interesting in comparing it to where we are in our industry.

Mr. Peterson, just one fast question. You talked about compatibility validation and this ImageWatch. Similarly, when you do products for another industry, aviation and healthcare, who actually would do the compatibility validation? Would they, like we do, using an independent laboratory, use something like that? Or would they rely on the product validation that you have done, in terms of your company? Or do you use an independent validation process?

MR. PETERSON:

Thank you for that question. For the industry software vendors that we work with, those industry software vendors would

be the ones who would certify the compatibility. They're the ones who understand their application and what it's supposed to do. What Dell does is make sure that we give the person who's using the system the details around the configuration, around software, or around any of the basic COTS components that they need. So, the typical industry model is that the end provider of the solution is the one that tests it for the function that they expect it to perform.

EXECUTIVE DIRECTOR WILKEY:

So, there is no set of guidelines similar to what we use as an industry that that entity can rely on to go and say, "Well, I need to meet this requirement"?

MR. PETERSON:

Inside the scope of the voting systems that we're talking about, that's not really my area of expertise, but I would have to say I'm not aware of any.

EXECUTIVE DIRECTOR WILKEY:

Okay, thank you very much. Thank you Madam Chair.

CHAIR BEACH:

Thank you. Well, does anybody else have any...

VICE-CHAIR HILLMAN:

Well, no, but I saw Mr. Pearson looking like he wanted to say something on that point and I would just invite you to.

MR. PEARSON:

Thank you Commissioner Hillman.

EXECUTIVE DIRECTOR WILKEY:

I was trying to not pick on Steve today.

VICE-CHAIR HILLMAN:

He was sort of getting up out of his chair, so I figured…

[Laughter]

MR. PEARSON:

I was, I was.  You know, it goes back to the second point I made about overburdening the process.  You know, literally the list of brands and models of PC's is extremely long, and we don't restrict -- we don't -- Dell is not a partner of ES&S.  So, I mean, it's like -- to limit -- we would be limiting as an industry to a specific set of computer systems and computer system providers, if you were to expect us, with 4,000 jurisdictions, to be able to qualify every system that those IT directors want to purchase in those counties, or we would limit them to restrict only the ones that we certify.  So, then we get down to the point where we have the five or $700 hammer, because now we're only going to certify and recertify the changes for a limited set of computers.  And those -- that's an expensive process and lengthy process for us to go out and continuously qualify that with a VSTL.  That is overburdening the manufacturers with that responsibility, in my mind.

Thank you.

CHAIR BEACH:

Commissioner Davidson had a follow-up.

COMMISSIONER DAVIDSON:

One quick, to follow-up on Mr. Wilkey's question about the

process that you have with the FAA.  Can you tell me -- and I

maybe need to direct this to Mr. Pearson -- you have several

different versions of ES&S equipment out in the many jurisdictions

that you have located them in.  Can you give EAC a list of each

county that has each specific version of equipment, and what they

have?  In other words, can you give us a list saying, "Here's the

version that our counties have or our states have working in their

election process"?

MR. PEARSON:

Commissioner Davidson, I want to clarify, are you speaking

specifically about the election management computer systems?  Or

are you talking about the tabulators that are in the field as well?

COMMISSIONER DAVIDSON:

Every piece of it.  Could you give us a list of the

management, the tabulators, you know, the model that they have in

the location, whether it's a scanned ballot or a director record or

whatever?

MR. PEARSON:

We could give you that list for all of the equipment that we've

provided them.  For the equipment that we did not provide them,

such as…

COMMISSIONER DAVIDSON:

Sure.

MR. PEARSON:

…computer systems that they run their election

management system on, I -- we could not provide you with that list.

COMMISSIONER DAVIDSON:

I understand that.

MR. PEARSON:

Thank you.

COMMISSIONER DAVIDSON:

Yes, okay, we're speaking the same language. Thank you

very much.

CHAIR BEACH:

Okay, thank you.  Thank you for your input.  It was very

helpful to us.

And before we call our second panel, we'll be taking a five-

minute break to change out the closed captioning.

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[The Commission recessed at 2:23 p.m. and reconvened at 2:32 p.m.]

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CHAIR BEACH:

Okay, now I'd like to introduce our second panel on this issue.  First we have Mr. Jack Cobb of Wyle Labs.  Mr. Cobb is an internationally certified software tester with more than 12 years of IT experience, including more than five years specializing in software and systems analysis for voting systems.

Next, we have Mr. Merle King of Kennesaw State University.  Mr. King is an Associate Professor of Information Systems, and the Executive Director of the Center for Election Systems at Kennesaw State University in Kennesaw, Georgia.  With his colleagues at the Center, Mr. King has led the development of one of the nation's best resources for election administration and support.  The Center provides technical support to the Georgia Secretary of State's Office and to the 159-county election supervisors in Georgia.

And finally, we have Mr. Steven Berger of TEM Consulting.  Mr. Berger is a professional specialist focusing on government and industry relations, advanced technology and voting systems.  He has 28 years of experience in standards development, project management experience includes telecommunications, information technology, voting systems, and information industries, with a technical focus in areas of electromagnetic compatibility and disability issues.  He is also a technical reviewer for the EAC's Voting System and Testing Certification Program.

And again, you will have ten minutes each to make your presentation, and then we ask that you stay seated for questions from the Commission.

We'll start with Mr. Cobb.

MR. COBB:

Good afternoon, Madam Chair and Commissioners.  Thank you for inviting Wyle to participate in this hearing about the use of COTS products in voting systems.

Wyle provides testing services to many industries.  Wyle became involved in the testing of electronic voting systems in the early 1990s.  And we have tested over 150 separate voting systems.  Wyle currently holds accreditations through A2LA and NIST, as well as providing -- being accredited by the EAC to test voting systems.

In our experience, we have seen COTS components support many different functions in voting systems.  We have seen both COTS hardware and COTS software.  Almost all voting systems employ COTS products in some manner.  Hardware components usually consist of PC's, laptops, monitors and other peripherals, while software usually consists of operating systems, database browsers and utilities.

According to the 2005 VVSG, COTS can be classified into two categories; modified COTS and unmodified COTS.  The

unmodified COTS is exempt from many of the VVSG requirements, where modified COTS components require that the VSTL perform an engineering analysis to determine which standards apply and what is to be tested.

There are pros and cons to using COTS components. Many of the reasons for the use of COTS components -- the main reason for the use of COTS components is the acceleration and cost savings in the development cycle. COTS components function as a "black box" component in voting systems. These functions supported by a COTS component do not have to be developed. This allows the system designer to bypass this function in the system architecture. The designer does not have to know how the component accomplishes this function; just that it receives its input and provides its expected outputs. With regards to PC's and laptops in voting systems, manufacturers do not have to fully develop a PC from scratch. This is also the main con to the use of COTS components. COTS components are continually changing. These changes may consist of subassembly changes or just a small part. The changes usually are to similar components but not identical. We have seen the adverse effects of this in the voting system testing. A voting system manufacturer made a minor modification to a NASED certified system that required the voting device to undergo a retest of electrostatic disruption. During the

retest, the LCD monitor continually failed and the test was halted. After a lengthy discussion and research, it was discovered that the LCD manufacturer had switched subcontractors for a part of the LCD monitor. The LCD manufacturer assumed the same part manufactured to the same specs would perform the exact same, they didn't, resulting in the failure. The voting system manufacturer was never aware that anything had changed, since he used the same model number and revision for the LCD model.

The EAC has published an RFI, "2007-05 Testing Focus and Applicability." This document requires COTS standalone products, such as PC's and laptops, to have the CE or FCC Class B marks affixed to the COTS product. The VSTL is to receive the Declaration of Conformance, perform an analysis of this document and determine if the testing performed meets the VVSG requirements. This is a difficult task. Not all COTS manufacturers readily provide this information, and if they do, the products often are not tested to the same level. A couple of examples of this are the electrostatic disruption and the conducted RF test. Both of these tests have residential and industrial levels. While the industrial level is much higher, the COTS manufacturer can test to the lower level and still declare conformance to CE.

PC's and laptops usually serve only two functions in the voting system architecture. They are either used in a back office

environment to perform EMS functions, or they are the voting

device itself.  In some situations, proprietary voting system software

or firmware -- in both situations, proprietary voting system software

and firmware rely upon a third-party package of software.  This

third-party package can consist of an operating system database or

utilities.  Most of the voting system proprietary software has been

written with the assumption that the third-party packages are

available and resident on the hardware.  In most situations, the

COTS hardware only needs to support these third-party packages

to operate successfully.  An example of this would be a voting

system that requires Adobe "Acrobat" or "Crystal Reports" to run an

XP environment.  The reporting functions of the voting system

would be handled by the operating system and the reporting

application.  As long as the hardware can support these packages,

it would produce reports as expected.

In conclusion, Wyle believes that if PC's or laptops function

in the back office environment to support the EMS functions of a

voting system, that three suggestions by the EAC would be

sufficient to lessen potential risks.  But, if the COTS PC functions

as a voting device, it should undergo full testing to the VVSG.  Wyle

would also like to suggest another method to test potential risks if

the PC or laptop functions in the back office environment.  We can

simply perform an installation test on the replacement model.  This

test could install all third-party supporting products required by the

system and all proprietary software to ensure the replacement

model can support the third-party package and the voting system.

In addition, the system could perform a minimum performance

requirement set forth by the EAC, and this could all be documented

in an RFI.

Again, I'd like to thank you Madam Chair and

Commissioners for inviting Wyle to participate in this hearing.

CHAIR BEACH:

Thank you.  Mr. King.

DR. KING:

Thank you Madam Chair, Commissioners, Executive

Director Wilkey.  It's a pleasure to be here today.  I'm Merle King

and I'm the Executive Director of the Center for Election Systems.

I think we've heard from other panelists about the benefits of

COTS components; the way that they can drive down costs.

Ostensively, they're mature technologies that can reduce some

uncertainty in the deployment of systems, but what I'd like to talk

about is some experiences that we've had in Georgia with COTS

components, and some observations of the impact of COTS on

certification, and then finally, a recommendation.

Depending upon the extent to which the voting system has

integrated the COTS components into its initial configuration and

the type that's used, the modification of the system can begin immediately upon deployment.  And for a jurisdiction, that can be a very disconcerting event, that before you even fully understand the behavior of the rollout of your system, you're engaged in upgrades, modification and maintenance of the system.  This places an unusual burden on the jurisdiction in that you're having to ask for money for a modification from your funding sources, virtually, immediately after the deployment of it.

So, what I'm going to talk about are some of the selected COTS issues that we've run into in Georgia.  Our system is fairly mature.  We've had it since 2002, and some of these problems are recently manifested, and some have been known for quite awhile.

Georgia uses a uniform voting system throughout the state. And what that means, from a COTS perspective, is that there are no county issues.  Every issue is a statewide issue when it comes to COTS in Georgia.  Although there are many advantages of having a uniform system, it prevents localized changes to the deployment of a system, and it means that every change will be an expensive change, because it will be a statewide change.  Counties cannot change out a voting system that contains obsolete COTS components.  This requirement for uniformity places many constraints on the management of the system and, again, requires everything to be viewed from a statewide perspective.

Currently, we use a Premier Election Solution System, GEMS 1.18.22G that runs on top of a Windows 2000 server, running on Dell hardware. Over the first seven years of deployment of the system, we were able to preserve its deployment configuration, how it was originally sent into the field, by not applying service packs. That's something that's considered to be standard practice in the IT industry, but we had to avoid that in order to preserve the initial deployment configuration. We were also able to purchase replacement servers from Dell and downgrade them to run the Windows 2000 operating system. During the same time period of 2002 forward, Microsoft announced the end-of-life of Windows in 2004, and in 2008 we discovered that Dell would no longer be producing a server that we could downgrade to run Windows 2000. Support for software products is phased out over a multi-year schedule. Mainstream Support for Windows 2000 was retired in 2005, and Extended Support will be expired in 2010. So, we're truly at the end-of-life for that product, not only in the sale but in the support.

Recently, we dealt with an issue in which the Secure Socket Layer certificate, a security feature of the system, had to be upgraded, and we took that as an opportunity to kind of re-examine all of our COTS components on our servers. And in that process we quickly, if I can go through just the steps that we went through in

addressing how a state would look at a COTS modification issue, which sometimes I've heard on this panel, it seems trivial to say, "Well you just migrate to another platform." And that's a very complicated process.

When we were reviewing the application of Service Pack 4 to the Windows 2000 platform, that is bringing Windows 2000 to its current recommended status, we first got the Secure Socket Layer from our vendor, the new certificate, and applied it to our own test systems. We tested those and then upgraded those systems to Service Pack 4. So, we now had servers running Windows 2000 with Service Pack 4 and the new SSL certificate. We then contacted Wyle Labs to test whether the system was in continued conformance with the 1990 NASED VSS standard under which our system was initially certified, and then we followed up the Wyle testing with our own testing to confirm not only our initial results and their results. The process took about four months, which in an election year, it is an incredible compression of time, in which you're looking for Windows to do the testing, as well as running elections in the background.

We've also had COTS related issues on batteries that are used in our ExpressPoll units. In this particular case, the manufacturer of the batteries -- and it's a one-off battery. It was designed to go into a tablet that's highly specialized. It's still a

COTS component. The manufacturer no longer manufactures that battery. In working with our vendor, they went back and negotiated the resolution with that manufacturer to ensure continued compliance -- continued availability of that battery for use in our electronic poll book, EP 4000 is the model number. The point is that without the intervention of the manufacturer to go back and negotiate that contract, there's nothing that would compel that battery manufacturer to continue to do runs of those batteries. And many of these issues can be invisible to the jurisdiction. The COTS manufacturers can be subcontractors of subcontractors pushed far back beyond the visibility of the jurisdiction.

The last example is a firmware "recall" notice issued by Seagate for a series of hard drives. And this is an example of firmware issues that, according to the Seagate directive, that failure of the firmware on the hard drives could result in a catastrophic unrecoverable error on the hard drive, which, for the most part, is not a great issue in elections because everything is backed up, but if it occurs during an upload or a download, or on Election Day could in fact be catastrophic. So, I bring these up as examples of changes in software, the operating system; changes in hardware, the battery; and changes in firmware, all generated by COTS providers within our voting system in Georgia.

What I'd like to do, and I'm trying to stick with my ten minutes, so I'm going to go to the certification issues portion of my testimony. And, there I identify that there are numerous issues related to the certification and recertification of voting systems that have been modified, upgraded, or updated, or in some way touched by these COTS issues.

The first is that the EAC Voting Systems Testing and Certification Program Manual provides for de minimis changes. It's a great concept. However, the changes may only impact the hardware of the system and have no impact on the functionality of the system.

I think that first criteria is problematic, in that hardware changes may in fact be quite substantial to a system and may not be de minimis at all. On the other hand, there can be firmware and software changes that, in my opinion, would meet that criteria of de minimis. And my recommendation would be that the criteria for evaluating a de minimis change is its impact on the system, not its genesis, not what piece of the system generated the change.

A second point is that warranty work by component suppliers in a voting system may be contractually required by the jurisdiction. When you buy a Dell server, your jurisdiction may require you to take out a warranty contract with the manufacturer and that contract may require you to perform upgrades in order to keep it in

conformance with the recommended environment for that product.

Specifically, service packs on operating systems.  This application

of service packs is considered an IT best practice.  And the

certification process should, not only permit that, it should in ways

enable these best practices to be applied without violating

certification of the system.

The EAC's COTS conformance strategy should not presume

that the manufacturer will be the only source of requests for

changes.  And there may be, as I pointed out in my testimony, there

may be circumstances where a vendor has a choice -- a

manufacturer choice between selling a jurisdiction a new product or

performing maintenance on an existing product.  And the economic

incentive may be different for those two strategies.  There may be

also the situation in the future where the jurisdiction is the owner of

the voting system; that many jurisdictions do not presume the

continued existence of the manufacturer.  So again, I think the

standard should create some way in which the owner of the

system, whether it's the manufacturer, whether it's the jurisdiction,

can bring forth requests for modification -- requests for evaluation

or modifications.

CHAIR BEACH:

Mr. King…

DR. KING:

Yes.

CHAIR BEACH:

…your time has expired.  Can you summarize?

DR. KING:

I will summarize.  Given the volatility of COTS components, over their lifetime, which is driven by the market, which is driven by the business model of the COTS manufacturer, that voting system manufacturers should avoid placing COTS components at the core of the architecture of the voting system, because they are beyond the control of the manufacturer and, therefore, beyond the control of the jurisdiction.  COTS components have an appropriate place. That place is at the peripheral of the system, not at its core.

CHAIR BEACH:

Thank you.  Mr. Berger?

MR. BERGER:

Thank you Madam Chair, Commissioners, Executive Director Wilkey.  I'm Stephen Berger and it's a pleasure to be here today.

Let me start with the basis for exempting some COTS components from testing, and that's the belief that the COTS has already been extensively tested for a variety of reasons and, further, is widely used providing evidence from its field experience of its adequacy.

I'd like to suggest that we can divide COTS into four general categories. The first would be what I think we normally think of as COTS, and that would be an internationally marketed PC. It will have been tested for RF emissions to the FCC requirements, which are legally mandatory. It almost certainly will have been tested for safety to -- for its UL marketing and perhaps other international requirements. If it goes to Europe, and has the CE mark. it would have been tested for RF immunity, electrostatic discharge, those kinds of things. If it's sold in Sweden, it probably will have been required to be tested for ergonomics and usability to the TACO standards. If it's sold to U.S. federal agencies, it will have been evaluated for disability access to the Section 508. And so, the assumption is with all of that testing, there's a lot that we can count on in those products. Even beyond that, there's a category of COTS that goes further. On the Metro, in here yesterday, I noticed a poster for a Dell laptop that would take a drop from four feet, being hardened further than the normal commercial grade laptop. And so, you have some products that even exceed that.

Where our concerns are are categories of COTS that come under what we normally think of. One would be special market COTS. If a laptop is sold only in the U.S. and only qualified, it will never have been tested for RF immunity, because there are no U.S. mandatory requirements. It may not have been tested for

safety, that's optional, in many jurisdictions.  It won't have been
tested for ergonomics and usability, and probably hasn't been
tested for disability access.  So, there's a lot of unknowns.  So, the
product may meet all those requirements, but it won't have been
necessarily tested.

And even below that there's a category of COTS I would
semi-custom.  Any of us can go into an electronics store, buy a
mother board, buy a case, buy a power supply and the store will
probably put it altogether and hand us a PC or a laptop.  What its
quality is, whether it meets the requirements of the VVSG is
certainly highly questionable.

So, one of the issues is when something is brought forth as
COTS is it really what we were originally thinking about?  I would
say we all want to see the benefits of COTS captured, and they're
substantial, as has been said before.  The challenge today is how
do we mitigate the risks?  And I would say there's two categories of
risks.  One is when a COTS product is exempted from testing, is
that exemption justified?  And I'd suggest that for some categories
it is and for other categories of COTS it may be questionable.  The
second issue -- area of issue would be for the testing that is done,
at what point would change in the COTS bring into question the
validity of the testing that was done?

So, I've outlined in my testimony a number of issues. One is, does the COTS really meet the intended requirements for the allowances given? Secondly, we're assuming that its field performance justifies that exemption, but actually, we don't look at that. And sometimes the field performance is pretty good evidence that there is a problem. Another issue is, repeatedly we've found that there are compatibility issues. Different cost components may be just fine, but certain combinations may be problematic. This is one of the areas where ongoing dialogue with vendors can be helpful, because they can tell us where independently COTS maybe work, a lot of combinations maybe work, but there may be some particular troublesome combinations.

I'll just say that I think, at the core, where we are is in a process of looking at a variety of issues, trying to understand the risks and where the risks go beyond what we feel are acceptable for elections and voting systems, to figure out how to mitigate those risks. I'll suggest several steps that might be taken.

One is, as I suggested, COTS, I believe, should be qualified rather than just taken on face value. There should be a mechanism for excluding combinations of COTS that are known to have interoperability issues. I would suggest that there's a lot of value to having ongoing periodic discussions with COTS vendors. They can tell us what the roadmaps are, so we can thinking about what do

we want to evaluate, especially when there's major technological changes in the underlying technology.  There are ongoing COTS efforts at other agencies, and I believe a liaison between the EAC and those efforts at the Navy, at the Joint Spectrum Center, at -- there's actually a committee of these that exist under -- in the area of electromagnetic compatibility.  Liaison, there, I think would be quite helpful.  And then I would say, and I would actually support a number of things that were said by the first panel; that we should look at the increased cost and resource required by whatever we do to mitigate risk in COTS, and see if we can't match it with reduced cost in other areas, so that it's not just an increase of cost to the certification process.

Thank you.

CHAIR BEACH:

Thank you.  I'd like to turn to Vice-Chair Hillman for any questions or comments she may have.

VICE-CHAIR HILLMAN:

Commissioner Davidson would you like to go first?

COMMISSIONER DAVIDSON:

Go ahead.

VICE-CHAIR HILLMAN:

Go ahead?  Okay.

COMMISSIONER DAVIDSON:

Yeah, sure.

VICE-CHAIR HILLMAN:

Mr. Cobb I'm going to try to feel my way through a series of questions with you, because I think I know where I'm trying to go but I'm not sure I have the roadmap to get there.

So, if I understand correctly, a manufacturer develops a voting system and may indicate that the voting system can operate with a COTS PC or laptop, as long as that laptop or PC has certain minimum?

MR. COBB:

Correct.

VICE-CHAIR HILLMAN:

Okay. So, it could be any manufacturer's PC or laptop, as long as it has minimum requirements?

MR. COBB:

Some people specify in their documentation. A situation with MicroVote, they have called out Dell laptops.

VICE-CHAIR HILLMAN:

Um-hum.

MR. COBB:

So we have to use Dell laptops.

VICE-CHAIR HILLMAN:

Okay.

MR. COBB:

But not everyone documents it that way and some people just say a minimum of "blah."

VICE-CHAIR HILLMAN:

Okay. So, if they call out specific PC's or laptops, it's probably easier to identify which it is. If they don't specify, what does Wyle Labs do?

MR. COBB:

We document the test environment as it was tested saying that we tested on this laptop with serial number blah, blah, blah, system requirements, all the way down to memory, hard drive size and the actual service tag or serial number on the PC or laptop. And that's what it's tested with, not what's used.

VICE-CHAIR HILLMAN:

And in doing that, does the lab take into consideration any other reported malfunctions or anomalies with that particular PC or laptop?

MR. COBB:

We do not research that specifically.

VICE-CHAIR HILLMAN:

Okay, so if that particular laptop has a history of the screen going black in two years, it's not…

MR. COBB:

No, we do not research that.

VICE-CHAIR HILLMAN:

…known?

MR. COBB:

That's right.

VICE-CHAIR HILLMAN:

Okay.  And do you verify that, in fact, that PC or laptop has

been tested or certified to meet the basic requirements or minimum

requirements?

MR. COBB:

We follow the RFI by the EAC 2007-5, which says that we

need to get conformity -- the Declaration of Conformity and try to

research the best we can to what it has been tested to.

VICE-CHAIR HILLMAN:

Okay.

MR. COBB:

The CE mark, the FCC Class B, and UL markings.

VICE-CHAIR HILLMAN:

Okay, all right.  You were here for the first panel discussion,

were you?

MR. COBB:

Yes, yes ma'am.

VICE-CHAIR HILLMAN:

So you heard the discussion about the outrageous, out-of-control costs and what it used to cost and what it cost today to have a system tested and certified. Could you share with us, or would you share with us what are the items that contribute to the major costs for testing? And what causes, what I'll call, the cost overruns?

MR. COBB:

In my opinion, the major areas that are extremely expensive in testing are the review of technical documentation and the source code review. Those are two major areas that are extremely expensive, because of the nature of back and forth, back and forth. We submit issues back to the vendor. They fix it. They submit again. And it's back and forth. And you're probably doing a source code review for at least three or four months before you're anywhere near getting ready to start testing. It's called a pre-testing activity. And the technical documentation review probably goes on for the entire test campaign. Something may be discovered in testing that's not documented properly. They'll have to go update their documents. So, you're constantly reviewing the documents and the source code that goes into a system, and those are two very expensive parts of testing.

VICE-CHAIR HILLMAN:

Um-hum.  Are those what you would call discrepancies?  Or are those in addition to?

MR. COBB:

Those are discrepancies, yes.

VICE-CHAIR HILLMAN:

Discrepancies.

MR. COBB:

Um-hum.

VICE-CHAIR HILLMAN:

Okay, all right.  And the process under the 2005 VVSG, the testing process,..

MR. COBB:

Um-hum.

VICE-CHAIR HILLMAN:

And was Wyle testing prior to EAC's VVSG?  Did you test when the NASED…

MR. COBB:

NASED was broken up a little differently.  Hardware was tested as a hardware lab and Wyle was a hardware lab.  And software was broken out and tested at other laboratories.

VICE-CHAIR HILLMAN:

I see, okay, so you were doing hardware.  So -- and now you do both?

MR. COBB:

Yes, ma'am.

VICE-CHAIR HILLMAN:

Is that what you're saying?

MR. COBB:

Yes, ma'am.

VICE-CHAIR HILLMAN:

Right. And so even if you were -- could isolate the hardware testing, is the process any different? Does it take longer? What -- what would cause the cost to be six times higher in 2009 than it was in 2004?

MR. COBB:

The labs now have to be accredited to 17025 lab standards which means that you have to document everything you do for repeatability, traceability. So in a software world, that's extremely intensive. If you could take just a small logic statement, there could be eight different paths you could take by passing in a simple choice. Think of a drop-down list. Well if a drop-down list has 20 choices, I could make 20 different paths. I have to test all 20 paths. But not only do I have to test those, I have to document which path I'm going down every time, where before you could just say, "I'm going down this path using this data," inputting everything. It now has to be documented at a level that says, "I'm choosing red, I'm

choosing blue, I'm choosing green. My expected result is," blah, and so on and so forth. So the requirements for the labs have actually increased because now we have to be accredited to a higher standard, and that is generating a lot more overhead than was there under the NASED process.

VICE-CHAIR HILLMAN:

Is it -- given the environment and the nature of the business of elections, is that cost-effective? Is that a good thing for the voters in the long run?

MR. COBB:

Well we're 17025 certified for our A2LA accreditation in all scopes of -- or a lot of scopes of hardware testing. So we already were there, but some of the other labs weren't. And specifically, most of the ones that were software labs, they didn't perform under those guidelines, so that's a major reason there's a difference.

VICE-CHAIR HILLMAN:

Okay, thank you.

MR. COBB:

Yes ma'am.

VICE-CHAIR HILLMAN:

Dr. King, do I recall correctly that Georgia controls -- or I should say that the Center for Election Systems at Kennesaw controls the certification?

DR. KING:

We are the certification agent for the state, yes ma'am.

VICE-CHAIR HILLMAN:

Okay. And what have you seen to contribute to increased costs over the years that the Center has been doing this for Georgia?

DR. KING:

First, may I say we've not experienced the same level of cost that's been described by the members of the panel. However, I think one example of a change was prior to 2002, we would do a software review on those portions of the system that we were curious about that appeared to be behaving in a way that we didn't expect. Now, when we do a source code review, it's much more extensive. It does take more time. But in fairness, we haven't certified -- done a full certification on a system since 2002, so most of ours has been done on an ad hoc basis and only a component review as opposed to a complete system review since that time.

VICE-CHAIR HILLMAN:

If Georgia were to require that the voting system be EAC certified, what do you think that would do to your cost?

DR. KING:

Well, we do require that it's EAC certified.

VICE-CHAIR HILLMAN:

Oh, okay.

DR. KING:

And what we're waiting for is when we move to a new system that will require that.

VICE-CHAIR HILLMAN:

So what do you project -- or do you dare project or estimate what it might do to your time and cost?

DR. KING:

I'm a University employee, so it's always going to cost more. We just don't know how much more at this point.

[Laughter]

DR. KING:

Well, first of all, the 2005 VVSG is much broader than the prior standards that we tested to, so just the volume of tests that will have to be either reviewed or reaffirmed becomes much larger. It will take us more time, and we're hoping it will not take us more expertise than what we currently have at the Center. But to envision a doubling of the costs, that would be an easy estimate to make, given the change in the scope of the 2005 VVSG versus the 1990 VSS.

VICE-CHAIR HILLMAN:

And if EAC were to have a conversation to put actual dollars to some of the -- we can do actual cost versus projected costs, is

that something that you think is reasonable, to be able to cost out,

you know, what are the increased costs likely to be, and what is

going to contribute to that?

DR. KING:

I do think that's possible, and I think all of us who are

involved in testing, that's a part of how we plan testing. We have to

look at the scope, look at the actual criteria to be measured, look at

the resources we have. So, I think that's doable.

VICE-CHAIR HILLMAN:

Okay and a question, Mr. Berger. What do we do about this

issue where jurisdictions can determine what's the PC or laptop

that it uses, and then the constant upgrades and improvements that

the manufacturer of those COTS items might engage in, and what it

does to the certification process that the system has to go through?

MR. BERGER:

There are levels of concern. And I think we want to look at

what represents the highest risk and mitigate those, and we'll never

eliminate all risks.

So, as an example of high risk, the Dell Latitude that was

tested on one of the recent certifications, came without wireless.

That particular model has always been offered, to my information,

with or without wireless. What the vendor provided, didn't have

wireless, so none of the wireless requirements in the VVSG were

tested.  The specifications, right now, don't tell the jurisdiction, "Only buy a Dell Latitude without wireless or a comparable laptop without wireless."  If the jurisdiction bought one with wireless, then there's a whole set of specifications that simply weren't looked at and we don't know what risks that might involve.  So that, I would say, would be a very high level of risk that we could mitigate by just specifying, "This system was tested without wireless.  Make sure you only use it with notebooks without wireless."

As we come down further, I think, essentially, there's some very productive conversations that could be had with vendors like Dell, with the voting system vendor, about what's the intelligent way to draw that circle, so that jurisdictions can have choice and have as much liberty as we can give them, while not introducing undue risks.  And then, across some line, I think there will be a consensus that there needs to be further evaluation before you introduce new functionality.  The example I've given before, you introduce laptops with wireless, that sort of thing.

VICE-CHAIR HILLMAN:

Thank you.  Good, thank you.

CHAIR BEACH:

Commissioner Davidson?

COMMISSIONER DAVIDSON:

Mr. Cobb, you were talking about the cost increase and the technical data plan, I don't know…

MR. COBB:

Package.

COMMISSIONER DAVIDSON:

Package?

MR. COBB:

Yes, ma'am.

COMMISSIONER DAVIDSON:

Package.  Does that include the test plan?

MR. COBB:

No ma'am.

COMMISSIONER DAVIDSON:

Okay.

MR. COBB:

No, the technical data package is submitted by the manufacturer, and it includes their system documentation, their user's guides, the design spec, the software spec, the functional spec, the system overview.  That's the package.

COMMISSIONER DAVIDSON:

And that package that you have to definitely, I think you used the word, I can't remember the exact…

MR. COBB:

Review.

COMMISSIONER DAVIDSON:

Review and document.

MR. COBB:

Um-hum.

COMMISSIONER DAVIDSON:

That package, that is required by NVLAP's process, the

amount of documentation that you have to go through?

MR. COBB:

It's in the VVSG.

COMMISSIONER DAVIDSON:

VVSG?

MR. COBB:

Yes, it's in Volume II, Section 2.

COMMISSIONER DAVIDSON:

Okay.

MR. COBB:

The whole section…

COMMISSIONER DAVIDSON:

Okay.

MR. COBB:

…is documentation.

COMMISSIONER DAVIDSON:

And then when you talked about your certification through

NVLAP, what is the expense that you have there that is requiring so

much?

MR. COBB:

In software testing, traditionally, it's been experience based,

skill based. There are people who are trained to do it. But in

documenting to the level of the 17025 standard…

COMMISSIONER DAVIDSON:

I think that's what I was trying to get to.

MR. COBB:

…to make it -- to make -- to get documented to that level is

extremely time consuming and difficult. And before we actually

execute a test, we have to know the expected result of each test.

And it's real simple to sit in a voting system and say, "Well, we

expect it to run an election." But if you get down to the lowest level

of a small function within some of these EMS packages, what is

that result based on the other things that have been input into the

system? And it grows drastically after that point.

COMMISSIONER DAVIDSON:

Okay. Getting back to, really, what our meeting is about

today in COTS and as Brian -- or Mr. Hancock mentioned at the

very first of the meeting, we want to keep it to the component of the

PC's.

MR. COBB:

Um-hum.

COMMISSIONER DAVIDSON:

What is your suggestion there?  Just to say, no other COTS whatsoever, let's just talk about the PC's as he wanted us to today, because we know there's many different COTS products that's being utilized, but the PC itself.

MR. COBB:

I think that if -- I could envision it going down in this manner, and that would be that the replacement PC is drop shipped to a VSTL, the VSTL cleans it off and installs everything from the certified system, that we can get the software from the EAC and load everything on and log in, make sure everything comes up, yes, it looks like everything is operating, and send it on its way.  It would be along the lines of the compatibility test that the gentleman from Dell was speaking of.

COMMISSIONER DAVIDSON:

Okay.

MR. COBB:

I don't see that taking longer than a few hours.

COMMISSIONER DAVIDSON:

Okay.

MR. COBB:

That's not a big deal.

COMMISSIONER DAVIDSON:

And the cost wouldn't be…

MR. COBB:

Not greatly.

COMMISSIONER DAVIDSON:

…outrageous?

MR. COBB:

It would be less than $2,000, I would say.

COMMISSIONER DAVIDSON:

Okay.

MR. COBB:

Um-hum.

COMMISSIONER DAVIDSON:

Mr. King, in talking about PC's, and you've got a whole state

that you have to be concerned about, and you've got how many

counties, 50?

DR. KING:

159.

COMMISSIONER DAVIDSON:

159? That's a lot of counties to control. And when I say

"control," what keeps one county from putting a PC in, because

they think that, oh, this might run faster and not contact you? And how do you control that?

DR. KING:

Well, some of that was visualized in the rollout of the system, and there are changes that were contemporaneous in the State Election Board rules that would make it a felony for a jurisdiction to run a non-standard system. So…

COMMISSIONER DAVIDSON:

So basically, you've got to go back to the laws if a state followed your process and make it very difficult for a locality to change out a COTS product without your knowledge and your testing it?

DR. KING:

That's correct, that's correct. It would require a change in the statute.

COMMISSIONER DAVIDSON:

Okay. Do you have suggestions for us, just concerning the PC's? Do you agree with Mr. Cobb, in how we would move forward in this area?

DR. KING:

To me, the problem with the PC as the core platform, is that the PC is a product. Dell will sell more lime colored, cherry colored and off-green colored PC's to college freshman in Cobb County

than they will voting system components in the entire country. I mean, what drives the PC is the market. It's an extremely volatile product.

Conversely, in voting systems, what you want is the most stable platform you can imagine. In Georgia, we're running a system now into its eighth year. We envision running it into a 10$^{th}$, 12$^{th}$, 15$^{th}$ year, if possible. But on that PC platform, which is shifting itself, has to ride an operating system, and the operating system is the interface to the election management system. When the PC can no longer support the operating system, then you're out of options. And so, my concern is that as -- if you think of your PC as the foundation of your voting system, you're building your house on sand. It's constantly moving underneath it. And I would recommend to any manufacturer of systems that you identify the most stable configuration, the most sustainable configuration.

I noted, in the gentleman from Dell's testimony, the use of 36 months as though that's a long period of time, and it probably is in hardware manufacture, but in elections that's a blink of an eye.

COMMISSIONER DAVIDSON:

Correct. Okay, Mr. Berger, do you have anything to add to what they have said about PC's? And in trying to get to the issue of just PC's, what is your best suggestion of how we move forward at the EAC?

MR. BERGER:

Well, let me say, I very much appreciate both of the panelists before me with their suggestions. I agree with a quick compatibility test. I also agree with Dr. King's statements.

I would say there's two things we can do. One is to work with the PC vendor and the voting system vendor to draw as liberal a circle as we can without introducing inordinate risk. Let as much flexibility as possibly be there, but then, understand where the lines are when we really need to get some further evaluation.

The second thing that I would put with that is to work with the PC vendor to understand their roadmap, particularly their fundamental technology roadmap, and do forward planning, so that we're not surprised by changes. Maybe a quarterly conversation or meeting would be appropriate.

COMMISSIONER DAVIDSON:

Okay. Mr. Cobb, or Mr. King, do you have anything to add to any of the questions? No?

DR. KING:

No.

COMMISSIONER DAVIDSON:

Okay, I saw a pause there. I think you really wanted to tell me something.

DR. KING:

No.  It's something that…

COMMISSIONER DAVIDSON:

I'll meet you out in the hall afterwards.

DR. KING:

Well, no, no, no, I'm sorry.  Steve made me think of

something, but it immediately evaporated.

COMMISSIONER DAVIDSON:

Okay, thank you very much for being here.  I appreciate it.

CHAIR BEACH:

Thank you.  Mr. King, in a State like Georgia that manages

your election equipment from top down, can you maybe describe to

me challenges that COTS presents to your election officials across

the state, if any?

DR. KING:

Well, there are many.  Everything from the current concern

about the continued availability of Dell Edge 1900 servers with a

chip set that can be downgraded to run Windows 2000.  That's of

significant concern to us.  It's required us to stockpile inventories of

servers, which is a highly unusual practice in an IT shop.

The second is issues like printer drivers.  Every installation

requires printers.  Those printer drivers sit on the server.  We have

to evaluate every time a printer is changed out, is there any

unintended consequence of the installation of that driver onto the

server?  Modems are other issues.  Modems are used to

communicate unofficial results.  When a modem manufacturer

changes, the firmware that drives that modem changes.

So, there's a continued assessment of the COTS

components, and a gnawing fear that those COTS manufacturers

may simply choose not to make those products any more, or may

go out of business.

CHAIR BEACH:

Could you give me kind of a ballpark of what something like

that or the cost implications would be for…

DR. KING:

Well, ultimately, the cost is a total replacement of the

system.

CHAIR BEACH:

Okay.

DR. KING:

And, you know, we kick around a number of 100 million,

looking at what Maryland recently paid to switch out.

CHAIR BEACH:

Yes.

DR. KING:

So, our worst case scenario is if we're no longer able to

sustain the system through managing and mitigating COTS issues,

that that would be the worst case scenario.  Best case scenario for a vendor, but worst case scenario for us.

CHAIR BEACH:

Right.

DR. KING:

But it requires ongoing vigilance.  And as Commissioner Davidson indicated, ongoing communication with our counties, who we support, that we've had several meetings where we will sit down with the IT managers of a county, very smart, sophisticated people, and have to explain to them how IT management in election systems is so different from every other IT product that they manage.  They want to know why we don't upgrade the servers, why they can't move the servers, those kinds of things.

CHAIR BEACH:

Okay, thanks, that's helpful.  Mr. Berger, I know you've had experience testing and designing equipment, software in multiple industries.  Can you tell us how other federal certification entities approach COTS, any advice or things that you've learned working in those industries?

MR. BERGER:

First of all, with difficulty, everyone struggles with it.  And the fact that there's a committee that gets together periodically, mostly

centered on DOD, bringing together people who work on COTS issues ongoing, is illustrative of that.

There are various ways that this is done. It was suggested, in the first panel, that having interoperability testing under some cooperative effort. That's what's done with cell phones. All of the network providers got together and under CTIA, the Cellular Telephone and Internet Association, they have a compatibility program, where all cell phones are tested before a network provider, like AT&T and Verizon, will even look at it.

In the financial industry, they took an interesting step, and I would like to bring this out. Under the object management group, they got together and came up with something called a model-driven architecture. And essentially what they did for financial software where they have equal quality concerns to ours, for them fortunately a much larger industry base, they designed -- essentially designed for testability so that testing can be automated to a much higher degree than it can be currently with voting systems. And because the systems were designed for testability, they were able to manage ongoing changes and development at much lower cost. And I think that's a model that may deserve some study in our field.

CHAIR BEACH:

Okay, thank you. And I have one other question for whoever on the panel may be able to answer this.

For the VSS 2002 and the VVSG 2005, as far as the provisions dealing with COTS in the standard, can you explain to me what -- if there's a difference at all between the standards from the 2002 to the 2005?

MR. BERGER:

Very minimal…

CHAIR BEACH:

Very minimal?

MR. BERGER:

…in my opinion.

MR. COBB:

I don't think there's any difference. I think the wording is the exact same.

CHAIR BEACH:

And then, what about for the next iteration? I don't know if you've reviewed that at all. Is there a difference between the 2005 and the next iteration?

MR. COBB:

They have made some updates in the COTS area. And they go into a lot more detail, and I can't bring those up right now. But they definitely address it a lot more than the 2005 did.

MR. BERGER:

Yes, the TGDC has had discussions on this, and I think those are reflected in the revisions, trying to -- actually some of the points I made -- trying to bring in a clearer definition of what is COTS, providing that not everything that someone may say is COTS; it's just to be taken at face value, but there really needs to be some evidence that it's what we normally consider -- think of when you say COTS. I think those are the major differences.

CHAIR BEACH:

Okay, thank you. I'll turn to see if our Executive Director has any comments or questions.

EXECUTIVE DIRECTOR WILKEY:

Yes, thank you Madam Chair. Did you want to ask your question?

CHAIR BEACH:

Oh I'm sorry.

EXECUTIVE DIRECTOR WILKEY:

I know you had one additional you wanted to ask. She was whispering in my ear here, so…

COMMISSIONER DAVIDSON:

I was going to have him ask it, but it's for Dr. King. When there's a COTS change, you said that you do adhere to the EAC's certification and testing, Georgia does. So, when there is a COTS

change that you're making, do you send it back to the labs for

testing?  Or do you do that yourself?

DR. KING:

Both.

COMMISSIONER DAVIDSON:

Both.

DR. KING:

And in the most recent case, we did ask Wyle to come over

to our facility and evaluate the Edge 1900 server with Service Pack

4.

COMMISSIONER DAVIDSON:

Okay, all right, thank you.  Go ahead, I'm sorry.

EXECUTIVE DIRECTOR WILKEY:

No, thank you.  Just to echo what Commissioner Hillman

said earlier, I also do not believe in cruelty to animals, so I don't

want to beat this dead horse too much.  But while I have somebody

from Wyle, here, I think it's a perfect opportunity to go back just for

a moment on the question of cost, because I know I've been to

Wyle a number of times over the years, the last 20 years, and I

know that you do work for all kinds of industries; the aviation

industry, for NASA for, you know, you name it.  I've even seen you

test toasters down there and telephones.  Is there some difference

between what you charge our industry and what you charge other

industries, in terms of the tests you do that would make our costs any different than anybody else?

MR. COBB:

What we've heard from the vendors is not exactly the same model. There are two different models. We are testing our first system, and we use a firm-fixed price on a success based system. If there are failures, then we send out an anomaly report, you'll have to retest, stuff along those lines.

But if you're successful going through with no issues, the price you pay, day one, is the price you're going to pay when we're done with the test. As long as there are no issues, it's the same thing. And we're not quoting 2 million, 3 million. I think our baseline quotes are going out somewhere around 500 to $800,000 as a baseline. There will be exceptions for some of the larger systems that are more complex, but for a simple system that's it. And working in the NASED world, at a software lab, and knowing what Wyle charged in the hardware lab, that really is only about a double, maybe triple in cost than before. And that comes from having to have usability experts, security experts, the extra documentation, those kinds of things, that come with the 2005 versus the 2002.

EXECUTIVE DIRECTOR WILKEY:

That being the case then, and I asked a similar question relative to the aviation industry and the health industry, could you hazard a guess as to the percentage?  Or, I mean, do you find it would be more, less?  Where do we fit in that picture in terms of our process?

MR. COBB:

No knowledge.

EXECUTIVE DIRECTOR WILKEY:

Fair game, fair game.  Maybe someday we'll have one of the representatives from that community come and we can ask them the same question, because I think it would be interesting to see the difference in other industries and where that cost percentage is to meet the requirements of qualifying the products that they use to fly an airplane and to run something in the hospital.

Just one other question, and then I'll turn it back to you Madam Chair.  The gentleman from Dell talked about the compatibility validation, the use of the ImageWatch.  What relationship does that process, in what they do, have in our program?  Do we use anything from what they do, in terms of taking a product through our validation process?  Do we look at what they've done?  Do we look at their roadmap and then utilize it in the testing process?

MR. COBB:

Currently none whatsoever.  Usually, we are either documenting -- they are using minimum system requirements or specific model and during testing we're either using that specific model or we have a PC supplied for testing that is to the minimum requirements, and we just document what it was tested on at the time.

EXECUTIVE DIRECTOR WILKEY:

Okay, I think you've answered my question the way I wanted it answered.  Any comments?

DR. KING:

I would say although that is very useful information to have, it's useful information that you acquire after you've purchased the system.  And Commissioner Davidson, I do remember now what Mr. Berger's testimony reminded me of, which is full disclosure of manufacturers of critical imbedded COTS components and their lifecycle status before purchase.  That's when that information is useful to you, is when you know whether you're buying a system that will run for three years or five years or eight years.  To discover that it's no longer sustainable two years after purchase, it's not as useful then as it would be prior to the purchase.

EXECUTIVE DIRECTOR WILKEY:

So, it's baseline.  Is that fair to say enough to say?

DR.. KING:

Um-hum.

EXECUTIVE DIRECTOR WILKEY:

Steve?

MR. BERGER:

I'll just say, I think those tools potentially offer us a lot of value, and even beyond what we're talking about today. Dell has tools by which they can tell if the machine, in the hardware and software, has been modified since it left their factory. And if you think about, in an election, if we can prove that unit is unmodified, that's very positive in what it adds to the whole election audit process. I think there's a lot of possibilities we can learn from an ongoing dialogue.

EXECUTIVE DIRECTOR WILKEY:

Thank you very much. Thank you Madam Chair.

CHAIR BEACH:

Thank you. I know Vice-Chair Hillman wanted to ask another question.

VICE-CHAIR HILLMAN:

I did, and it was something I meant to follow-up with Dr. King on, earlier.

You had a comment about the COTS PC or laptop not being core…

DR. KING:

Yes.

VICE-CHAIR HILLMAN:

…the core of the system versus peripheral.

DR. KING:

Um-hum.

VICE-CHAIR HILLMAN:

Could you just, sort of, say that in language that voters would easily digest, as to the fundamental difference and what you mean by that?

DR. KING:

If I can approach it through printers and arrive at PC's, if you'll permit me.

VICE-CHAIR HILLMAN:

Okay.

DR. KING:

Printers are used in different ways in systems, COTS printers. One is to print reports. The other is to print ballots, ballot on demand. One is a core technology, the ballot on demand printer. The second is a peripheral device that's used to write reports. That's a clear delineation.

When you're looking at PC's, a PC that is used to collect votes, a PC that provides the interface with the voter, to me, would be at the core of the architecture. A PC that is used for tabulation

or some support or a communication activity may be further out

towards the periphery.  And as an evaluator of the system, what I

want to see is what the core architecture is built around, because

modifying that core architecture is going to typically have more

ramifications to the system, as opposed to modification to

something that's peripheral.

But I think, if I can comment on Mr. Berger's testimony, that's

what he's calling for, is clarification of where these boundaries are,

so that when we do begin our assessment we have some notion of

scope, what's central and what's peripheral.

VICE-CHAIR HILLMAN:

And that clarification would come from where Mr. Berger?

MR. BERGER:

I think it would best be done as a joint development between

the vendor, the VSTL and the EAC to define where are the lines

where we properly mitigate -- identify risks and, you know, don't

overly constrain.

VICE-CHAIR HILLMAN:

VSTL being voting system testing laboratory?

MR. BERGER:

Correct.

VICE-CHAIR HILLMAN:

Okay, thank you.

MR. BERGER:

Yeah. If I may add just one more comment, picking up on what Dr. King said.

One of the critical elements, and we see it in other technology areas, like with the IPhone now, we need to have good firewalls and separation between core function and non-core function, in order to allow a more relaxed treatment outside the core. And to give an example, if a voting system relies on Windows logging as part of its election logging and audit process, then we have to be very rigid about controlling the operating system and its logging function. Conversely, if the voting system handles all its own auditing and logging and does not rely on the operating system, then we can be more relaxed about the operating system logging.

So, I would say, not only in our field but others, this whole thing of how do you properly provide firewalls and separation is a fertile issue to work in the future.

VICE-CHAIR HILLMAN:

Thank you.

CHAIR BEACH:

Thank you for all your input. This certainly was a healthy and informative discussion by both panels, and I appreciate you appearing before us today. Thank you.

Do any of my colleagues have any closing remarks?

VICE-CHAIR HILLMAN:

Well, I just hope that the voters and various parts of our constituencies appreciate the approach that EAC is taking to this issue. The demand and the call is for voting systems that are accurate and secure and reliable and that everybody, those running for office and those voting for those running for office, can depend on. But getting from the 2002 Help America Vote Act requirements to where the Voting System Standards Voluntary Guidelines need to be in the Testing and Certification Program is more than a notion, as they say. And so, you know, discussions like this are one way to really sort of delve into the issues to explore, what are the problems. I mean, better to explore and anticipate what the problems are. As you said Dr. King, it's better to know in advance, and once you bought the system and say, "Oh by the way, there's this one little issue that might cut the shelf life of this in half" is, I think, healthy. And we really are talking about something to try to work for the current, but more importantly, for the long term, so that the next generation of voting systems, and the next iteration of the Voluntary Voting System Guidelines will begin to have some staying power, and hopefully the hardware/firmware/software will have some staying power, too. I mean, I know what it's like when I'm at home. I can ignore it at home with my PC because I don't

have to, but I see what happens even here in the office, with the

frequent updates and, you know, the changes in this and what it

does and the unknowns.

And so, I just appreciate all the work that all the panelists are

doing and the discussions with us and the staff as well.

Thank you.

CHAIR BEACH:

Commissioner Davidson?

COMMISSIONER DAVIDSON:

Well, I agree. I think we all find it very frustrating when we

update our software and our printer doesn't work any longer. So, I

mean, just a simple thing like that.

But I think that our meeting today will definitely educate a lot

of people out there. Obviously, our partners in the election world,

many of our small, local people in reviewing our Comcast today will

definitely, I think, educate a lot of people about COTS. It's a simple

word, but it's very difficult to, as we've discovered today, to manage

and how we go about managing it. So, we've got a lot of work

ahead. I can see Brian's got a lot of work.

Thank you, though, for being here. Appreciate it.

CHAIR BEACH:

Certainly a lot of work and I anticipate we will be having

ongoing discussions on this issue. So thank you.

And before we close, I just want to make an announcement

that October 8th will be our next public meeting.  So, I look forward

to seeing you all next month.

And the meeting is now adjourned.

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[The public meeting/hearing of the U.S. Election Assistance Commission

adjourned at 3:38 p.m. EDT.]

add/bw