

**ADVISORY COMMITTEE ON STRUCTURAL SAFETY OF VA FACILITIES  
MINUTES OF June 24, 2005 MEETING**

**COMMITTEE MEMBERS:**

CHRIS D. POLAND, S.E., Chair  
WILLIAM KOFFEL, P.E.  
LELIO H. MEJIA, Ph.D., P.E., G.E  
SUSAN NICULESCU, Ph.D., A.I.A.  
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**VA STAFF**

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**VISITORS**

JOHN BIECHMAN, National Fire Protection Association  
FRED BURNS, Veterans of Foreign Wars  
VIVIAN DRAKE, VA Office of White House Liaison  
DAVID KAYAL, American Legion  
RICHARD KUCHNICKI, International Code Council  
Phil Riggin, VA Office of White House Liaison

## 1. Chairman's Introductory Remarks

**MR. POLAND:** Good morning. My name is Chris Poland. I'm the Chairman of the VA Committee on Structural Safety, an advisory committee to the Department of Veterans Administration. Welcome this morning to our 2005 meeting. I'd like to remind you that the meeting is being recorded, and it's real important that we all speak one at a time so that there is no confusion about what's being said. I'd like to take a minute and go around the room for a round of self introductions.

*Everyone present at the meeting introduced themselves.*

**MR. POLAND:** Thank you very much. I'd like to remind you that under the rules that we operate, the discussion can only be between the committee members and VA staff, and any comments or questions that we have from our guests, we'll need to receive those in writing. Thank you.

Okay, Lloyd, you have an announcement?

**MR. SIEGEL:** Yes, I have a letter written yesterday by the Secretary to Chris Poland, who has not received it yet. It's dated yesterday. "Dear Mr. Poland: Thank you for your recent expression of willingness to continue to serve as Chairman of the Advisory Committee on Structural Safety for the Department of Veterans Affairs Facilities. I'm pleased to reappoint you for term ending November 2006. As you're well aware, the Committee is an important body, advising me on all matters relating to structural safety, and the construction and remodeling of VA facilities. Veterans Health Administration Office of Facilities Management provides staff assistance to the Committee. I'll be in touch with you regarding the next meeting. If you have any questions concerning your appointment, please call Krishna Banga, Committee Manager. Again, please accept my deepest appreciation for your current and future contributions to this very important committee. Sincerely Yours.

**MR. POLAND:** Thank you. We're going to move down through our agenda, and when the Deputy Secretary and Mr. Neary arrive, we'll stop our agenda and move back to agenda item two.

Our next item is Item 3, the minutes to our September 3, 2004, meeting. I've had a chance to review these and correct them, and so I assume that there are no other comments about the minutes. And I'll be happy to sign it.

*The Chairman then signed the minutes.*

**MR. POLAND:** Okay, thank you. We're ready for the report on the status of the replacement of the glass bulb sprinklers. Josh.

## **2. Status of replacement of Glass Bulb Sprinklers**

**MR. ELVOVE:** Thank you, Mr. Chairman. I am just following up on a couple of topics that we discussed at the last meeting, one of which was the status of the VA's replacement effort for the glass bulb sprinklers. Last year, Ken Faulstich reported that there were 90 sites with the glass bulb o-ring. At that time, 13 still had these sprinklers in place. As of this week, there are still six sites with these sprinklers in place. I have the report with me that you're welcome to have for the record. It shows the locations, and it's hoped that within a month, three of the remaining six sites will have those sprinklers replaced, and by the end of the year, the balance of the three will have their sprinklers replaced, so we'll have no more of these recalled or defective sprinklers.

**DR. NICULESCU:** I'd just like to say thank you for a good effort. Ken's been following this for a while, and thank you for finishing it up.

**MR. POLAND:** It's been a long time. Good thing to get finished. Are there any other questions or comments for Josh? I'd like to move on to the next Item, "Proposed revisions to the fire protection design manual".

## **3. Proposed revisions to the fire protection design manual**

**MR. ELVOVE:** That's me again. As you know from last year's report, VA has a fire protection design manual which serves as the basis of design for fire protection for construction and alternations. This document was last revised in September 2001. Last year, myself and my four counterparts that are network fire protection engineers have been working on revising the document to bring it up to speed, and at this point, we are pretty close to the document that we are going to release again. We were holding back for -- at least this month for references on the building codes, which will come up later in the discussion, and we'll make the revisions to the document based on memberships building of the code, and the only other item that is still kind of pending is -- actually leads into the next topic, which is the fire protection IT spaces. That we're trying to embroider into the fire protection design manual. At this point and time, we have some language in there, but we feel there's more to be added.

**MR. SIEGEL:** The Office of Facilities Management is going to collaborate with Josh and his group by retaining the services of a properly qualified firm to help on the drafting of the IT section, and then any other matters that Josh and his group require.

**MR. POLAND:** Any questions or comments? If not, we move on to next Item, "Fire Protection of IT Spaces".

## **4. Fire Protection of IT Spaces**

**MR. ELVOVE:** A natural segue, I guess, just to let you all know that the VA is considering consolidating some of the division and facility servers in singular multiple locations, and with that, the risk is becoming a lot more greater, and therefore we are

looking at fire protection for those areas in a different light than we may have in the past, and it may involve the reintroduction of gaseous fire protection systems in addition to other fire protective measures which had not previously been considered since the stopping of the use of halon. So depending on the nature of the risk that's determined on the -- the data that's being stored will determine what types of fire protection will ensue. Again, that's going to be part of our effort with the IDIQ to what was considered criteria, determined based on this risk, this is the protection that she'll need.

**DR. NICULESCU:** But as we discussed yesterday, I believe you also have a system of redundancy of information, so that it's stored in other places as well.

**MR. ELVOVE:** That is correct.

**MR. POLAND:** Have these IT Centers been located?

**MR. ELVOVE:** The two that I'm aware of that are being tested are one in the Northeast, which might serve up to four networks in a -- on a VA site, and they're talking about one serving potentially three western networks that might be co-located in a leased site, something like Request, or Google, or Yahoo keep theirs, but that's beyond my knowledge, but that's what I've been made aware of.

**MR. SIEGEL:** Josh is referring of course to the VHA sites. VBA and NCA have other systems for redundancy. VBA is working toward a system where almost any one of their facilities will be covered by another facility. They have, I understand, completed the system except for one facility, which is not backed up the way they want it to be backed up. In addition, VA has certain facilities which serve all of VA, and they currently are backed up by other Federal agencies. The system is still not as instantaneous as they want it to be. In other words, it would take a certain amount of time for the backup to get online, and they want to have a system that will require only milliseconds for backup to take over. Even though there are individual IT divisions within the various administrations, VA IT operation is centralized. We're working toward complete immediate backup of everything. It is not easy to achieve.

**MR. POLAND:** If I understand what Josh was just saying, this is a new step to start to centralize the computing of the recordkeeping in IT, or it's not a new step?

**MR. SIEGEL:** No, it's not a new step to centralize; a new step to better the backup system. A unit, for instance, which will cover a number of VISNs is not really centralizing, it's still decentralized.

**MR. ELVOVE:** I guess I would term that regionalized as opposed to centralized. But there will be redundancies, and the idea is not to put all your eggs in one basket, but to consolidate the number of servers that we have scattered throughout the facilities, and to some core locations to ultimately reduce cost of equipment and manpower.

**MR. POLAND:** I want to ask about something other than the redundancy. I want to go back to the original idea, and I want to just get some clarification. Are you building computer centers now on VA sites?

**MR. SIEGEL:** VA's main computer center is now located away from a VA facility. There has been since our Physical Security Assessments, a decision made to transfer it elsewhere into a specifically designed facility which will be located at one of the medical centers. That will be the new main VA facility for centralized VA records. However, it is moving almost as we speak into a temporary facility closer to the medical center, where it will be located while the new facility is built. This will be as soon as the modifications are made to that temporary facility, which we pointed out in a special Physical Security Study that was made about the facility. The temporary facility was formerly occupied by the Federal Bureau of Firearms, Tobacco, and Alcohol, which is a pretty secure agency; but yet it was done in earlier times with earlier threats and earlier standards. Even though it was sufficient for them at that time, is not sufficient in today's world.

**MR. POLAND:** Do you know if it meets the seismic safety standards for critical facilities for VA?

**MR. SIEGEL:** Yes. Fortunately, it's located in an area of relatively low seismicity.

**MR. POLAND:** What I was getting to is that I sense that there is a move to start building facilities to house IT systems, and I don't think we've had that before. We certainly haven't talked about that before. It's not covered directly in the H-18-8.

**MR. SIEGEL:** We have had it before. A main VA Center is housed in a facility now, and covers a very large and important part of VA's activities, namely payroll, etc. We did a Physical Security Assessment of that facility as well, and it is in very good condition compared to other facilities. But even so, there are certain mitigations which are required.

**MR. POLAND:** Any other comments or questions related to the IT spaces? Josh.

**MR. ELVOVE:** Oh, yes, back to your question, there is a checklist I have seen, because there was a survey recently done over the last few months to get a feel for where our computer spaces are at the medical center, as they wanted a sense of structural arrangements and fire protection features of these areas, and the survey came out, and I saw a checklist that had some structural items in it. I can't say how they were seismic related, but I know there was a checklist, because there's one for security, as well.

**MR. SIEGEL:** Unfortunately, we haven't had the benefit of seeing it, so I can't comment on it.

**MR. ELVOVE:** I have it on my computer. I can forward it to you.

**MR. SIEGEL:** Great. Thank you.

**MR. POLAND:** We are ready to move on to the next item, "Response to assigned tasks."

Lloyd, would you like to talk about the model code status? I wanted to point out that in our discussions yesterday; we talked about the VA program guide PG18-3, which is a listing of the codes and standards. And I wanted to point out that, it was the basis of our discussion. And we have been talking about how we need to modify this list of codes of standards used by VA in order to reflect the development of new national codes.

## **5. National Model Codes Status**

**MR. SIEGEL:** As we discussed at the workshops yesterday, I previously passed to you by e-mail the NFPA letter of June 17 to us, the VA's comments, and the ICC release on the I-codes of March 31, which talked about their adoption by most of the Authorities Having Jurisdiction across the United States. In addition, we distributed the section of the Department of Defense's Unified Facilities Criteria on the DoD requirements, which adopt the International Building Code, as modified, for their facilities. We also distributed GSA's criteria, which does a similar thing: it adopts the International Building Code, plus NFPA 101, and other modifications. We also understand that there had been discussions between NFPA and the International Code Council on coordination between the two organizations. We also know that there is litigation between the International Code Council and NFPA for certain copyright infringements; and while the suit is going on, it has stymied the informal conversations between the two organizations. It seems apparent from the adoption of the International Building Code throughout the country that it is the code of choice. However, VA has very strong relationships with NFPA 101, as well as other NFPA individual codes, medical gases, et cetera, that we feel are absolutely essential for us to keep. We will be doing all we can to encourage as much as we can, any conversations between the two organizations. We are at this time examining each one of our new projects in terms of what codes the local jurisdiction uses; and trying as much as possible to coordinate with their desires. We, in the past used UBC and NFPA 101, et cetera; and ICC, is the successor organization to UBC and the other regional model codes.

**MR. KNIGHT:** Let me just add one thing: That in light of the significant increase in funding for projects in the last year, and we expect or hope for in the future years, this is an issue that needs to be resolved fairly quickly for the adoption of codes. We need to provide some guidance to our designers in the field for these projects, both major and minor.

**MR. POLAND:** Any questions about the report before we get on to our recommendations? Lloyd or Kurt, I wonder if you could say a few words about how the VA relates with the DoD unified facilities criteria? You were mentioning yesterday that you were thinking about aligning yourself with some of that.

**MR. BANGA:** We haven't had the opportunity or the chance to go over the DoD's adoption of IBC. We just received this information yesterday morning.

**MR. KNIGHT:** But in general, we are proceeding ahead with -- and working with the DoD unified guide specifications. That is our initial thrust, and the criteria obviously is something we're going to follow up in the broader range, not just codes, but the DoD has recently in the last two or three years gotten very aggressive about combining their standards, the DoD -- all the DoD agencies are -- and they at NAVFAC and Navy, Air Force Corp, coming together and putting, instead of every individual organization having their own standards and specifications, coming together with the unified specifications and standards, and that is a process that's -- is aggressively being pursued by DoD. We are involved in looking at their specifications, NAVFAC specifications, and our goal is to review those specs, and adopt those specs that we feel are appropriate for the VA. In some cases, we may adopt their spec and add a few paragraphs or sections, or modifications to that within the system they have, it allows that to happen. You can use 90 percent of their spec and add a few specification changes, and then that becomes the VA's spec. So we are pursuing that, or have a contract underway now for reviewing that, and this is tied into the new master format of specifications, because the specs are being renumbered now. And so they're working with DoD to try to address that issue. The unified criteria is an area that we have looked at, overviewed, but not had gotten directly involved in adopting. There are some significant differences in some of our specs and some of our criteria, so that we are definitely looking to coordinate and cooperate more with the DoD agencies, which also includes -- NASA's also going through this process of using unified guide specifications and criteria. Again, reviewing DoD's unified documents and adopting those that suit there needs and what not. In addition to that, the DoD has a space planning system that is across all of their agencies, and we're updating our space criteria for health care facilities, and there's been a decision made by VA to adopt the SEPS system, which is an electronic tool to allow VA to plan future projects. So we use our criteria, but use the DoD tool. And again in that collaboration, our goal is to minimize the differences between their health care space criteria and our health care space criteria, but they will pick up some things that possibly helps them in areas. There are two different programs, the VA Health Care Program is significantly different than DoD's because of the type of patients we have. So there are certainly areas that will be similar, and there'll be many areas where we're different, but we're again collaborating with DoD to develop this system, or to use their system, and that is well underway, with several phases already underway with update. And we've been working closely with DoD on the electronic tool part of it, and VA has already had part of their criteria in that tool.

**MR. SIEGEL:** We've been working for many years through NIBS with other federal agencies trying to uniform our specifications, a very difficult task, but largely accomplished, to make sure that the references for all of our specifications are similar among the different agencies. It was hampered for a long while by the fact that all of the DoD agencies were not part of that group. As we all know, there was a certain amount of rivalry among the DoD agencies. So for many years, some of those agencies were not part of the group of many other federal agencies who were working

towards similarity, but now, fortunately, all the DOD agencies are together, so it's going to make things much, much easier than it was in the past. In addition, there are many projects, construction projects, where we are sharing facilities with some of the DOD agencies. So that really increases the need for us to work together collaboratively, and I'm very happy to say it's quite a different atmosphere now than it used to be.

**MR. POLAND:** Okay, we've had discussions with you yesterday, and for a number of years, about the codes and standards, and we have some recommendations for you.

**DR. NICULESCU:** Yes. Thank you for the summary. It was very accurate, and I have three motions that I would like to put.

**1. Move that the "VHA PROGRAM GUIDE PG-18-3" Topic 1. Codes and Standards be amended as follows:**

- (a) "2. General: VA has adopted..." in lieu of "2. General: VA shall adhere to (but not be limited to)..."**
- (b) "2.c. National Fire Protection Association (NFPA) Codes with the exception of NFPA 5000".**
- (c) "2.e. International Building Code (IBC)."**
- (d) "2.f. Reference UBC to be deleted".**

**2. Move that within the next year VA develop modifications to IBC that are specific to VA facilities.**

**3. Move that VA commit to the necessary resources to providing input in the IBC development process.**

The motion seconded by Mr. Koffel was unanimously carried.

**MR. POLAND:** Any questions or comments? Josh, are you now active in the code process?

**MR. ELVOVE:** No, I'm not. When I say I'm not active in the code process, I am very active in the guidelines process, but that's not a code.

**MR. POLAND:** Are there members of the VA staff that have been active in the ICC due process?

**MR. SIEGEL:** Ken Faulstich used to be active in NFPA, and I also believe he attended the ICC, but I'm not sure.

**MR. KNIGHT:** And the ICC group has a federal group that meets periodically for information and input, but I think the intended list is to become more involved in that level, and to take an active role in trying to address some of the modifications of VA feels are necessary in the IBC.

**MR. ELVOVE:** Presently, if I may, there is really no involvement from the fire protection community within the VA, or within the IBC process, in terms of prominent leading recommendations, or attending meetings, or being on committees, so conversely in the NFPA process is very active membership. A number of my counterparts are on the technical committees, and the life safety code, and other NFPA standards. We attend the technical committee sessions where we can vote and state our positions on various codes and standards. We have not had any involvement whatsoever with the IBC process, and I guess the motion here is really getting to VA management saying that you've now proposed to adopt a code that you've not participated in, so it's time to get out there and voice your concerns, if you have any, to get your voice heard on any issues especially related to health care, including the documents, so unnecessary requirements are not forced upon you.

**MR. KNIGHT:** And I think we expect IBC to welcome that input.

**MR. POLAND:** Now we're ready for another motion, Bill.

**MR. KOFFEL:** Yes, this motion would be as follows:

*Add a new paragraph in PG 18-3 with title, Conflicts between Nationally Recognized Codes & VA Requirements". Should a conflict exist between VA requirements and the VA adopted nationally recognized codes, the VA requirements shall prevail. Should a conflict exist between VA adopted nationally recognized codes, the code conflicts shall be brought to the attention of the VA Deputy Under Secretary for Health for Operations and Management.*

Note: Mr. Siegel questioned, "I wonder if you think it's proper to specify who in VA you think should decide this; that is, getting involved in the internal operation of VA. Would you consider just saying VA without specifically identifying the person? This is up to you to decide, but do you think it's proper for you as an advisor to the Secretary to tell him who he should have approve something for him?"

This resulted in a lengthy discussion among Advisory Committee members and VA staff, and the motion was formalized as noted below.

***Add a new paragraph in PG 18-3 with title, Conflicts between Nationally Recognized Codes & VA Requirements". Should a conflict exist between VA requirements and the VA adopted nationally recognized codes, the VA requirements shall prevail. Should a conflict exist between VA adopted nationally recognized codes, the code conflicts shall be brought to the attention of the VA. The Committee further recommends that the resolution of conflict be made by the authority having jurisdiction for VA to ensure consistency system wide.***

The motion seconded by Dr. Wood was unanimously carried.

*At this point, Mr. Devine, Senior Advisor to the Deputy Secretary accompanied by Mr. Neary, Acting Chief Facilities Management Office; Mr. Riggin, Advisory Committee Management Officer; and Ms. Vivian Drake, Program Specialist (White House Liaison) came in to greet the Committee members.*

**MR. NEARY:** Good morning, everyone. My name is Bob Neary, I'm the Acting Chief Facilities Management Officer. And it's my pleasure this morning to introduce Mr. Danny Devine, who's the Chief of Staff for the Deputy Secretary.

**MR. DEVINE:** Greetings every one! The Deputy Secretary sends his regrets. I don't know, some of you may have seen the Federal Page today. Something about some budget issues over on the Hill, and so much of the day, much of the last week, and much of the future, two or three weeks, are going to be devoted to that budget, and so he's in conference with some of the top folks over there trying to get these straightened out. We have at least two more hearings coming up next week on budget issues, one over at the Senate on the 30th, and then the other one in the House probably going to be the 29th, so there's a lot of competition for our top folks these days. But he did ask me to come on over and say a few things. We were talking about the Committee yesterday. And some of the things that he may of wanted to talk about. And as Phil and Vivian will both attest to, he loves the advisory committee system that we have, and he likes to talk about it, especially, you know, the work that you folks do. In part because he says, you know, as much as I like to think I know a lot of things inside VA, there are certain issues and certain topics that he just can't get a handle on, and this is one of those kinds of issues. Because all the scientific knowledge that you folks have -- a lot of folks don't know what you do or how important it is. And so we hear about the things from, what is it, '71 with the earthquake, and the other situation we had with some of the hospitals and clinics in Las Vegas, where suddenly the kinds of work that you do become extraordinarily important, and nobody wants to build the new hospitals anywhere. That we're going to have any kind of structural or integrity issues at all. You know, the challenges just with the budget, and just the challenges of getting money to build a simple clinic, let alone a hospital, are just so major that the last thing they want to do is worry about, well, if we put it up, how long will it stay up? And one of the things that we do know though, is we must otherwise build them pretty well. We're still in hospitals in many places around the country that are at least fifty years old. So we must be doing something right along the way. And the other thing that he was very happy to talk about was the reappointment, the paperwork that he just signed early in the week having you come back as the chairman. So he was glad he was able to do that, and he had hoped that he could have said that to you personally. And I also understand that we have a brand new member.

Welcome to you Mr. Koffel. I think that there is a certificate of appointment. So I can go ahead and give this to you. And I guess I'm supposed to read this but it's in that script that I can't do very well.

William Koffel, I hereby appoint you as a member to the Advisory Committee on Structural Safety, Department of Veterans Affairs. The Committee is charged with

providing advice to the Secretary of Veterans Affairs and to the Deputy Secretary if I could on structural safety matters in the construction and remodeling of VA facilities.

**MR. KOFFEL:** Thank you.

**MR. DEVINE:** Is there anything I can take back from you, back to either one of the bosses? Any major kinds of issues, just right off the top, that are a concern to the Committee?

**MR. POLAND:** Well, I can start out by saying that we are very pleased to receive the report today that the sprinkler system issue that's been under replacement for many, many years is going to be finished this year, and we appreciate that. We are -- have been talking, and will continue to talk about VA's approach to increased security for your facilities. We are very happy to be participating in that, and very pleased to see that VA has taken a role amongst other agencies, and as always, we're very pleased to work with the VA staff, with Lloyd Siegel, Kris Banga, Fred Lau and Kurt Knight. They do an outstanding job, and they're proactive. They are very interested in carrying out the VA mission and providing good facilities, and they're very interested in working with the Advisory Committee in a proactive and an appropriate way. And it makes it very easy to be an active committee and to be providing good input when there are people that receive it so willingly, and carry it out. So we thank them very much for that.

**MR. DEVINE:** Tell me about the security. Has it been difficult to integrate that, especially with the new facilities that are coming are online? Has it been difficult to integrate your ideas and thoughts into that process?

**MR. POLAND:** We're just getting started in that process. We were briefed yesterday on the report of the work that's going on, and we look forward in the next year to seeing more of that integration and participating in that.

**MR. KNIGHT:** Absolutely. Probably as you know, we've done assessments of a number of VA facilities, identified some vulnerabilities, and we're developing a process to develop some strategies and then ultimate standards to address those issues. The Committee is going to be intricately involved in those issues, especially the ones related to structural safety, and we will intend to keep them fully informed and involved as we go through this process from strategies into actual VA standards. And that process is just in the draft stages now, with expectations of some standards later this late winter or early spring of this year.

**MR. SIEGEL:** As you also know, VA's methodology for accessing physical security has been adopted by FEMA as their model for other federal agencies and the private sector. The latest volume they've issued carries VA's seal on the cover as well HHS' seal on the cover to acknowledge our great involvement and help to them. General Kicklighter has been a great help in this process ever since it was begun several years ago, and he's been an advocate for moving ahead and addressing the

issue broadly across VA, so we certainly appreciate his help and assistance over the last few years.

**MR. DEVINE:** There's a special assistant secretary over at HHS that has frequent conversations with the deputy, and he always throws in the part about I see that you guys are using our work, we're very interested in some of the security issues. And he just makes that point over and over again, but we are an important agency to the other thirteen -- of these departments, and they have to pay attention, just, you know, a lot to the work that you folks do.

**MR. POLAND:** Other comments?

**DR. MEJIA:** All right. I was going to say basically the same things you said, in that it's a real pleasure to work with the VA and with the VA staff in these activities, so I thank you for all the help we get from the staff in VA.

**MR. DEVINE:** And as always, the boss would definitely say, if there's anything that you need -- well, first of all, he's always going to say that you're going to get it from Vivian and Phil anyway, but if there's anything above and beyond that, if you need time with him, he will certainly make that opportunity --

**MR. DEVINE:** Well, I'll let you get back to the scientific work, and all that kind of stuff that I wouldn't understand either, so. Well thank you, and again, we're sorry that he was unable to come on over, but hopefully that the budget will be settled and it may help our work on down the line with the construction, those kinds of things, and sprinklers, and all those -- you know, those are the things that make our system work. So thank you. Congratulations to you. Thank you for having me over.

**MR. POLAND:** And now I'd like to move to Item 7A on our agenda, resolutions of the September 3 meeting. Kris.

#### **6. H-18-8, Dec. 2003; Spec. Sec. 13081; and Build-to-Lease Design Guide -Revised**

**MR. BANGA:** Thank you, Mr. Chairman. There were several revisions H-18-8 recommended by the Committee at the last meeting. We have revised them all. And connected with that, we also have the specification section 13081 for nonstructural elements, which required revisions, and we revised those. In addition a few revisions were recommended in the structural requirements in the Build-to-Lease Design Guide for Outpatient Clinics. We updated all except the two motions about the Importance Factor. We were not able to find a place for it in the document.

**MR. POLAND:** We have had a chance to look through all that you've done, and we have a couple of motions related to that issue.

**DR. WOOD:** Yes, Chris. I'd like to propose a few additional modifications to H-18-8.

***Propose three (3) modifications to H-18-8:***

- (a) *A second sentence should be added to the definition of ancillary facilities, which appears in Section 1.1. "All ancillary structures shall be assigned to Seismic Use Group I."***
- (b) *A third sentence should be added to the definition of critical and essential facilities, which appears in Section 1.3. "All critical and essential facilities shall be assigned to Seismic Use Group III."***
- (c) *A definition of "Seismic Use Group" should be added to Chapter 1.***

**MR. POLAND:** Any comments?

**DR. NICULESCU:** I have a question. The definition of a seismic use group that you're adding to chapter one, do you have that definition written out?

**DR. WOOD:** It is defined in the IBC.

**MR. SIEGEL:** Perhaps you might consider adding "as defined in IBC."

**DR. WOOD:** Okay.

So we modify then the third part of the motion to say, ***to add a definition of seismic use group as defined in the IBC.***

The motion (with three parts above) seconded by Mr. Koffel was unanimously carried.

**MR. POLAND:** We believe that this also takes care of the resolution that you haven't been able to take care of from September 3 related to the importance factors for snow and wind in the design-build facilities. By defining the seismic use group for VA facilities, within the H-18, based on IBC 2003, the importance factors are established.

## 7. Incorporate Seismic Design Categories Concept in H-18-8

**DR. WOOD:** Currently, the IBC 2003 is a reference document for H-18-8. The IBC refers to seismic design categories; whereas H-18-8 refers to seismic zones. In order to remove any potential confusion, we think it would be more appropriate to refer to seismic design categories in H-18-8. To accomplish this, we have a two-part motion here.

- (a) ***Chapter 3 of H-18-8 currently refers to structures “in areas of high and very high seismicity,” and this terminology is not consistent with the design approach used in the 2003 International Building Code. The phrase “in areas of high and very high seismicity” should be replaced with “structures assigned to Seismic Design Categories D, E, or F” in Sections 3.0 through 3.7.***
- (b) ***A definition of “Seismic Design Categories” should be added to Chapter 1.***

The two part motion seconded by Dr. Mejia was unanimously carried.

**MR. POLAND:** Any comments or questions? One thing I'd like to point out, Kris, and that is something Sharon thought about this morning. In section 3.9 of H-18-8, under the “Exceptions”, you refer to moderate, low, and low zones. We want to leave it that way. Because we're keeping the definition of zones in order to establish priorities; when we want to talk about all VA facilities when we don't know the local site conditions. But we have to go over and have these seismic design categories when we do know the local conditions, so that works out very handily now.

**MR. POLAND:** Okay, we're now ready for the next Item.

## 8. Seismic Rehabilitation of Minor Projects – Quality Control

**MR. BANGA:** As we reported yesterday at the WORKSHOP, a “Design Alert” was issued by FM, and also a Directive was issued by the Under Secretary for Health. Both alert the medical centers to ensure that minor projects are designed and constructed under the supervision of qualified structural engineer with experience in the seismic design.

**MR. POLAND:** Questions or comments for Kris? Is there any way you can track how this is working in the field? We're all very interested in that, we'd just like to make sure it's happening somehow.

**MR. SIEGEL:** We do not have authority to track the minor program. I'll look into methods for tracking that.

**MR. POLAND:** With reference to the previous conversation we had, for those kinds of projects, who's the Authority Having Jurisdiction?

**MR. SIEGEL:** The same person. But it's delegated pretty much to the field.

**MR. POLAND:** And at the field level, who is responsible for the quality control?

**MR. BANGA:** Facility Chief Engineer.

**MR. SIEGEL:** In other jurisdictions besides the federal one that comes up as a problem. In many states and counties, which also have to an extent, sovereign immunity over local code. Even in private sector projects where they do fall under local jurisdiction, in some instances, there are activities handled by the chief engineer of the facility which are not necessarily submitted for code approval the way the local regulations state they should be. It's a problem everywhere. However, with something as critical as seismic and fire safety, I think we have to generate a method to oversee it, and I will look into it.

**MR. POLAND:** Appreciate that. Maybe you can report on that to us next time we get together. I think everybody recognizes after the 1971 San Fernando earthquake, California realized that leaving seismic safety in the hands of the local jurisdictions didn't work, and that's why they created a state level agency to watch from a higher level. And it's just a fact of life. I think it would be very helpful to think how you might be able to do that.

Okay, let's move on to next item

## 9. Coordination with ANSS Program

**MR. BANGA:** As was suggested by Dr. Wood at the last meeting, we have been in touch with Dr. William Leith, the coordinator of ANSS program. The program includes:

- Expansion of National Seismic Monitoring from present configuration of 56 stations to 100 modern seismographs;
- Replacement of existing analog equipment with 1,000 modern regional seismograph stations;
- Additional installation of 3,000 free-field (ground-based) strong-motion seismographs in densely populated high seismic areas; and
- Installation of 3,000 strong-motion instruments in buildings and structures.

The total costs for the expansion and modernization for ANSS is estimated at \$170 million and \$47 million (in 1999 dollars) each year for operation and maintenance.

In response to a "Call for Pre-proposals", we submitted a proposal to install new modern digital instruments in 24 VA buildings located in very high seismic areas. This translates to installation of over 250 sensors in these buildings.

I am glad to report to the Committee that three VA buildings (all fairly large); B126 at Long Beach (A = 353,000 ft<sup>2</sup>), B100 at Seattle (665,000 ft<sup>2</sup>), and B500 at West Los

Angeles (937,000 ft<sup>2</sup>) have made it to the top list for installation of multi-channel instruments within this year.

**MR. POLAND:** That's wonderful.

**MR. KNIGHT:** Thank you very much, Sharon, for bringing that up last year, and because it's obviously has been a success for us in getting some additional instruments.

**DR. WOOD:** Yes, we're very excited about having these instruments installed. Getting more information about the buildings I think will be very helpful.

**MR. POLAND:** We're still looking forward to seeing how the records that we're going to obtain can be used in the post-earthquake evaluation of buildings, and have that built in to VA's Post-Earthquake Evaluation Program. We understand that there is a continuing effort that's going on right now from our September 3 meeting. We had a resolution on that. So I just want to underscore one more time that hopefully we can make progress on that this year because these records will be very, very useful, but the way they're used is still under development. And I think that VA has an opportunity there to help take the lead and see to it that they are useful.

**DR. WOOD:** You know, I don't know what the funding situation was in VA, I assume that it's rather difficult, but the USGS has an External Grants Program, and so one way, perhaps, to accomplish this would be to -- you have a series of consultants and -- but you could identify a consultant and have them put a proposal to USGS through the external grants. And so they would they would have some funding from you and some funding from USGS. And that might be a way to leverage and accomplish -- because USGS is also very interested in using these records for rapid assessment of buildings. And so they would be able to leverage their money more, and you would be able to leverage your funding more. I would suggest you continue to talk with Bill Leith.

**MR. BANGA:** Also, you would recall that last year, we reported that 45 of our analog instruments were replaced by digital instruments, which are monitored centrally in Menlo Park through a dedicated line furnished by VA for each instrument

**MR. KNIGHT:** And it's likely we could use our APF fund to begin that process of identifying or outlining, or a process of using the instrument data for a quick response, analysis, or whatever. I mean we could certainly get a consultant involved in that and begin the layout process.

**MR. POLAND:** The way I have seen these programs develop at the basic level is that you use the instrumental record to determine if you need to do an inspection in the first place. Because it's true that people at the site will be frightened and believe there's something wrong when the shaking hasn't been strong enough to cause anything to be wrong. And there's even examples every few years of buildings that are evacuated and left evacuated for two or three days that didn't need to be evacuated because the ground shaking was so small. The last one that occurred that I know of was here on the

East Coast, in Virginia, they evacuated a prison for two days because of ground shaking, it was a magnitude 5 earthquake, and it's just because nobody knew. And with the record and training with the local facilities people, say if the ground shakes, you look and see if the record is whatever level, 15 percent G, 20 percent G, 30 percent G, a number that they can read off the record, or they can be told what it is, and then it gives them some assurance to make decisions based on that, because it is a very frightening experience.

**MR. KNIGHT:** And then that process could be added to H-18-8.

**MR. POLAND:** Well, it could be put in there, or it could be put into the post earthquake response guidelines you have for doing post-earthquake inspection, or the post-earthquake emergency response programs. We understand there is a whole emergency response procedure that you have in place that's apart from us, but this is a piece of that we could add to that. For instance, your consultant could determine what level of shaking you'd need to start an inspection program at a particular facility once an earthquake had occurred. And that really is something that you need to decide based on the quality of the buildings at the facility. You know, if we're at a facility with a brand new hospital, you're going to not worry about that the same way you would if you were at a facility with older buildings, especially fragile buildings. So that's one way that you can use this information. It's very helpful. The other thing is when we actually instrument the buildings, and these three that are going to be instrumented, we'll be able to tell what the level of acceleration is at the various levels in the building, and also how much the displacement of the building is. And what the industry is coming to understand is that the amount of displacement really gives us the best indicator of how much damage may have occurred down inside. You know, we go look at buildings after earthquakes, sometimes it's pretty hard to tell right off the bat how much damage has occurred, but if we knew how much the building had displaced, we would have a much better chance. And so the instruments are really a tool to allow us to keep buildings open. You remember our experiences in Palo Alto during Loma Prieta, and in Northridge earthquakes. Some of the buildings were evacuated that needed to be evacuated. A lot of buildings were evacuated that didn't need to be evacuated, because we just didn't know. And that's what these records are useful for.

**MR. KNIGHT:** And your selling point would be that, really, that you allow yourself operationally to maintain --

**MR. POLAND:** That's correct.

**MR. KNIGHT:** Your functions, and it will help. And of course that's a tremendous savings associated with that.

**MR. POLAND:** Having been on the ground inspecting buildings after three major earthquakes, I can you that the tendency is to close them when they don't need to be closed. And that's -- there's a huge benefit here.

**DR. WOOD:** Another thing that Chris has been pointing out, we've been speaking specifically about buildings that will have dense instrumentation arrays, and that's great because it's going to provide you detailed information. Something else that USGS is interested in is having one or two instruments in a number of buildings and trying to use it for very rapid assessment. Well, that ties in exactly with what Kris was saying. Also you have campuses in regions of very high seismic risk. You could perhaps put in a proposal to do that, to help with the immediate post-earthquake evaluation, or emergency management-type work. It's all through ANSS. They've been focusing on the detailed structural instrumentation at the beginning, but they want to move in to emergency management in the next few years.

**MR. KNIGHT:** And that ties in quite closely with the other recommendation that we didn't accomplish, to coordinate with our Emergency Management group.

**DR. WOOD:** That's right.

*At this point, the Committee members and VA staff had a lengthy discussion on the safety and operability of equipment and material in the building, and the Committee came up with a recommendation in the form of a resolution.*

**DR. MEJIA:** How about something along the lines of the VA to look into the issue of seismic safety of equipment and materials and the need to develop additional guidance for maintaining such seismic safety.

***We would essentially move that the VA look into the issue of seismic safety and operability of equipment and materials, and the need for guidance for maintaining such seismic safety over the life of the facility.***

The motion seconded by Dr. Niculescu was unanimously carried

**DR. MEJIA:** I wanted to ask a question. I thought up for consideration in the future, and that is how it -- we thought about the use of this seismic instrumentation taking advantage of instrumentation to provide feedback into the design process. And that is that some of these facilities have used different versions of the seismic guidelines that have been in operation over the years, how they actually perform, and then that performance may provide feedback into approving the guidelines that have been developed. It may be something that we may want to give consideration in the future.

**DR. WOOD:** But that is one of the stated goals of the ANSS instrumentation, is they specifically wanted to pick buildings that would help answer questions that would enhance the design process. I don't think -- they're obviously not looking specifically at our design document, but it could be included in the study, so.

**MR. BANGA:** As I understand this program will provide emergency response personnel with real-time earthquake information. It will provide engineers with information about building and site response. And provide scientists with high quality data to understand

earthquake processes and solid earth structures and dynamics. So the program -- this is just a summary, I mean, there is more elaborate information in that program.

**DR. MEJIA:** Yes, and I was just thinking that it'd be advantageous for the VA to improve on it. It could be more specific to providing feedback into your own design process.

**MR. KNIGHT:** We don't have any specific statement or criteria that says that, that we should use results from -- I mean, it -- I guess it happens when we do have earthquakes and the data is analyzed, and it gets cranked in, but there's nothing specifically that says we do that, even though we do it in -- for the most cases.

**MR. POLAND:** Just to add to what Lelio was saying, in my mind, from a structural engineers' perspective, after we get some records from one of our buildings, we may want to have one of our contractors study the building and see if there are things that we should be doing differently. One thing that the ANSS program is being -- is going to be looking for is that once records are taken from a particular facility, they're going to want people to study that building. And I assume that there's no problem with turning over drawings and allowing one of our hospitals to be studied and reported on in the research community.

**DR. WOOD:** That was one of the --

**MR. POLAND:** Regular research meeting.

**DR. WOOD:** That was one of the contingencies that you had to have approval to release drawings in order to get approved.

**MR. POLAND:** So, is there a problem?

**MR. BANGA:** No.

**MR. POLAND:** Okay, anything else on the ANSS program? Let's move on to the next item.

## **10. Appointment of additional member with experience in Mechanical & Plumbing Code**

**MR. KNIGHT:** All right. Basically this recommendation was made. It was intended to assist the Committee in determining which codes the VA should adopt, with the recognition that the codes not only deal with structural and fire safety issues, but also mechanical, electrical, plumbing, et cetera, and the Committee felt that they needed some expertise along those lines, to help them make a determination of which codes to adopt. In our review of this recommendation, we also reviewed the statute that created the Committee, and the charter under which the Committee acts. And basically, it's fairly limited, or it's limited to the structural issues relative to fire and safety, and does not delve into other areas, such as mechanical, electrical. And there is some differences in -- when a mechanical system fails, you get complaints, when a structural system fails, you get catastrophic loss of life, in some cases. So there is a distinct difference between the types of results or the outcomes when there is problem related to poor design or not in compliance with codes, and what not. Then there are other processes that VA has in place that address mechanical, electrical, and other professions where, when we do develop our criteria, we do it with the input of private sector consultants, and they review our standards, they review standards of other government agencies, they review standards that are being used by the private sector, and make recommendations to us as to where we should change our standards of any kind -- criteria, design manuals, et cetera, not just specifications, so we do have a process in place that addresses the need to maintain the currency and the quality and the cost effectiveness of our standards in general. We also took under a way to do a overview or review of the mechanical standards for IBC. We were also in the process of looking at the NFPA 5000, which we hadn't yet completed. And our initial review of the IBC mechanical was that there was no problem there which could not be resolved with the methodology that has been proposed by the Committee; i.e, developing a list of modifications to the codes that if there were conflicts, and I'm certain there will be some conflicts, but I'm fairly certain that they're not going to be major or have a major impact on the design of our mechanical systems. So based on those analyses, and conclusions by VA staff who looked at this, we concur and we recommended that the Committee not expand its charter to include mechanical, or any other professions, and that we have an adequate process in place that addresses the update and quality of those standards. And again, the decisions made on curves as part of this meeting kind of litigates the need for additional professional input from other professions into this process. So we would recommend that VA would -- doesn't adopt that recommendation, that the -- and hopefully the Committee will concur on that approach.

**MR. POLAND:** Any comments?

All members agreed with the approach presented by Mr. Kurt Knight.

**MR. POLAND:** We're ready to move on to the next Item.

## 11. Reevaluate the classification of Critical and Essential Facilities

**MR. BANGA:** During the last meeting, we presented the case that the requirement of seismic design in H-18-8 for critical and essential facilities is exactly the same. So I am pleading that the two tables (1 &2) for these facilities be combined into one table with heading, "Critical & Essential Facilities".

**DR. WOOD:** Yes, we discussed this yesterday, when we were looking at other types of hazards, we talked about hurricanes, we talked about security, there seemed to be differences between critical and essential.

**MR. BANGA:** Yes, however this document, H-18-8 covers VA Seismic Design Requirements only.

**DR. WOOD:** Right, but what we thought was that if you had -- if you use different terminology for different hazards, that it actually would make it more difficult to keep track of things from the perspective. So I think Lelio has a motion that would address part of what you're saying, and if that's not acceptable to you, I think we should continue talking about it. But it's my personal opinion that until we have a better idea of multi-hazards and how you make the distinction between critical and essential facilities, that we shouldn't just merge the groups right now.

**DR. MEJIA:** Let me ask you something, Kris. We discussed this at length yesterday. The desire to merge these two tables, one to simplify the -- I guess the use of the guideline, or are there other --

**MR. BANGA:** When some one sees these two tables, a question comes in their minds as to what are these two tables for? A few consultants wanted to know why these two different tables are here when the design requirements are the same.

**DR. MEJIA:** It does originate some questions.

**MR. POLAND:** We understand that for H-18 and for what this says, it doesn't make a lot of sense to have two tables. But as the Structural Safety Advisory Board, and we think about all the facilities that we're advising on, we see three distinct classes of facilities, even though the seismic design requirements are the same for two of them. And just from what I heard yesterday, it seems to us that when we look on a security side, that we would think about the critical facilities as critical facilities and the essential facilities and ancillary facilities, in the terms of the security procedures that we have now, as non-critical facilities. And so there would be a place where you would have a different combining. Now, it wouldn't go on H-18, but in fact, as we think about the inventory of buildings from a safety standpoint, we see these three classes of buildings, and so we think we ought to maintain the three classes of buildings.

**DR. NICULESCU:** Can I say something here? I think the underlying issue was to try and make the language used in H-18 and the language used in other areas, be it

security or hurricanes or whatever, consistent. And the particular words that we were using, central and critical and ancillary should be the same words as the words used in those other areas. I think that was part of what we were trying to do, underlying. And so what are the words used in those other areas? Does anybody know? I think you were trying to make sure that there was consistency between the various --

**DR. MEJIA:** That's definitely one aspect. Then there's another aspect that actually ties into seismic safety itself. And since it ties into seismic safety, it ties into H-18-8, and that is the issue of post-earthquake inspection. In post-earthquake inspection, it probably would be very useful to have a differentiation between critical and essential facilities. You'd want to direct your inspection efforts, and prioritize those depending on whether a facility is critical or essential. And since that inspection, itself, will -- may have to make reference to H-18-8, itself, and it would be used in keeping the separation between the two.

**MR. BANGA:** Well, this document is not for post-earthquake evaluation of buildings.

**DR. MEJIA:** So I realize it's not specific to inspection is not covered by H-18, but it does relate --

**MR. BANGA:** Well, as Susan mentioned a while ago, that this document is for design and construction, and is not for anything else.

**MR. SIEGEL:** If we were to keep a difference between critical facilities and essential facilities, or to keep two tables, I feel we have at least five items that should move from essential to critical. Those five items would be water tower, because without a water tower, the facility can not operate, and it --

**DR. WOOD:** The sprinkler.

**MR. SIEGEL:** Probably should say water tower, et cetera, because it should also include water storage tanks, oil storage tanks, oxygen storage tanks, sewage storage tanks, et cetera. And the next would be Security and Law Enforcement. You have to have security and law enforcement after an extreme event. You also have to have the National Continuity Operations Center after an extreme event. That is the heart of keeping everything going. You have to have Medical Research or you have the potential of ruining years of research. You have to have the Animal Facility for that same reason. So you've got so many in critical facilities, you have so many fewer under essential facilities; it doesn't seem to make sense.

**MR. BANGA:** IBC does not have two distinctions for such buildings. They are all lumped in one category of essential buildings, e.g., fire stations, hospitals etc.

**MR. POLAND:** As I recall -- I just want to make one point, and Kurt, I want to hear from you. When we changed this the last time and created the three tables, we worked real hard to make sure we were using the sub-names that are used in your system, as

opposed to using the generic names that are in the IBC or the UBC. And so that's why these things are written the way they are. The other thing is that the water towers are standalone structures, and always a part of facilities.

**MR. KNIGHT:** Again, one issue, too, not only this classification, and I see some advantages from my end, but in implementation of programs to correct these deficiencies, I see there may be an advantage of having critical and essential; i.e, physical security, we may want to deal with the critical ones first, the essential ones second, and ancillary third. Now, again we're not calling them the same thing as physical security, and that's an issue that we've been discussing. And I don't know the resolution, but there is an issue about implementation and where this categorization may help in defining why the VA does these buildings first, and why they do these ones second?

**DR. MEJIA:** Well, in our discussions yesterday, we thought that you might want to consider keeping the separation as is for the time being, and then that you also consider defining the classification of the facilities from a multi-hazard perspective, and incorporating those categories into things like post-earthquake inspection of buildings, and the management of risk for all of the hazards. So this is sort of delaying things until next meeting.

**MR. BANGA:** What about the six items which Mr. Siegel brought? Do we move them to critical?

**MR. POLAND:** We can. In my mind, what Lelio has just suggested is we're thinking it would nice to get a definition, a multi-hazard definition. And it's going to take some time to see what that looks like. Because what I'm sitting here thinking is in the VA database of information, each facility is given a classification from a structural safety standpoint as one of these classifications. And I don't know where that gets cataloged or where it gets defined, but once it's cataloged and defined, then as we go to these different standards or guidelines or guidance of directives, we have the ability to talk about critical facilities separate from essential facilities separate from ancillary facilities. But we need to define what those mean so that we can better understand what they are.

I just wanted to make a point though. Excuse me. As I recall, the reason that we created the critical and essential facility categories was to assist us in the prioritization of facilities under the seismic program. And Kurt has just said that he could probably use the same categories in the prioritization of the security program. So we're thinking that it makes sense to define these terms from a multi-hazard perspective and then to maintain the categories.

**MR. BANGA:** Let me clarify something here. On the categorization which you just mentioned, the points which were established for developing the hierarchy are the same for Critical and Essential facilities. So when the ranking was developed, it was based on the following criteria.

Building is Critical or Essential, located in High or Very High seismicity, seismically deficient, built before 1977 (before the adoption of H-18-8), and the area of the building is larger than 10,000 square foot.

- Seismicity 35 points (max)
- Deficiency 30 points (max)
- No. of beds 20 points (max)
- Size 15 points (max)
- Total score 100

**MR. POLAND:** It's hard for me to say that an acute care hospital is the same in all aspects in design and operation as a domiciliary. It's hard for me to say that. It's hard for me to say that it's the same as medical records. So I know everything is important, I understand that, but it's just -- I want you to know, I'm a roadblock here, because as your advisor, I just say to you it's hard for me when I think about everything that we have to deal with, to just lump all this stuff together. And so it got separated. And I support the separation. Now, if there's no use, there's no use, I suppose.

**MR. BANGA:** Let me give you some more feedback on this. Medical centers, which are the prime users, have come to us and have wanted their dietetics buildings to be classified as very essential facility.

**DR. NICULESCU:** I was wondering why it's not critical.

**MR. SIEGEL:** Because you can get food elsewhere. Food can be trucked in.

**DR. NICULESCU:** Then what about the psychiatric care; why is that not in critical facility?

**MR. SIEGEL:** They can theoretically walk away from an event.

**DR. NICULESCU:** They're not bedridden.

**MR. SIEGEL:** Also, if things go as VA is currently planning, there may not even be a psychiatric care facility anymore. VA is trying to integrate mental health care fully with physical health care. It is possible that twenty years hence, there will not be any psychiatric facilities in VA.

**DR. NICULESCU:** Right. We look forward to that day.

**MR. POLAND:** Need some more thoughts.

**DR. MEJIA:** I guess as I understand it, there's a number of types of facilities that are essentially mis-classified in terms of these tables? And my question was which ones would you say are not mis-classified, or -- there is a significant number of those.

**MR. SIEGEL:** At the present time, if we are keeping the three tables, there are only those five items which I would suggest should move from essential to critical.

**DR. MEJIA:** Which ones are those?

**MR. SIEGEL:** Starting from the top of the list: Animal Facility, Medical Research, National Continuity of Operations Center, and Security and Law Enforcement, and Water Tower.

**MR. POLAND:** I guess I understand that the reasons involved, except the water tower. You would truck water in; it's like we truck in oil, we truck in most anything within 24 hours.

**MR. SIEGEL:** Well, it's true --

**DR. NICULESCU:** You need the pressure.

**MR. SIEGEL:** You need the pressure. It's not just --

**DR. NICULESCU:** But you have to pump it up.

**MR. SIEGEL:** Yes.

**DR. NICULESCU:** There must be some place to pump it to.

**MR. SIEGEL:** For instance, in Hurricane Andrew, the facility at Miami was put out of business because the toilets couldn't be flushed. And because water was not available for running the air conditioning system, the clinic areas, the outpatient areas, which were the most needed facilities, became flooded. Condensation created floods in the area, and people who were being treated for, bumps, and cuts, etc., and the personnel who were treating them slip, couldn't really use the area as they should have. Eventually, trucks came in from around the country in the VA system with ice and water and all kinds of other supplies, so the hospital was able to operate, one of the few that was able to operate in Miami. But the lack of water necessitated getting all of the inpatients out of the facility, as well as the fact that, the sprinklers couldn't have operated either, because there wasn't any water flowing. That's why the water tower, or other water storage is critical.

**DR. MEJIA:** And in that kind of event like, there's usually a pretty high demand. Not just by, you know, by a large portion of the community, so you'd be competing for those kinds of resources with other institutions.

**MR. SIEGEL:** Our hospital in Miami was one of the few in the area which was able to operate, mainly because we're a system. We were able to bring trucks and vans in. I believe I discussed them in the past. These are clinics and are sent to rural areas. I believe four or five of them came from different parts of the country to Miami to be able

to help treat the community. If the facility had had the water tower in operation, or other water source, it would not have been such a problem.

**MR. KOFFEL:** Did that facility have its own water source, or are we talking Public water.

**MR. SIEGEL:** It is one of the facilities that is under investigation in our pilot hurricane study. It will either have underground water storage, wells, or above ground water storage. I don't think have a water tower.

**MR. KOFFEL:** The issue of water tower is really as old as the facilities -- if we built the new facilities that wouldn't have a water tower.

**MR. SIEGEL:** No.

**MR. POLAND:** See, in my mind what you're describing is obviously what we want to have happen, but that's really related to a critical facility, and a critical facility has to have an un-interrupted water supply. And when I've worked on other facilities, sometimes we bury tanks and plant pumps to accommodate that. To say their water tower has to be a critical facility says that we have to have that ability for the entire campus. And maybe we won't need it for the entire campus, we just need it for the critical facilities. So I just, you know, in the spirit of trying to make best use of the dollars to serve the veterans, I'm not sure treating water towers as critical facilities so that we have that kind of water supply for an entire medical center makes sense.

**MR. SIEGEL:** If one is designing from scratch, you're absolutely right. We would assume for the many existing conditions we have out there, however, without completely redoing the water system, then there would be a problem.

**MR. KNIGHT:** And then that's really an issue we're going have to deal with in our physical security studies --

**MR. SIEGEL:** Absolutely.

**MR. KNIGHT:** Is it new or existing because all the major utilities, water, steam, et cetera need to have redundancies and there will be recommendations that these need to be accomplished over time, of which they won't -- it'll be a long time before any of the existing ones. Now from a seismic safety standpoint, of course, that tower will be protected in the same way that it is for critical facilities, and from a seismic safety, it has no difference of protection. So it's protected in the same way for other issues, such as hurricane and physical security which, is uncertain now, I think. And that's -- at right -- at this point in time as we develop our standards, there is uncertainty as to exactly how we're going to deal with that classification of buildings and how we implement the program, et cetera. And a year from now, we may have that very well defined and be quite certain of what we want. I would hope.

**MR. POLAND:** Go ahead.

**DR. MEJIA:** Well, you know, I guess there needs some flexibility in therein the use of these categories. And from a design perspective, since the requirements are the same right now, we wouldn't really need posting additional requirements by redefining or by relocating some of these to the critical category if that serves the VA better from a longer term perspective. And as we discussed yesterday, I think we need to -- this suggestion of giving ourselves a little more time until next year in obtaining these -- with these modifications -- with the modifications we've discussed for another year, so that we have some time to think about their use and then to apply them from other perspectives as well, with the use -- that's how we discussed and we crafted a motion around this, so that --

**MR. POLAND:** Let's go ahead and make that motion and we'll see if we can get a second. I -- you know, we got to keep doing what we believe in, that's what we're here for. So let's give it a go and see if we can bring it together.

**DR. MEJIA:** The motion is as follows:

***We recommend that over the course of this coming year, the VA maintain the classification categories of critical and essential facilities shown in Tables 1 and 2 of page 18-8, and amend the corresponding note to read that critical and essential facilities tables were developed as part of VA's Seismic Study Program to develop long-range priorities. The seismic design requirements are the same for the two categories. The motion has a second part, which is, the VA consider defining the classification of facilities from a multi-hazard perspective, and incorporating the classification categories in the planning for post-earthquake inspection of buildings and the management of risk from other hazards. And this be done over the course of this coming year.***

The motion seconded by Dr. Wood was unanimously carried.

**DR. MEJIA:** Now, I guess one thing we would have to do is add to this a change, another motion to change the classification of some of these per our discussion if we could do that.

**MR. POLAND:** I'm a little uncomfortable with that, because we really haven't defined -- what we're asking is to use these terms universally for all hazard consideration --

**DR. MEJIA:** Right.

**MR. POLAND:** In post-earthquake inspection planning, and since they're not defined, we can move them around right now, but we can leave them alone, too. Give ourselves a year to do that.

**MR. KOFFEL:** Yes, I don't see that I -- I'm not convinced -- since the criteria is the same, that we need to start moving the facilities from one table to another until we get to the second part of your motion.

**DR. NICULESCU:** I would agree. And I understand the concern that the VA has that some things might be seen as less critical than others, but I think we have to think about it carefully.

**MR. POLAND:** Maybe we'll end up changing the names.

**DR. NICULESCU:** Yes.

**MR. POLAND:** To me, I just see three types of facilities, not two. And you make a good point, we haven't really talked about that. If there's something about saying critical and essential and that's blocking what we're trying to accomplish, then we can change back to it. Kurt, does that make sense to you?

**MR. KNIGHT:** Yes, I'm fine with that.

**MR. POLAND:** We're going to --

**MR. SIEGEL:** May I ask one thing? Can we please change water tower to water tower, utility supply storage, et cetera?

**MR. POLAND:** Can we put that in a separate motion, and we'll take care of that in just a moment?

***We have the motion to maintain the tables for the year and get definitions for the terms in a multi-hazard environment, just to summarize that. All those in favor say aye.***

The motion seconded by Dr. Wood was unanimously approved.

**MR. POLAND:** Can I have another motion?

**DR. WOOD:** Sure.

***I'd like to make a motion that we modify the last item in Table 2, of H-18-8. The current wording is "water tower," change that to "Water tower, utility supply storage structures et cetera."***

The motion seconded by Dr. Mejia was unanimously approved.

**MR. POLAND:** Now we're ready for the next item.

## 12. Inspection of Facades - Update

**MR. LAU:** In the past year we have prepared the Facade Inspection Directive. After being reviewed by our Acting Chief Facilities Management Officer, Mr. Neary, it was rejected to forward it as a Directive because of his concern of the limited funding in VISNs. He suggested for us to look into the possibility of incorporating the Facade Inspections Program in the Facilities Condition Assessments program that is managed by the Consultant Support Group in FM. So at this point, I have a draft "Information Letter". It's a different format from the Directive, but the content is basically the same. How we are going to carry that program out, we'll need to discuss it with the Consultant Support Group.

**MR. SIEGEL:** Also, it will suggest to the medical centers that if they see any visual signs, they attend to it immediately. One of the concerns is that FM has no authority to direct medical centers to do anything. That more properly comes from our boss, the Deputy Under Secretary for Health.

**DR. NICULESCU:** What I would like to suggest is that as the letter is developed, because it's not finished yet, that we could see a copy of it, and in particular, I'm concerned. I know there's a lack of funds, and I know there's a lot of empty buildings that are boarded up and you keep people away from them, but I am concerned. Somewhere, and I think maybe in the fifth paragraph, there's a good spot to put in something about that repairs are expected. And admittedly, it won't be on all buildings, it won't be your abandoned empty buildings. I have some suggested wording for that. I'm not sure it's really enough to be a motion, so maybe I'll just hand it you and we'll incorporate it in the letter as it develops.

**MR. POLAND:** Why don't you go ahead and read it, so we know here?

**DR. NICULESCU:** Okay, well there's a sentence in the fifth paragraph that says, "all VAMC shall take precautions to protect staff and patients when unsafe facades are identified." And I would like to change it to say, "All VAMCs shall take precautions to protect staff, patients, and others until repairs can be made when unsafe facades are identified." Again, trying to get in the idea that these things ought to be repaired, and especially if they're anywhere near where people are. So it's just a suggestion, and I'm very aware of the unfortunate situation of abandoned buildings for which there is no money for maintenance. But this applies to the buildings that people are around, as well, and those need to be repaired.

**MR. KNIGHT:** I think we can commit to providing when we get the final draft, provide the final draft to you for the Committee for review, prior to submitting it to our management.

**MR. POLAND:** Other comments about the facade process? Does this sound reasonable? Thank you, Fred. And I agree with you, since it's a draft letter, it doesn't

really need to be a motion, and thank you for the opportunity to review it. We can do that by e-mail once you're ready.

Okay, we're ready for the report on the status on physical security assessments for VA facilities.

### **13. Status of Physical Security Assessments for VA Facilities**

**MR. KNIGHT:** VA has conducted 118 assessments of critical facilities. Eighteen of those were for full assessments; one hundred were called pre-assessments. The eighteen have identified specific mitigations, specific vulnerabilities in those mitigations, and the costs of correcting those mitigations. The vulnerabilities also have been prioritized. That program is continuing. We're doing an analysis of that data; that those assessments were completed approximately one year ago. We're doing an analysis of the data based on a survey of the eighteen facilities, as to what they have accomplished in correcting the identified vulnerabilities. And there has been significant process, and many on the corrections that they have taken are the lower cost easier to accomplish items, but there's been a significant -- maybe 15, 20 percent accomplished. This is an environment of tight funding and difficult times, so the medical centers have taken it seriously, they are reacting to it. So we're quite happy with that. We also have had from a funding perspective in our 2006 budget, funding included for physical security as a separate line item, which is a method of flexibility that allows us to use that funding for various facilities without going back to Congress and requesting specific approval to do that. So that, again, is very positive, as far as we see it, because it allows us to use this funding. We've identified approximately five percent for major projects, and that puts that monies into the flexibility of the line item, which allows that the billing is only a small part of that, and then we can not require to use that money, but if it's a larger facility, it is more critical that -- that that money can be allowed to be spent there. So it gives VA the flexibility of applying that in the most appropriate way. We also are planning future assessments. We're going to assess the sites where the 23 -- what we call CARES Projects, the next prioritized group or projects that have been identified for construction. We're going to do full assessments of those 23 sites. Many of them have pre-assessments, but they don't have full assessments. The findings of those assessments will then be incorporated into the designs that are ongoing for those new projects, so that in some cases, I mean, they'll be a site analysis, but in some cases, the design may be able to incorporate, or address some of the issues within the funding that's been identified for that project. I mean, obviously, the project funding is a critical component, but we will identify needs, as related to those ongoing 23 projects. And in addition to that, we intend to conduct an additional eight full assessments in cities where Department of Homeland Security, has identified high risk. They have a list of cities that are considered at higher risk of attack than others. And we have eight facilities, and those cities will become pre-assessments but not full assessments. So we will conduct full assessments of those sites. Then in addition to that, we're going to conduct pre-assessments on the remaining list of what VA has defined as its critical facilities. This will complete our assessment of VA identifying critical facilities with at least a pre-assessment of all critical facilities. We've also begun the process of developing a

standard strategies document, a Physical Securities Standards Document. That initial draft is available, and -- that we'll put that into an appropriate format, and then it will be vetted through VA for concurrence. Once we receive concurrence on the strategies, we will then proceed with developing standards as part of that process. In reality, we're going to go ahead and contract for the standards, probably not waiting for the concurrence, because the feeling is that many of the requests, and many of the strategies will not have major problems, or major issues with VA; that issues are going to revolve around access, and control of access, and protection of the sites, site access control, building access control, parking, and those types of things. And many of the really technical issues, redundancy, et cetera, we'll have a -- a minimum -- we'll have -- we'll likely have not much criticism, or changes from our proposed strategies. The strategies identified four categories of buildings: Critical and non-critical --

**MR. SIEGEL:** Life safety protected, rather than non-critical.

**MR. KNIGHT:** Critical, life safety protected, and then new and existing for each of those categories. And we've done these with the understanding that VA has a large program, we are not going to be able to accomplish these things very quickly, and ultimately, we will have to develop an implementation strategy of how to -- whatever monies we get, how to spend it most appropriately for VA from a privatization standpoint. And we do have a positive impact, although not completed yet, that we have been requested to put together a paper to identify an implementation program for funding the vulnerabilities that have been identified to date. And that would be a multi-year, long-term program. And how it gets funded and the actual process is not yet defined, but we have been requested for the '07 budget to put together a program, and then run it up the flagpole and see what we can get approved. So that's a very positive thing for the program. And I think that concludes the analysis or report on physical security --

**DR. NICULESCU:** I have some questions. I think this started, as I remember it, as an analysis of how best to secure VA facilities from terrorism, but I'm wondering if -- some of the facilities I visit have a problem, not exactly terrorism, not exactly vandalism, but people are living, or trying to live, in abandoned buildings, and basically making problems for the VA, for themselves, et cetera. I wonder if that could be considered as part of what you're involved in. The problem happens on large campuses with poor security and long fences, and lots of abandoned buildings. And the buildings are accessible and heated in the winter, and why not hang out there?

**DR. WOOD:** The buildings are still heated?

**DR. NICULESCU:** Well, many campuses are on a complete heating system.

**DR. WOOD:** Because they have like steam heaters --

**DR. NICULESCU:** Yes.

**DR. WOOD:** Or something like that.

**DR. NICULESCU:** And otherwise, you have to go in and empty them out.

**MR. KNIGHT:** There is a lower level of operation that is maintained just to keep the structure from deteriorating to the point that it needs to be torn down.

**MR. SIEGEL:** Before VA excesses a building, it's required by law to offer those buildings to agencies which deal with homeless. VA also has under VHA a Homeless Grant Program which offers a certain amount of money to homeless organizations, or municipalities, or eleemosynary institutions such as The Salvation Army, to create a homeless facility. It could be on a VA campus, or it could be in a city or some other place as small as a house or a very large building. VA then pays part of the construction cost of this facility, and also pays a per diem for veteran residents in those facilities. It's similar to our State Home Grant Program, where VA awards grants, up to 65 percent of the project cost to a state, to create a facility. Some of these are in non-used VA facilities on VA campuses, where land is then transferred to the state, or in other locations. So VA is very aware of this problem, and is doing all it can to try to help solve problems of homeless veterans.

**MR. KNIGHT:** In the specific assessments, I don't think that was identified as an issue, although site security is an issue, and is related to that; i.e. and protecting your perimeter and access into it.

**MR. SIEGEL:** And to our understanding of the 118 facilities that were assessed, actually 119 because we assessed the facility that's going to be used temporarily by VA IT that has never been raised by any of the facilities.

**DR. NICULESCU:** Oh, okay. It was raised today.

**MR. SIEGEL:** I'd be happy to look into it, if you let us know which ones you come across that have that problem.

**MR. KNIGHT:** Well we can identify it as a potential issue to the assessment teams --

**MR. SIEGEL:** Yes, for new assessments.

**MR. KNIGHT:** When they go out, and have them at least ask the question, is it an issue with them? Is it a problem with them? Now, it's probably the major metropolitan cities.

**MR. SIEGEL:** No. Well, also in some rural areas.

**DR. NICULESCU:** Yes.

**DR. NICULESCU:** And then I had another question in regard to that, and that is that where I live and work in New York City, there are tall buildings and there are areas of low buildings, and a couple of the VA facilities are very tall in areas of low buildings, and

it makes them more obvious targets. One is actually standing on the highest point in New York City.

**MR. POLAND:** You're talking about the Bronx?

**DR. NICULESCU:** That one is the Bronx, right.

**MR. POLAND:** Right.

**DR. NICULESCU:** Right. Wonderful views of the entire city. And the other one is in Brooklyn, right by the harbor.

**MR. POLAND:** Yes.

**DR. NICULESCU:** It is in the neighborhood of one and two-story houses with twelve-story VA building right in the middle of it. I'm wondering if the VA has, considered this in the understanding of security and vulnerability. Maybe we should change the approach and conclude that you don't want to stick out, and you don't want to build a tall building in an area of low buildings, you don't want to draw attention to the facilities. And I wonder if there's been any discussion of that?

**MR. SIEGEL:** VA sometimes, especially in metropolitan areas, has a hard time getting a large enough site to be able to create a low facility. For instance, in one of the places where we are creating a new facility -- a replacement, actually, for the facility which is located elsewhere in this city -- we had originally requested a fifty acre site acquired in a medical center complex. It was attempted to get us to utilize a twelve acre site for this large VA medical center. If we had done that, we would have had to have an enormously tall building. We strongly resisted that, and it's not completely yet resolved. That's an extreme example, but we've had that problem elsewhere as well. . One of our other facilities is on a much larger site, and there is an attempt to make it as low as possible, but even then, the efficiencies of operation make it very difficult to have a patient bed tower spread way out rather than tall.

**DR. NICULESCU:** I understand that, but the VA seems to have had, over the period it has been operating, a variety of standard plans. And one was very wide campuses with two- and three-story buildings connected in loops, whatever, and then that segued into these taller towers, sometimes H-shaped, sometimes Y-shaped. I guess what I'm saying is I think that we need to consider security in the overall design of the facility, not just in the details about perimeter fence and so on. And part of that is placement and the way it fits into the complex. I mean, the tall buildings that the VA has in Manhattan are unnoticeable, they're surrounded by tall buildings. But when you build a tall building in the middle of two-story housing, it has tremendous impact, visually, which perhaps you don't want to have. And those sites are big, so it was not -- it was a desire to have impact. All I'm saying is perhaps --

**MR. KOFFEL:** Well, your --

**DR. NICULESU:** We should be more discreet.

**MR. SIEGEL:** You're absolutely correct. In the times those facilities were designed, physical security was perhaps the last thing anybody ever thought about. And so there might have been a social reason to consolidate it. High rise public housing, for the high rise public housing was the model in the earlier days of public housing. And we all know the very many reasons why so much of that public housing has since been leveled, because it breeds social problems. The kind of tall, rather inflexible buildings that VA and most other institutions built in the past are certainly not well-designed, as medical care changes from a bed model to an outpatient model, for today's medicine. And it creates lots and lots of problems. You're absolutely right on.

**DR. NICULESCU:** Well, I don't know what the result of your security study will be, but I was wondering if there were going to be some recommendations or policies arriving out of it, that we could look at this kind of issue.

**MR. KNIGHT:** Well, we have three -- provided you a copy of the strategies document. You may want to take a look at that and see if there's anything in there that you would recommend.

**MR. POLAND:** Yes, in that regard, in looking at the 24 strategies, it's hard to see one that really relates directly to what Susan's talking about. Maybe we should stand back and look at the whole planning design concepts. And with security in mind today, from a progressive collapse standpoint, just a structural standpoint, I know that we can almost assure a progressive collapse prevention at no cost if we limit ourselves to certain structural systems and layouts. It doesn't cost anything. If you bring it in afterwards, after a building is already configured and you've already made decisions how you're going to deal with it, you could spend 5 percent of the value of the building trying to protect yourself. So from a structural standpoint, I think I'm -- this is another aspect of what Susan's talking about. It just seems like one of the strategies ought to be to stand back and look at the whole process, and see how we can integrate security at least cost.

**MR. SEIGEL:** That is absolutely an excellent point. And one of the ways, of course, is to have a large enough site so that you remain relatively low and more residentially scaled. But that also means as a corollary, is that you would have a very large site, which would be unusual for a residential area. You have seas of parking surrounding the facility, which is also unusual for a residential area. As you know, it's not that easy to do.

**DR. NICULESCU:** I'm just saying that there have been very different approaches over the years that the VA has taken. And perhaps some of them, like the tall buildings, which some are now empty, are very difficult to know what to do with. And they're very vulnerable, very obvious.

**MR. KNIGHT:** The goal of the standards development process, or the intent, that we're going to develop a physical security design manual, in which most of this will contain. It will also reference other of our criteria and standards and specifications, but there will be a single document that talks about physical security. Now in the introductions to that, that's certainly a topic that could be discussed as a concern, an issue, and you devise designing a few facility, especially, or a major renovation --

**MR. SIEGEL:** We can probably address that with some verbiage; ensuring that it happens is a much bigger issue, because mission and dollars are always drivers, of what gets built.

**DR. NICULESCU:** Well, the proposed use of this document that you've been working on together is to help fix problems that are visible now, right?

**MR. SIEGEL:** Because as Kurt indicated, there will be four sets of strategies. One set is "mission critical" and "existing life safety". And the other two will be new "mission critical" and "new life safety". One of the things you might want to do for an existing critical is to make it less outstanding. And there's two ways of doing that: one would be to cut it down; the other would be to raise all the residential but I don't think that's too feasible. On the other hand, we have been cutting down the heights of some of our buildings, as you're well aware in the seismic strengthening program. And so in that sense, they don't stand out. But it's very hard in a medical center, with the tremendous square footage required, to get something that will fit into a residential neighborhood; and it's just not too feasible. And especially if you're trying to locate that medical center, with the university medical center, which we tried to do in many cases. Usually, then, you're next to a bunch of eight- or ten-story buildings. But I'm talking about being contextual, let's look at things as a whole, if we can, and let's try and not build too tall, because the tallness really makes you vulnerable.

**MR. POLAND:** Kurt, are the strategies pretty much set now? I know this was a draft report that you showed us. Is there still room to have flexibility with this?

**MR. KNIGHT:** I think so, yes. If we can get the comments fairly quickly.

**DR. NICULESCU:** Okay.

**MR. POLAND:** I don't know if this rates a strategy. It seems to me --

**DR. NICULESCU:** It does.

**MR. POLAND:** It does, and maybe we need to recommend to you that we add a strategy that tries to capture what Susan is talking about, that really -- and it's not about --

**MR. KNIGHT:** There is --

**MR. POLAND:** It might.

**MR. KNIGHT:** I'm sorry.

**MR. POLAND:** I believe what she's talking about, it's not about not building tall hospitals in residential neighborhoods, it's about considering that context. And considering security right from the start in a project, when you have a new project, because it doesn't seem to be in here yet. And again, just to reinforce that, I know that as we brought seismic safety and design to VA facilities early on, it was very expensive, and as we started to learn how to use different kinds of systems and really deal with the issue up front, we're able to bring the costs under control. And so I really believe there's an important point here to be made, and it ought to be included.

**MR. SIEGEL:** If I may, there is a section that could be enlarged that already focuses on this.

**DR. NICULESCU:** Do you remember which one it is?

**MR. SIEGEL:** It's Strategy 8.

**DR. NICULESCU:** Eight, Crime Prevention Through Environmental Design?

**MR. SIEGEL:** Yes, that speaks to it. It doesn't talk about tall buildings in residential neighborhoods, but that's exactly what crime prevention through environmental design is all about. It's about using natural ways of obtaining visible security for crime prevention.

**MR. KNIGHT:** Yes, and that term is used that way, but the way we described it is more broad than crime prevention.

**MR. SIEGEL:** Yes.

**MR. KNIGHT:** Although that's --

**MR. SIEGEL:** That's the standard term.

**DR. NICULESCU:** Mm-hmm. Yes, I remember when that idea was conceived. But I think it's gone a little bit beyond the crime prevention and the defensible space --

**MR. SIEGEL:** But this is a perfect space to enlarge that.

**DR. NICULESCU:** Sure.

**MR. POLAND:** I really think this is an important point. I'd like to get it up to standard with our motions. So Susan is going to craft a motion. We're getting very good at this --

**DR. NICULESCU:** Yes.

**MR. POLAND:** Crafting motions on the fly.

**DR. WOOD:** I have a motion also related to this issue.

***The Advisory Committee would like to be kept apprised of developments related to the development of standards for physical security assessment of VA facilities. The Committee would like to review these standards when the final draft is available, and the staff should consider convening a conference call or special meeting of the Committee to discuss that draft.***

The motion seconded by Dr. Mejia was unanimously approved.

**MR. POLAND:** Any comments? That sounds reasonable. Good.

**DR. WOOD:** Sorry, Susan, it wasn't long enough.

**MR. POLAND:** That's quite all right.

**DR. NICULESCU:** Let me tell you where I'm heading.

**MR. POLAND:** Okay, go ahead.

**DR. NICULESCU:** The VA consider augmenting the strategy 8 on this document to include broad issues of planning context, building height, vulnerability. And what I wanted to say was, buildings sticking out like a sore thumb --

**MR. KOFFEL:** Site selection.

**DR. NICULESCU:** Site selection? It's not quite enough, but that will --

**MR. KOFFEL:** But there are --

**DR. NICULESCU:** Vulnerability.

**MR. KOFFEL:** Some broader areas.

**DR. NICULESCU:** Site selection.

**DR. WOOD:** Context within the adjacent buildings, or something.

**MR. KOFFEL:** I think she has some of that, but I mean --

**DR. NICULESCU:** Prominence. Because to the extent we make ourselves prominent, we make ourselves vulnerable, basically.

**MR. POLAND:** So why don't you read that again as a motion?

**DR. NICULESCU:** Okay. The VA consider augmenting the Strategy 8 to include broad issues of planning context, building height, vulnerabilities, site selection, and building prominence.

**DR. WOOD:** Yes, I'd say building prominence.

**DR. NICULESCU:** Is that too general?

**MR. SEIGEL:** I'm glad you read it building prominence; because I was afraid I was going have to abandon my bow ties.

**MR. POLAND:** I'd like to get something in there about the style of construction --

**DR. NICULESCU:** Yes.

**MR. POLAND:** The structural system.

**DR. NICULESCU:** Yes.

**MR. POLAND:** Maybe construction techniques, or something?

**DR. NICULESCU:** Site selection --

**MR. POLAND:** Something broader than just structural system.

**DR. NICULESCU:** Structural system and techniques.

**MR. POLAND:** Sure.

**MR. KOFFEL:** Is that a Strategy 8 item, or more Strategy 11, where they get into objective collapse and column protection?

**MR. POLAND:** Well, it sounds like it, but it seems that strategy 8 is the one that's trying to capture the notion of design.

**DR. NICULESCU:** Exactly. If you do it in Strategy 8, we won't have to do it there, because --

**MR. POLAND:** Yes, that's right.

**DR. NICULESCU:** We already did it. I mean, I guess what I'm trying to say is we can design so that we don't have to deal with some of these other things. When we have the option, when we have the land, et cetera, but if we try and set out to do it that way, it'll make the other issues less difficult.

**MR. POLAND:** Well, that sets the tone of what we're interested in. You guys will have to figure out how it all fits together.

**MR. KOFFEL:** I'll second that.

**MR. POLAND:** Thank you. You want to read that one more time --

**DR. NICULESCU:** Sure.

***The VA consider augmenting Strategy 8 to include broad issues of planning context, building height, vulnerability, site selection, structural system, and techniques, and building prominence.***

The motion seconded by Dr. Mejia was unanimously carried.

**MR. POLAND:** We are ready for next Agenda item: Status of the CARES Program.

#### **14. Status of CARES program**

**MR. SIEGEL:** I have a copy of the CARES decision report of the Secretary, which we will pass around, which really gives you a very good idea of the CARES status, even though it was last November. It shows all of the projects which were in the budget request for 2004, 2005. I also have another document which shows the actual authorizations that were written by Congress for 2004 and 2005, and the budget request for 2006, and the House action.

This will really give you a very good idea of how the CARES process is being carried out. In the future, we won't talk about CARES projects, because the projects are no longer being called CARES projects. CARES has been accepted as a methodology, a program that will go on through the following years. Another thing that is taking place is that there are studies now being done of 18 markets, where there was no final decision by the Secretary. Those include New York, as we have been discussing, Boston, and other major population centers where there were so many intricacies that the Secretary deemed it was necessary to have more detailed studies of alternatives to be evaluated. These areas are now being investigated, and the results, once they're put together, will probably, hold public hearings, and the Secretary might create another Federal Advisory Act Committee, as the previous CARES commission was, to hold hearings on those resolutions, and we'll have further decisions made by the current Secretary. Some of these decisions are very, very hard to make. New York is a classic example. Almost all of the facilities are technologically outmoded, certainly not models of efficiency. They would be more efficient to offer services in differently. They're very, very hard decisions to make.

You have to consider transportation, you have to consider where the population lives, the relationship to the facilities, whether or not it's better to decentralize as much as possible versus centralize. We know that by and large centralization is more efficient, it's harder, especially in congested metropolitan areas like New York and Boston, it's much harder for veteran patients to get around. And there are a lot of very, very strongly held opinions. The President and Congress have committed a very large amount of

money to this modernization program, and VA sorely needs to modernize, because so many of our facilities are obsolete. In the private sector, it's much easier -- even though there are bond problems, for an institution to decide, okay, we're just inefficient, we have to replace ourselves in a relatively short period of time, but then they have other financial opportunities, such as depreciation, et cetera, so that they can more easily obtain funds than the federal government. Our funds are obtained through taxes and federal bonds. Our program is going along much more swiftly than many of us have dared hope, and that's really excellent. One of the problems is layperson looking at a tall, large building, not realizing that it's completely functionally obsolete, not realizing that it's probably more expensive to try to renovate it than to replace it. Plus the fact that if you do replace facilities, we then move to a different neighborhood. What happens to that old site, et cetera? DoD agencies in their BRAC closures have certainly come across this time and time again. It's interesting that the previous secretary, Secretary Principi, is now heading the current BRAC commission for the President. Any questions?

**DR. NICULESCU:** I feel that I need to let my fellow committee members know that my firm, and indeed I, are working on CARES, too, just so that you are aware of that. I'm not hiding anything from you. But that's part of my responsibilities.

**MR. POLAND:** Okay.

**DR. NICULESCU:** And it's fascinating.

**MR. POLAND:** A very exciting program. Thank you. Okay, let's move on to new business. "NIST report on the World Trade Center"

**MR. SIEGEL:** We were told by the second in command at the Building and Fire Research Lab that everything was going to be on the NIST special website yesterday at 10:00, but it indeed wasn't. And Fred tried to contact him this morning to find out what's happening.

**MR. LAU:** Yes, he's out today, but I talked to his assistant. Her understanding is that everything on the website, is the most recent updated version, and the word, "draft" will stay on the document because right now they're waiting for public review comments.

**MR. KNIGHT:** But it was our understanding that public comments had been incorporated into a final version --

**MR. POLAND:** Yes.

**MR. KNIGHT:** But that's not yet on the website.

**MR. POLAND:** Yes.

**MR. KNIGHT:** So I don't know what's happened as far as whether there's a -- I don't know why it's not posted.

**MR. SIEGEL:** As I discussed in our workshop, the article in the New York Times, that was written the day before the report was released, it certainly does not seem that it would affect us that much. It seemed to concentrate on 40-story and over buildings. I'm sure, however, its conclusions on building exiting may have ramifications for us even without doing 40-story buildings; but I don't believe it will be that severe unless it causes NFPA, for instance, to take an entirely different look at 101.

**MR. KOFFEL:** There have been some proposals. The one that seems to be gaining the most popularity right now, or support, I guess I should say, is for an increased width of stairs.

**DR. NICULESCU:** Right.

**MR. KOFFEL:** But that is triggered at a significant occupant load served by that stairway, and most of your facilities will probably never get to that point, unless you were to put a large --

**DR. NICULESCU:** Auditorium.

**MR. KOFFEL:** Assembly occupancy on an upper floor of one of your buildings, then you might fall into that threshold, but because of the occupant load factor and density of a health care facility, I don't think your -- and the height of your typical buildings, I don't think you're going to be affected.

**MR. POLAND:** We'll watch that develop. Maybe there will be something --

**MR. KOFFEL:** And if we get any --

**MR. POLAND:** For us to consider next time.

**MR. KOFFEL:** Further information about -- for this -- information may be available, and we will of course let you know.

**MR. POLAND:** There is another bullet under new business. Kris, are you going to talk about it?

**MR. BANGA:** Well, we have just learned that the Department of Homeland Security has cleared a revised version of "The report to Congress, Toward Earthquake Resistant Federal Buildings (FEMA 360)" and has submitted the report to Office of Management and Budget. As some of you may remember, FEMA submitted to OMB an earlier version of this report in 2000.

**MR. SIEGEL:** Kris, it was my understanding that it had been sent to OMB and DHS had not released it.

**MR. POLAND:** My understanding was that this is a FEMA-developed report that it was shared with OMB before it was officially delivered, and that sharing process didn't resolve for a long time. And it sounds now like it's been officially delivered to OMB and will be delivered to Congress. As I recall, Kris, this is the report that really triggered the inventory process, the whole seismic movement. It is my understanding that VA program is consistent with all the recommendations that are in this report, even though the report has been sitting around for five years.

**MR. BANGA:** That was the basis of our seismic study program.

**MR. POLAND:** So this won't really cause any change to the VA. It's just a matter of almost formalizing, or bringing to light, what's been going on.

**MR. BANGA:** Yes, our Seismic Study Program is now in the last phase. We have studied over 230 buildings, some preliminary; and many detailed studies. This number of 230 buildings takes advantage of the buildings which are similar and the same vintage. So, we have made good progress towards this end. The result of studies identified 75 EHR, exceptionally high risk (HER) buildings, and 150 high risk (HR) buildings. And, this has been made possible to develop many seismic projects.

**MR. POLAND:** Well, if the report is delivered and all the agencies were to do what VA is doing, and that's what the report was really looking for, was to get on about correcting the seismic deficiencies in federal facilities. Any comments or questions about that?

**DR. MEJIA:** I guess one informational note for the entire group, and we may want to think about in the future, this doesn't have any short-term implications, but in the long-term it might. There's a fair amount of research going on within the seismological community on the estimation of earthquake ground motions, taking advantage of data that has been collected in recent earthquakes. The Pacific Earthquake Engineering Research Center is sponsoring and conducting research that will result in the release what are called a new attenuation relationships for ground motions, probably towards the end of this year, or maybe sometime next year that eventually will make their way into national maps and building codes, and that sort of thing. So I just wanted to update the group about that.

**MR. POLAND:** That information won't be included in the 2006 IBC.

**DR. MEJIA:** It may not. Probably not.

**DR. WOOD:** I don't think so.

**DR. MEJIA:** Probably not.

**MR. POLAND:** So if being proactive, as we like to be, if something is there that we think is important for the VA to actually have the -- we have the ability to make that as a

part of our modifications when the 2006 IBC comes along. We need to have a look at that at our next meeting.

**DR. MEJIA:** At our next meeting, it may be --

**MR. POLAND:** Something you might be able to bring.

**DR. MEJIA:** If it's been released, I may be --

**MR. POLAND:** If it's been released.

**DR. MEJIA:** Able to give you a better update on what's happening.

**MR. POLAND:** Because that gets right to our seismic factors that we use in the design requirements we have in H-18-8. Good. Hopefully, for those that go up, they'll be some that go down.

**DR. MEJIA:** That's correct.

**DR. WOOD:** Yes, I'm not counting on it.

**DR. MEJIA:** We'll see.

**MR. POLAND:** Now, Sharon.

**Dr. Wood:** Another item of new business, if I could just make a suggestion, I found having Josh here with his perspective of what's going on in divisions, because he's closer to all that, to be very helpful. And I don't know how this has to work, but I think we would appreciate having that kind of person at this kind of meeting. We always have the Central Office staff, but if we could have a representative, that seems appropriate.

**MR. SIEGEL:** We had invited some other people to join in this meeting, and they unfortunately weren't able to make it; but we agree with you, we don't build buildings for ourselves, we build buildings for the field. The more field representation and interaction we have, the better. There are, what did Josh say, a handful of VISN people that have similar positions as his.

**DR. WOOD:** He said there were four.

**DR. MEJIA:** Yes, and we could certainly request that either he or one other one attend in addition to whoever replaces Ken Faulstich.

**MR. POLAND:** Right. And if there's somebody on the construction site, because we have these \$7 million projects out there that we can't really see, and it would really be great to have a couple of those folks in here to talk with us. I think it's a very robust conversation.

**MR. SIEGEL:** Again, we have funding problems. We don't have the staff to be able to assign resident engineers at minor projects, although we get requests to have engineers at minor projects. If there are minor projects in the same site where we have a major project, we are happy to have the staff help out. But a \$7 million project, although classified as minor, can be quite a project.

**MR. KNIGHT:** And in fact, since they raised the limit to \$7 million, I think the previous list of EHR buildings was about 30 percent or 40 percent work fall into the minor category. Now that its moved to \$7 million, I would -- we haven't done the calculation, but I would expect it to be half or more of the Exceptionally High Risk building costs would fall into that minor category.

**MR. POLAND:** Well, the design alert and the directive that you sent out brought to light the need for quality assurance of the same type that we have, and that's part of what the resident engineer was doing. As we watch this develop, and especially if we have representatives from the field come in and be a part of our meetings, maybe they will help us understand what else we can do, because we're not going to be able to go out and hire a bunch of resident engineers, I understand that. But we have to keep an eye on that.

**MR. KNIGHT:** Well, the other person, we have the Medical Center Operational staff. We also have some resident engineers that work on seismic projects, the construction of them, and then overseeing the developments. Maybe that would be useful to possibly bring in --

**MR. BANGA:** We can try to bring in Project Engineers like Tim Pogany, Mike Heaton and Bob Clifton, who are working right now on seismic projects.

**MR. KNIGHT:** Yes, we have a number of them that we can bring. They see a different side of it than us, too, as far as an actual construction and the issues that come up with it --

**MR. POLAND:** Assignment of new activities.

We have agreed to review the final draft of the letter regarding facades.

And then I assume if anything comes out of the World Trade Center report that you're concerned about, and you want us to respond to and decide if there's something that needs to happen, since we missed that window, we would be happy to do that, also. I don't believe we have agreed to do anything else between now and the next meeting.

**DR. WOOD:** The bit on progressive collapse -- insecurities.

**DR. MEJIA:** And security standards.

**MR. POLAND:** That's right. We're going to review those.

**MR. KNIGHT:** I'll assume that, and maybe that's an incorrect assumption, but we have passed a strategy document, you probably haven't had a chance to read it yet in detail, that is a process we'd like to move along very quickly, so I think if you have any comments on that, you need to get them back to us, say, within a week. Again, there will be a second stage of this, the actual standards themselves, which will be maybe more attuned to the kind of detail that we get involved with here, but --

**MR. POLAND:** Okay.

**MR. KNIGHT:** I would request that if you have any comments based on a document, you get them to us within a week.

**MR. SIEGEL:** This document is the result of almost complete agreement among the three administrations: Veterans Health Administration, Veterans Benefit Administration, and the National Cemetery Administration. It has not yet been officially approved by VA; but we feel because of the agreement among the administrations, as Kurt mentioned before, except for a couple of controversial items at the beginning, there should not now be much disagreement.

**MR. POLAND:** So we have comments within a week. I think we're going to want to make sure we get some in. Do we need to coordinate our comments? Can we just -- since --

**MR. KNIGHT:** No.

**MR. POLAND:** Since the time is so short, can we just send them to you?

**MR. KNIGHT:** Yes.

**MR. SIEGEL:** Surely.

**MR. POLAND:** Because we really all represent different areas of interest.

**MR. KNIGHT:** Absolutely.

**MR. KNIGHT:** And you can send them directly to me by e-mail.

**MR. POLAND:** Okay, and then reviewing the security standards really depends on how that develops.

**MR. KNIGHT:** Right.

**MR. POLAND:** It may be our next meeting before you're ready to have us have a look at that.

**MR. KNIGHT:** Well, we would try very hard to have that document -- input from you probably near the first of the year or thereafter.

**MR. SIEGEL:** We have a lot of CARES projects underway, and they keep asking, what we should do. We can't easily tell them yet, because we don't have those new standards. So we'll keep you posted on that, and I would expect to get some document out to you around the first of the year.

**MR. POLAND:** Well, if it needs an hour or two of conference call, we are certainly willing to do that, as we said. Or if it really justifies a whole meeting, I think we would all be willing to do that, also.

**MR. POLAND:** Are there any other new assignments? New activities?

**MR. SIEGEL:** Are there any other items you all would like to discuss with us?

**MR. POLAND:** I think we pushed pretty hard on the things we were interested in. I just want to say again, that we are still looking forward to the development of post-earthquake inspection programs, that's a resolution from last September. Development of those programs that utilize the ANSS information, that's kind of an ongoing task that's still going on. I believe all the other recommendations that we made before have been dealt with, but that was one that's still ongoing.

**MR. KNIGHT:** That's tied in with our coordination for other emergency management staff.

**MR. POLAND:** That's correct. Okay, date of the next meeting?

Based on every one's consent, the next meeting was set June 19-20, 2006, and we'll stay on the same schedule: Workshop the first day, from 10:00 AM to 5:00 PM, and the formal meeting on the second day, from 8:30 AM to 12:30 PM.

(Whereupon, at approximately 12:05 p.m., the MEETING was adjourned)

Chris D. Poland, Chair

June 20, 2006

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