UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

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BRIEFING ON INSTITUTIONALIZATION AND INTEGRATION

OF AGENCY LESSONS LEARNED

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WEDNESDAY,

OCTOBER 25, 2006

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The Commission met at 9:30 a.m. in One White Flint North, 11555 Rockville Pike, Rockville, Maryland, the Honorable Dale E. Klein, Chairman, presiding.

COMMISSIONERS PRESENT:

DALE E. KLEIN, Chairman

JEFFREY S. MERRIFIELD, Commissioner

GREGORY B. JACZKO, Commissioner

PETER B. LYONS, Commissioner

PRESENTERS:

WILLIAM KANE, DEDR

LOREN PLISCO, Reg. 2 DRA for Construction

MARTIN VIRGILIO, DEDMRS

JAMES WIGGINS, DD RES

EDWARD BAKER, Director, OIS

ALSO PRESENT:

MIKE WEBER

MEL LEACH

P-R-O-C-E-E-D-I-N-G-S

CHAIRMAN KLEIN: Good morning. It's always nice to have a meeting to look across and you recognize everybody.

(Laughter.)

CHAIRMAN KLEIN: This is obviously an important meeting. We're going to hear about lessons learned and as you probably heard from me in the past not only is important to learn lessons, it's important to have lessons implemented. So we'll hear about that as well. Any comments before we start?

COMMISSIONER MERRIFIELD: The only comment I would make, Mr. Chairman, is I think the staff has done a terrific job over the last year in terms of taking a look at these issues. We have had many challenges in the past that they've looked at to bring the Davis-Besse event and others.

We had received comments before about how important it was for us to have a corrective action program given the fact that we review and comment on others' corrective action programs and I think that's the right thing and I'm looking forward to the results of the meeting.

CHAIRMAN KLEIN: And we're happy to have Commissioner Lyons with us again today.

COMMISSIONER LYONS: I think I am.

COMMISSIONER JACZKO: You can sit over here if you want.

(Laughter.)

CHAIRMAN KLEIN: Any comments?

COMMISSIONER JACZKO: Just again, I would reiterate a lot of what's been said. I think it's important, this is a very important topic and I look forward to seeing how we're going to take some of these lessons and put them into implementation and practice and some of the criteria we're using for doing that.

CHAIRMAN KLEIN: And Pete.

COMMISSIONER LYONS: I just second the comments that were already made. It's certainly very important to have a strong program. I appreciate everything the staff has done to do that, but the real proof of this is the implementation and making sure that these lessons learned are truly known by the individuals who have to carry them out.

CHAIRMAN KLEIN: Thanks. Bill, the floor is yours.

MR. KANE: Good morning. Chairman and Commissioners, the staff is ready to brief you today on the status of our Lessons Learned Program which we all strongly support. I have with me today Marty Virgilio, a fellow Deputy Executive Director, and I won't get into the rest of his title. You all know him. Ed Baker is the Director of the Office of Information Systems, Jim Wiggins who is a Deputy Director of Research but also Chairman of the Lessons Learned Oversight Board and Loren Plisco who is the Team Leader for the Lessons Learned Task Force and also a member of the Lessons Learned Oversight Board and Loren of course is the Deputy Regional Administrator for Construction in Region II.

So at this point, I would turn it over to Loren to begin the presentation.

COMMISSIONER MERRIFIELD: Bill, one note I would make. Marty's title is long, although I note to the Secretary it's not accurate. His title has changed to also reflect the work that Marty will be doing as the lead point person for Tribal issues and that's not reflected on the title shown before him today.

MR. KANE: I probably should at this point just, Commissioner, thank you and give his exact title which is Deputy Executive Director for Materials, Research, State, Tribal and Compliance Programs.

COMMISSIONER JACZKO: Have we dropped Federal?

(Laughter.)

CHAIRMAN KLEIN: I think what we need to do is just Marty is in charge of everything.

MR. VIRGILIO: Everything but reactors.

MR. KANE: Thank you. Loren.

MR. PLISCO: Good morning, Chairman and Commissioners. The purpose of this briefing is to inform the Commission about the implementation of the Lessons Learned Program and accomplishments of our working group over the past year. I last briefed the Commission on November 1, 2005, and during that briefing I discussed our general approach to completing this task and our initial thoughts on the proposed process. Today's briefing, I plan to briefly review why we were assigned this task, discuss what we've completed over the past year and discuss the additional enhancements that are needed to ensure the future success of the program.

Slide 2 please. In reviewing what happened at Davis-Besse in 2002, the staff identified issues that were similar to issues found in previous NRC self-assessments. The task force recommended that a more comprehensive review of these concerns be completed and that's referred to as Appendix F in the Davis-Besse Lessons Learned Task Force Report.

At the direction of the EDO, NRR completed this comprehensive review in 2004. This review concluded that corrective actions resulting from previous reviews although initially effective were not always found to remain effective. The EDO chartered my team in January of 2005 to review the root causes that the NRR review identified and to address the recommendations of that report.

Slide 3 please. As I stated, the NRR review found examples of ineffective corrective actions. They found examples where corrective actions had been implemented but were later undone, corrective actions had not been fully implemented, corrective actions did not fully address the original problem, corrective actions that did not result in measurable actions, the action item was closed before the corrective actions were actually completed and the frequent changes in due dates.

As they reviewed all those examples, they identified four root causes of the problems and they were noted by the team in the their report. The first one is the agency did not have a corrective action program. The task force recommended that the NRC establish an agency-wide corrective action program that focuses on the corrective actions for major lessons learned reports. Second, the agency did not have a

centralized tracking system for the actions. Third, there were weaknesses in the line organization closeout practices. And, fourth, the process for closeout of actions did not include effectiveness reviews.

Slide 4 please. In January of last year, the EDO chartered our team to develop a program to address the root causes noted in the NRR report. My team was composed of 12 members representing each of the major program offices, the regions and some of the support offices. We were tasked to develop a program that would prevent recurrence of significant problems and ensure the knowledge gained from lessons learned was retained and to maximize its benefit to the agency.

Slide 5 please. Since my last briefing, we have developed and implemented a program to address the root causes identified by the NRR review. We have issued a management directive to implement the Lessons Learned Program. We've prepared two procedures to provide additional implementation guidance and details to the staff.

The EDO has selected the Lessons Learned Program manager to administer the program and that's John Lamb. The EDO has designated the members of the Lessons Learned Oversight Board and as Bill mentioned, Jim Wiggins is the chair of that board. The staff has also conducted detailed effectiveness reviews for six historical lessons learned reports and I'll refer to those as legacy effectiveness review reports later in my discussion.

Slide 6 please. Management Directive 6.8, the Lessons Learned Program was approved by the EDO on August 1, 2006. This Management Directive establishes a more formal and structured process

to manage corrective actions in the agency. I wanted to highlight that our team took the opportunity to lead by example in development of this management directive and we've included background and bases information in the Management Directive to provide the basis for our decisions regarding the construct of the program. We thought it was important to explain why the program is needed and why it's set up the way it is and that way staff can better understand what we were thinking when we developed the program and more importantly, understand what we intended if someone wants to change the program later on.

We also interfaced during our construct of the Management Directive with the Management Directive process working group. There's a working group working on how to improve our process to develop and change Management Directives and we exchanged ideas with them on how to better provide bases and background information to the staff. It is my understanding that that working group is also in the process of forwarding its recommendations to EDO soon on how to better improve that process. But we had some discussions with them about how to better include background and bases information in future Management Directives as a whole so that as we have new staff come aboard, they cannot only read what the requirements of the program are but really understand why we're doing it in the first place the way we are.

Slide 7 please. The primary sources for potential lessons learned are most likely to be major event investigations such as action and review groups and incident investigation teams and EDO chartered task forces. We will also consider significant recommendations from the Office

of Inspector General and the Government Accountability Office reports. Other sources are possible so the EDO can also enter issues at his discretion.

The process has criteria for entry and is reserved for those significant items that we must ensure do not recur. The four criteria are (1) the item has significant organizational, safety, security, emergency preparedness or generic implications; (2) is a need exists to institutionalize corrective action for this item because the failure to do would reasonably be expected to challenge the ability of the agency to meet any of its strategic outcomes designated in the Strategic Plan or the corrective action would substantially improve the safety and security of NRC employees; (3) a root cause exists or can be identified; and (4) the apparent resolution is actionable by the agency.

COMMISSIONER MERRIFIELD: Mr. Chairman, I don't want to get into asking a lot of questions as we did in our meeting that we had here yesterday, but I think a clarification would be helpful for me at this point in Loren's presentation.

You noted that the EDO can enter issues at his discretion. What process have you included in this if the Commission believes that there are issues that the staff should look at relative to a corrective action program?

MR. PLISCO: We talked about this when we were developing the program. Our assumption was that any item the Commission thought would be polled to the EDO and the EDO would enter those into the system was our -- I mean that was the assumption that we

made if there's anything at the Commission level in their discussions with the EDO they think should go in that's how it would go in.

COMMISSIONER MERRIFIELD: So you fully anticipated that there could be action items created by the Commission tasked to EDO through what would typically be a Staff Requirements Memorandum outlining that.

MR. PLISCO: Yes.

COMMISSIONER MERRIFIELD: Thank you.

MR. PLISCO: Yes, and we knew we couldn't anticipate other sources. There may be other external sources or other external groups that may provide issues that would enter and that's why we added the EDO discretion rather than try to generate a long list. We put in what we thought were the more likely cases and then the EDO discretion. That's how we put the program together, but our assumption was that there would be other sources of items that would come in.

We also had a lot of discussion on the criteria and we also had input on the criteria from the staff and during our bench-marking visits and in the end, we kept coming back to the Strategic Pan and the strategic outcomes primarily because they were clearly written and endorsed by the Commission and we thought the right threshold for the kind of things we were talking about putting into this program.

It's also very important to ensure that we all understand and I've had some presentations with the staff and this question always comes up is an item that does not get screened into this program doesn't mean the agency isn't taking action on the item. For example, in task

force reports, all those items in task force reports that go over to the EDO get tasked out by the EDO through their action tracking system and get assigned to a lead office for action and those actions are tracked.

The only difference we use the term gold-plating when we were putting this program together. There are some additional rigorous requirements that we place on the items that meet this threshold to make sure that the item is institutionalized and the agency doesn't forget and special care is taken to make sure over the long term, say ten years, that that item is still in place. So just because something doesn't get screened in the program doesn't mean the agency isn't going to do anything about it and I think that's important to remember.

The other thing I wanted to mention was during the process when we were building these criteria the 2005 Hurricane Lessons Learned Report was being developed and we used the opportunity to take that report and practice using our threshold to see if we got the right answers or the answers that we thought were the right answers when we went through that and the recommendations that came out of that report, that report was in March of 2006, three items passed the threshold that were in that report and those had to do with communications, equipment for staff during emergency to improve the diversity and reliability of communications, to improve existing natural phenomena response procedures and to improve consistency in dispatching and accountability of responders and site staff, those three items.

We took our task force and we practiced. We essentially acted as the oversight board and went through testing out our criteria and

those are the three items that passed the filter. And I can talk a little bit later about what we've done since then, since that report really preceded the Management Directive, have we gone back to these three items to capture them in the process.

As the program matures, it's expected that additional potential lessons learned from office level reviews can also be recommended for program inclusion by the offices and the regions and the EDO has made it clear to us and our team that his long-term goal is to use this tool to help encourage self-assessment and continuous improvement at the staff. So if an individual office does a self-assessment and they identify an issue that may impact other offices, those items can be entered into the program, so other offices can look at that same item and see if they have the same problem or issue in their office.

Slide 8 please. To provide management oversight of the process, the program established a lessons learned oversight board to review potential lessons learned and apply the entry criteria. Once the item meets the criteria, the EDO will assign the lead office and the lead office will be required to develop a detailed corrective action plan. The components of the corrective action plan include root cause analysis, proposed corrective actions to address the root cause, an extent of condition review, a configuration of a management plan, and what that is is a description of how they're going to make sure that item, be it a procedure change or a training of staff, how it's going to remain in place, what their plan is to make sure it remains in place in their normal processes, the resources needed and the impact on other tasks that the

corrective actions would require, a communication plan on how they're going to communicate to the staff what the corrective action is, and an effectiveness review plan and schedule. What the office will have to do is prepare a plan on how in the future they are going to go back and make sure the corrective actions that they have taken have actually addressed the root cause of the issue and some success criteria on how they're going to judge success in the future for that item.

Slide 9 please. The oversight board will also review and approve the corrective action plan. Acceptance criteria are provided in the Management Directive. The lead office will then implement the plan and then once the plan has been completed, a closeout package with supporting documentation will be submitted to the oversight board for final approval.

Slide 10 please. As I said, another feature of the program is the requirement for effectiveness reviews. As part of the corrective action plan, the lead office will plan and schedule an effectiveness review to confirm that the actions have addressed the root cause of the issue and these items will be assigned and tracked separately.

The corrective action, once the closure package has been submitted by the lead office, will be closed and a new item will be opened in the EDO tracking system to track because it could be two years out or it could be six months out. So we'll track those separately, they will assign the office that action to come back in two years and provide the results of the effectiveness review.

The program also calls for a dedicated program manager

to administer the program and as I stated earlier the program manager has been designated and he's part of the EDO staff. Slide 11 please.

COMMISSIONER MERRIFIELD: What is the -- Clarification. What is the grade level of that individual? Roughly.

MR. KANE: 15.

MR. PLISCO: During development of the Management Directive, the team found that there was a need for additional detail guidance to implement the program that wasn't appropriate to put in the Management Directive. First, we noted that there was no agency guidance for the formation of assignment of task forces and resolved that this guidance would facilitate the implementation of the lessons learned program. So we also prepared a procedure for the EDO for the development of task force charters.

Based on a review of past reports, we provided some guidance on how to write, construct and prioritize recommendations for the team. So those recommendations would fit in better with the process that we developed. The problem that we noted in a lot of past lessons learned reports is all recommendations were the same in priority. Anything they found be it very important or just an improvement item would have equal weight in the report and what we've done is developed some guidance to help them provide some sense of their sense of priority to the EDO when they submit their report to help the EDO in taking action on those issues.

Second, we developed some preliminary instructions to the oversight board and the program manager on how to implement the day-to-day parts of the program and those also were put in an EDO

internal procedure.

Slide 12 please. So we now have a much more robust and structured process for addressing corrective actions for significant deficiencies. The process will screen items for significance, track the items until completion, require detailed plans to correct the items, include management oversight and store the history of the finding and action so it can be retrieved.

So what's different about this approach than in the past is we have more structure and formality and that's provided by the Management Directive and Handbook in the EDO procedures I mentioned and it provides a stronger linkage between the root causes and the corrective actions.

There's more senior management involvement. The oversight board consists of senior managers and they'll review and approve the corrective action plans. There's a dedicated staff member as I mentioned, the program manager on the EDO staff.

There will be centralized tracking of the corrective actions using the EDO's tracking system. What's important or what's different about this is in the past when the EDO assigned actions out of these task forces they were sent to an office really as one action. The task force report may have 20 recommendations and the EDO would send that to the office and there would be one action.

So when you go back five years later and try to reconstruct what happened, it's hard to track the history of each one of those 20 because of the way it was assigned. So the way we're going to

do it now is each individual recommendation will be assigned individual tracking action from the EDO's office. So then you can track the history much, much easier.

The effectiveness reviews are now part of the program and they'll be tracked as a separate action. The bottom line is the program has more focus on institutionalizing the lesson, looking forward in how we're going to make sure this action is going to stay in place and providing a retrievable history for the item to see how the action was -- what action was taken, when it was taken, who took the action. So from the start, actions are developed to last and the office must explain how the action is going to be kept in place and they'll have to go back and check to make sure it's still working.

COMMISSIONER MERRIFIELD: Mr. Chairman, not to belabor this today with clarifying questions but I was expecting at some point you might talk about how this approach is consistent with our openness goal in our Strategic Plan. Is that part of your discussion?

MR. PLISCO: Yes, I'll talk about that when I talk as far as the feature enhancements and our vision and the IT component that we think needs to be put in place and how that's going to link up in providing publicly accessible information on what we've done in transparency.

Slide 13 please. What I've tried to do here is just go back to the original root cause and the original NRR effectiveness review and just summarize what we put in the program and how we've used those actions to address the root causes in that report. The first root cause was there was no corrective action program and we put a program in place that

provides much more structure and formality in developing detailed corrective action plans to address the root cause of significant agency problems.

For centralized tracking, we now use the EDO's centralized tracking system and ADAMS. We're using ADAMS as the repository of the documents and as part of the closeout process, the lead office when they close out the package has to provide those documents and show where they are in ADAMS so that we have a trail where the staff can find documents that describe what action was taken.

COMMISSIONER MERRIFIELD: Loren, I think ADAMS has gotten to the point where everybody knows where that is. But EDATS?

MR. PLISCO: EDATS is the EDO's Action Tracking System, their new tracking system. I mean they put new technology in place, but essentially it's the same process that was in place before the EDO assigns actions to the lead offices and assigns due dates and milestones and they report back on where they are under those action items.

COMMISSIONER MERRIFIELD: I wasn't familiar with that particular acronym.

CHAIRMAN KLEIN: We're acronym heavy here.

MR. PLISCO: Yes, and I didn't put the acronym in.

COMMISSIONER MERRIFIELD: Too acronym heavy.

MR. PLISCO: I did my best to avoid using the acronym.

MR. KANE: I'm not sure I have this exactly right, but it's

the EDO Action Tracking System, EDATS.

MR. PLISCO: The weaknesses in the closeout process, we now have an approval process for the corrective action plan, a formal closeout by the oversight board for each recommendation with acceptance criteria and the effectiveness reviews, the lack of an effectiveness reviews, we do now use effectiveness reviews as part of our process to ensure the root causes have addressed the actions and the actions remain in place.

I'm going to switch gears a little now and discuss an additional task we took on to look at legacy lessons learned, to look back at some historical lessons learned reports. During the teams's development effort, we determined that the value of the lessons learned system is significantly enhanced by including relevant historical or legacy lessons learned information. In addition, we thought there was value in reviewing the corrective actions from previous lessons learned to make sure the corrective actions were still effective because effectiveness reviews had not been conducted on many of our past reports.

The team recommended to the EDO that a sample of those legacy lessons learned be reviewed and we developed a list of potential lessons learned candidates and actually putting the list together was a lesson on why we need a lessons learned program because there was no list. That told us something. There was no list anywhere that talked about all the historical significant events the agency has gone through. So that was an exercise in itself putting that list together.

And I would say we're still not complete. We're still polling the staff. We've asked the offices to provide input on showing it to their

staff and see if anyone remembers any other things that should be on this list.

CHAIRMAN KLEIN: My guess is that what you probably found is that you had a lot of lessons learned over and over again that had not been implemented.

MR. PLISCO: Yes, there are a lot of recurring themes in some of those reports.

We developed a template on how we wanted this information to be submitted by the offices when they did the effectiveness review and that was to stage ourselves for when we have our IT component on what kind of information we wanted and how we wanted to present it to the staff. So when the offices did their effectiveness review, we asked them to put it in a certain format so that we would have that ready once the IT component was in place and to help us in knowledge management in the future.

We tested out the template using the Hurricane Andrew event from 1992. We learned how to do one and the difficulty the staff would have especially retrieving old documents prior to ADAMS. Anything prior to 1999 is especially difficult to try to construct the history of what happened and to find all the correspondence back and forth like between the EDO and the offices and how issues were addressed and what corrective actions were taken and it was quite an exercise.

Once we assigned this to the other offices, they found it was quite an exercise too to try to piece this together. Going through this exercise, it provided some insights on the value that we need to do this.

We need to pull this information together especially for these major events and pull the history together in one place so it's retrievable by the staff.

COMMISSIONER MERRIFIELD: For full credit though, shouldn't it say that the counter is true? It gives you a better understanding of the value of ADAMS.

MR. PLISCO: Yes. ADAMS helps. We selected six candidates after discussing with the EDO. We provided recommendation of which six we thought would be of greatest value and provide the best insight because there are a lot of resources. We knew there was a resource impact to do these effectiveness reviews and the EDO had tasked those in January 2006. Those were completed this year and we reviewed the reports and we prepared a summary report to the EDO on the results of this and I'll talk about that in a few slides.

Slide 15 please. These are the six legacy events that we conducted the effectiveness reviews on and were assigned to the offices. The Vogtle loss of vital AC power, that was 1990. Indian Point 2 steam generator tube failure, that was in 2000. A potential criticality event at General Electric Nuclear Fuel, that was in 1991. The loss of an iridium-192 source and therapy misadministration at Indiana Regional Cancer Center, that was in 1992. Hurricane Andrew as I mentioned was 1992. And unauthorized forced entry into Three Mile Island, that was in 1993.

And those are the six events. We wanted a cross section of different kinds of events and impact on different offices because we assigned these to three different offices to do these reviews.

Slide 16 please. These are the overall conclusions of the

six reviews that we conducted. We didn't identify any outstanding safety issues that were associated with the reviewed reports. There were no significant deficiencies in the effectiveness of the corrective actions that were identified, however, we did find when we did the 2005 Hurricane Season Task Force Report - and I guess I should explain.

We did this on purpose the effectiveness review. We picked Hurricane Andrew because we knew the 2005 Hurricane Season Lessons Learned Task Force was going on. So we asked them as they went through the review to go back and look at the lessons learned from Hurricane Andrew and see if any issues recurred and that's how they did that effectiveness review. They did identify one of their issues did recur and that had to do with communications with the staff and the site and the loss of communications and that was a recurring item.

The staff also identified several areas where additional review may be warranted for some of the corrective actions that involve licensee actions and two examples that I'll provide, both of these had to do with the Indian Point 2 steam generator tube issue. There was one recommendation in the report that had to do with the tube integrity program. The licensee's steam generator tube integrity program had some deficiencies that should have been addressed. When staff went back and looked at the documentation and our review, they couldn't confirm that we had conducted any inspections to verify that program had included those elements.

In addition, there was an action item to develop a process for getting an independent technical assessment of a safety evaluation

with the Office of Research was one of the recommendations and when they went back, there was actually action being taken to address that but it wasn't in anyone's tracking system and milestones had not been established and the action had not been completed yet for those two items. Since identification of these two issues, NRR has entered those into their own corrective action program to make sure those two items get addressed.

Slide 17 please. Overall, we did learn some lessons doing these effectiveness reviews and we rolled these lessons back into the development of our process before we issued the Management Directive. The reviews were worthwhile from several perspectives. One, we did identify some items that we needed to go back and look at what we did for the corrective action. There was some knowledge management value-added. We heard back from the staff about they put some new staff on some of these and they really learned a lot about some of the programs we have in place and why we have those programs and learned about these major events that happened in our history.

I mentioned difficulty in locating documents. It was very difficult especially prior to ADAMS and it is going to be a significant task to go back and look at some of these old items because of the difficulty in retrieving the documents and even finding the right documents is difficult. It's very labor intensive.

We also learned that when you do an effectiveness review it's important to balance independence and the knowledge about the issue. Some of these issues happened ten years ago and when we went

back and did the effectiveness review, in some cases, we had to find staff that knew something about the event to try to piece together the history because we couldn't piece, we couldn't find all the documentation or you couldn't find a good documentation trail.

So in some cases, the offices had to find people that were involved with the issue to try to reconstruct what happened and what action we took and why we took that action and what we're doing today to continue that action. So they had to interview staff that were involved in those lessons learned and implementations of the corrective actions to find the whole story because they couldn't find it in the documentation.

The flip side is if you're really doing an effectiveness review and asking yourself the question did we really fix the problem, it may not be appropriate to ask the person that did the fixing. You may need some independence to make sure it's an objective review as far as whether that corrective action was successful over the long haul.

So we put some discussion in the Management Directive about when an office puts together an effectiveness review plan, they need the balance, provide the proper balance for that and that's something the oversight board when we see the corrective action plans will look at, is the right balance being provided when you do the effectiveness review to make sure you get an objective review, but also you have individuals that know what they're looking at and are knowledgeable to make a judgment on whether it was successful or not to make sure we have that balance.

The other item we noted, and this is in particular to the

legacy reviews, is the environment and changes in the regulatory process, changes ten or fifteen years afterwards. So if you do an effectiveness review the environment is completely changed and you have to take that into account. It may have a significant impact on how you look at whether it's effective or not.

Probably the best example is the Three Mile Island security event. You know everything that's happened since then that is kind of overcome by events now as far as the way the regulatory infrastructure is set up now and the requirements. That event really doesn't have the corrective actions taken then. We've done much more than that now. So you really can't go back and do an effectiveness review of that specific corrective action because we've done a lot more since then.

The last point I wanted to make is the view of importance. If you go back and look at events that are ten or fifteen years old, we've learned a lot about what's significant. We have a lot of risk tools now in place to make a better determination of what's important. Some things that may have been important fifteen years ago if you put them through some risk tools now they may not be important. So when you're deciding what to look at and how you look at some of these things in the past, that's just a factor you have to account for.

COMMISSIONER MERRIFIELD: Did you identify the opposite as well?

MR. PLISCO: Yes. And I should say that. The opposite is obviously true because some things, we didn't have those risk tools in

place at that time. That could be also.

But the point, to go back to what I mentioned before, there wasn't a priority scheme in place in the past and all recommendations were equal and it does make it difficult looking back at all the recommendations in all these reports especially when you're talking about the significant impact and assigning resources. So we took that into account. After we looked through this pile of these six legacy lessons learned in our recommendations to the EDO, we took that into account.

The specific recommendations we made to the EDO were that we need to conduct additional legacy effectiveness reviews in fiscal `07. However, we should limit the scope of the effectiveness reviews so those recommendations meet our program criteria. What we did in these six cases is these reviewers went back and looked at every recommendation in those reports and part of the feedback we got from the staff was there were items, really just improvement items or good ideas of things to look at, but to go back now and expend the resources to do that may not be the best use of resources. So before we assign offices additional legacy reviews, we ought to filter out which ones they should do and which ones they shouldn't do as far as expending resources.

We also noted that we do need to budget resources in the out years if we want to conduct additional reviews because it is a significant resource impact on us especially for these older items to find the information and pull the story together. So if it's deemed appropriate that we need to do more in the future we need to include that in the budget process.

And the last point we made and I'll talk some more about this in a minute is we need to integrate the results into our knowledge management program, our agency knowledge management program, and how to take that information we've gained from these reviews and make sure we provide that information in a way that's useful to the staff.

Slide 18 please. The base program is now in place with the management directive and it will address the root causes in the NRR review and the follow-up from Davis-Besse. However, for the long term, we need some enhancements for the program to add the most value to the staff and there are three items I would mention.

The first is configuration management. As an agency we need to do a better job on linking procedures and bases. I talked about what we did in our procedure in the Management Directive to provide some of that information to the staff and I know the Management Directive task force is looking at that issue and how to better do that in the future and provide some background information or at least a reference or source of the information so the staff can find why are we doing it this way so they can understand that. It's also important when someone five years from now wants to change those procedure, they know what they're changing and why it was there in the first place so they can understand that.

Knowledge management, our vision is the tool we're going to build with our IT component of this to provide all this historical information on these lessons learned and the corrective actions is to provide one tool to help the agency enhance their knowledge management

program. It will improve traceability so the staff will be able to go back and find the detailed information on what happened and what corrective actions were taken and why we're doing business the way we are today because of this feedback.

And we also want to summarize the information in a new way. If you go back and collect all the information on some of these lessons learned, you get a huge stack of paper. But there's not a one paragraph summary or a one-page summary at a high level so that someone from the staff can just read what happened and what did we do about it. That kind of summary information isn't available today and we're hoping this web-based tool we want to develop will have that information so the staff can find that.

And the web-based system as I mentioned is really the key we think to helping out in the knowledge management area and it will help us address the providing, making, this information accessible to the public. The public accessibility is to provide this historical information of what happened, what actions did the agency take and a story, really a story, of what happened so it's available to the staff and to the public and it describes the specific corrective actions that we took. And our vision is that system would use the abilities or the information we already have in the EDO's tracking system and ADAMS and I'm not an IT expert and that's why Ed is here. It's to provide a tool that can pull that information up so you only have to go to one place to get the information and not do what we had to do to go to find all this information. So we want to put it in one place so the staff can pull it up just once and have access to whatever

level of detail they need for their specific task and have that information accessible to them.

COMMISSIONER MERRIFIELD: But for clarification purposes, the EDO's tracking system, EDATS, would not be a publicly available system. So it would have to be a case of there would have to be a parallel explanation for the purposes of the public to understand what some of the corrective action issues that are entered into that log and the way that we're tracking without a complete duplication because it's a lot more detail than the public would need. But presumably there would have to be some mechanism to provide some level of that information for the public to understand.

MR. BAKER: The comment that Loren made earlier is that these documents are intended to be in ADAMS unless we find that there is some portion that is too sensitive to put there. We are currently working on a prototype which we have tested which actually links documents through hyperlinks within ADAMS such that you could start with the charter that the EDO issues. You could then link down to whatever the next document is whether it's the report, any correspondence between the team and the EDO.

You would then link down from the recommendations to the tasking and then link down to the responses. So you could start at the top or in the middle and find any of the documents very easily. So a member of the public provided the agency decides this is a public document can find all of that.

Now with respect to if you had the tasking memos in there

that go out the public could then see what was tasked, when it was assigned. They could then see the next document down which is the response. To do the type tracking that you were talking about would require something separate. That was not my understanding of the intent that the team had come forward with.

There were really three pieces. Tracking from an internal standpoint which the EDO tracking system, the new EDATS, can do, and is intended to roll out down to all of the offices so we have one tracking system for the agency. The second piece is the one I just talked about which is the ADAMS linking of documents so that you can easily find all of the pieces. The third piece was a web-based search and that's the piece we're still looking at because we do have a web-based search capability now in ADAMS. As we go forward with the next version of ADAMS and as we go forward with conversion to Microsoft products, we'll have to look at the interaction between EDATS and ADAMS and can you provide a more direct link there.

COMMISSIONER MERRIFIELD: I'm sorry. I didn't mean to -- this is a clarification for me and it's not quite in that direction.

CHAIRMAN KLEIN: It almost seems like yesterday.

COMMISSIONER MERRIFIELD: It does and I don't want to go there and I'll follow up on this in my questions. What I was really getting at is if a member of the public wanted to look at our website and find out what are the top ten priorities for our corrective action program and how are they prioritized, what you've described to me doesn't meet that. What you've described to me is a series of taskings on individual

lessons learned and following through on those rather than some kind of document that wraps them together, but I'll stop.

MR. PLISCO: Our vision is you go to a first page and it lists all the lessons learned by topic and we may sort them a certain way. Then you can select one of those. Then it has a summary.

COMMISSIONER MERRIFIELD: Not just lessons learned. Items that we have on our corrective action program.

MR. PLISCO: Right.

COMMISSIONER MERRIFIELD: And those aren't the same.

MR. PLISCO: The historical ones will be considered as closed.

COMMISSIONER MERRIFIELD: The historical lessons learned and then there is what is the agency's corrective action program going forward.

MR. PLISCO: Right, and our intent is to have all that --

COMMISSIONER MERRIFIELD: -- looking at that to determine what we are prioritizing is the same as we need to fix.

MR. PLISCO: Slide 19 please. We still see a few challenges in the future as we continue to implement this program. One is change management. To be successful, we will continue to need management's commitment and support to implement this program and we need to demonstrate the value of the program to the staff and part of that is this IT component, I think. To provide value to the staff in their day-to-day business, we'll need that IT component to complete that.

It's also important to note that -- we have a lot of Type A people in the NRC and that we like finishing corrective actions and checking them off the list and moving on and we need to look at some of these problems in a different way with this program and that's part of my change management speech too. We not only need to get it fixed but look at how we're going to keep it fixed in the future and when we look at the corrective actions, make sure our corrective actions address that perspective also. That will be different but we need to address them for the long haul.

The legacy issues, I've talked about. We still need to look at additional legacy items to verify actions are still effective and to increase the information we're going to provide to the staff on some of the historical issues. And we will need staff support and office support because it is resource intensive to go back and do this verification process and pull this information together.

But it's important with the many new staff we have coming on board. I think it's important we pull this information together to make it available to the staff so they can see what's happened in our history and why we're doing business the way we do now.

Slide 20 please. The primary goal of the program is to prevent recurrence of significant problems. We also have additional opportunities to use this program in the future. It will help us encourage the culture of continuous improvement. We plan to integrate this program with and support the agency's knowledge management initiatives and I think it provides valuable information from that perspective and to

encourage self-assessment in the NRC offices and share problems and solutions.

Slide 21 please. Summary. We learned from Davis-Besse that we need a better way to ensure important agency lessons learned or institutionalize the corrective actions are effective. We've implemented a program now to screen, track and document and store the corrective actions from these important lesson learned and to provide additional future value to the staff we need to integrate this information into the knowledge management program and provide easy access to this information. And that completes my presentation.

MR. KANE: That completes the staff's presentation. We're ready for questions.

CHAIRMAN KLEIN: This is always the fun part. If you look on Slide 15, you had shown your six examples that you went through and took a look at. Were there any other examples that you might have, that didn't cover all the issues? In other words, these six were pretty broad you thought. Are there any other reviews out there that might have added something that we needed to look at that you didn't catch?

MR. PLISCO: Yes. We've talked to the EDO's office about it. We think -- from two perspectives, we think there are other issues that are worthwhile to go back and look at and one of the ones we've been talking about recently is South Texas and I have personal interest in it because that had to do with some construction issues at South Texas, to go back and look at those lessons and see how we've implemented those corrective actions. Now that we're looking forward at

our new construction inspection program, we ought to make sure those lessons have been incorporated into our program. That's one example, but there are others on the list that we think that would be of value to go back and look at and that's why we're recommended to the EDO that we do some more.

MR. KANE: I think a broad category would be any of those in which the agency put together an incident investigation team to look at plant issues. Pretty much all those would fit into that category.

COMMISSIONER MERRIFIELD: Mr. Chairman, if they're going to look at South Texas which did get built and operated, we may want to think about Zimmer and Marble Hill which didn't.

CHAIRMAN KLEIN: There's probably a whole category of construction issues that one should look at as we're looking forward to some issues and I think that's --

MS. CYR: In South Texas, there was a lessons learned task force to go back and look at the problems.

MR. PLISCO: Right. Our list right now is things we have formal documents where reviews were done, detailed reviews and there may be things like that. We may or may not. I don't know if we have one on that.

CHAIRMAN KLEIN: But I think it's just probably outside of this particular subject area. As you look at moving forward on construction, it probably would be a big issue to cover those plants that also had some challenges, not just South Texas, but as you look certainly with Region 2's responsibility for new construction. One of the things, we

get back to lessons implemented and seeing Mel back there, I can't help but say one of the lessons implemented that we should look at as I've been in a lot of exercises, participated in a lot of exercises, and it seems like a lesson learned is we always lose communication. I don't believe while I've been here, I haven't had a lot of exercises that I've participated in where we're linking up with other plants. But as you look forward look at communication because we drop signals a lot and we lose people we're talking to. So that's one lessons implemented that we should look at.

MR. PLISCO: Yes, and I mentioned the recurring item from the 2005 hurricane season was, and that was more specific to loss of communication with like the resident staff. Our own people, we lost communications with. We lost the land lines and in the current satellite system we have, you have to step outside to use it and in a hurricane you're not going to step outside. So there's a time period you're likely to lose communications with and that's one of the issues that we're looking at and is there a better solution out there to maintain communications.

CHAIRMAN KLEIN: On slide 18, you talk about future enhancements. You talked about configuration management, knowledge management. What are your metrics because it's good to have these enhancements, but it's also important to – in all of these activities, how do you know how you're doing. So what are your metrics that you measure yourself on configuration management, knowledge management and web-based automation? Do you have a metric chart that let's you know how you're doing?

MR. PLISCO: We haven't yet. We've talked a little bit

about some potential metrics in our bench-marking visits when we met with other agencies and companies that did a program like this and looked at their metrics. We actually put some proposed metrics in the Management Directive as an attachment in the Management Directive. They don't all focus on these components of the program. Some of them looked at the process itself and how we're managing the lessons learned program itself.

But for example in the knowledge management area, we put these metrics in the Management Directive. It had to do with how often people access the system, how often it's used, how many repeat customers do you have, those type of metrics on the usage of the system once you put it in place. We don't have it in place yet, that part. But once we put it in place, those are some potential metrics that we can use and we put some of those in the Management Directive already.

CHAIRMAN KLEIN: I would just encourage you to look at metrics because if you don't have a way to measure you never know how you're performing.

This was discussed a little bit, but obviously with both -- I think Davis-Besse was one that sort of highlighted some weaknesses, both with the industry, INPO, and the agency. How do you plan to communicate to the public the results of this study so that the public will get greater confidence that we're taking lessons learned, making them into lessons implemented so that they'll have greater confidence. Do you have a communication plan that lets the public know?

MR. PLISCO: We have a communication plan. The focus

up to this point has been communication to our own staff and our own management on what we're doing and the progress of the development of the program. We haven't gotten to that step and part of that is I don't have the IT component so they can see it yet. We've talked about how we would roll that out to the public and communicate to the staff, but we haven't gotten to the point where we've written that yet because obviously we don't have anything to show them yet other than really the documents that we've provided to the Commission. That's really all that's been in public domain so far.

CHAIRMAN KLEIN: Obviously internal is where you'd first start. Coming behind that would be the public and then you might look at special public like our elected officials that would have an interest. So as you look at your communication plan, look both beyond the internal.

Commissioner Merrifield.

COMMISSIONER MERRIFIELD: You talked about knowledge management and I'm wondering to the extent you've discussed how that's going to integrate with our training programs particularly for our new employees because it seems to me that's one of the places that we may have had some gaps previously. We've sort of identified that senior staff understands. The Commission understands it, but the folks we have whether they're in the TTC or now down in Bethesda whether they're actually getting that out to the folks who are really having to implement that on the front lines.

MR. PLISCO: I would answer it first by saying our expectation would be when a specific recommendation involves training

of the staff for that specific action in the corrective action plan that the office submits that the oversight board will review and approve will look at those components. Is it the type of information or action that needs to be communicated to staff and is it going to be included in the training program?

The other aspect, maybe that's what you were asking, is in the end after we've completed the corrective action, how do we tell the staff about what happened with the event and part of our vision with the IT component is when we have that available, it's accessible to anyone that they could find that information and if it needs to be rolled into the training programs on specific topics and we've talked about that, Marty and I have talked about that, how we can better link because there isn't a close linkage at this point on how we do that and we need to develop that.

COMMISSIONER MERRIFIELD: Well, it seems to me we'd better do that because you know at the end of the day we evaluate corrective action programs of our licensees. You do it all the time as the Deputy Regional Administrator and the basis for that is going in and saying okay, are you identifying the problems, problem identification, do you have a plan to prioritize their action and to resolve those the first time the right way in order to have safe operations at the units. The philosophy, I think, from what I've gotten today is you're trying to do the same thing. The leap that seems to me we have to make is taking it from something that is identifiable and embraced by senior staff and the Commission to a point where each and every one of our staff in the agency embrace and understand that program and we're implementing that up and down

through our chain. I think that's where like we evaluate our licensees and the effectiveness of their corrective action programs, that to me is a reflection we'll have to have back on ourselves in terms of the success of this program and starting first line right in the training programs it seems to me that's going to have to be an integral part of it.

MR. VIRGILIO: Commissioner, if I might add. I agree with you completely. Loren in his presentation has focused on two elements of knowledge management, knowledge recovery and the IT/IM systems.

COMMISSIONER MERRIFIELD: Right.

MR. VIRGILIO: But if we look at Hurricane Rita and Katrina for example the staff in response to the tasking has developed a hurricane response action plan, a new procedure that we have. We've trained the staff on that procedure and there is going to be periodic refresher training on an annual basis for those procedures.

Furthermore, what we've done is in our strategic work force planning tools, we've actually identified a new category of skills, emergency response. That's going to foster targeted recruiting and that's also going to spawn some training programs. All this links back to hurricanes and the lessons that we've learned through this effort.

COMMISSIONER MERRIFIELD: Yes. That's all fine. I think that's all positive, but I think again I'm harkening back to what we expect of our licensees and the standard expectation of a licensee is you have a senior most manager of those utilities, whether it's the CEO or the CNO depending upon the utility, gets up in front of an all-hands meeting

and says this is what we expect for our corrective action program and this is the part in which we expect each and every one of you at the plant and folks who are supporting folks at the plant to incorporate that and I think -- I mean I don't criticize anything you've done here, but it seems to me the evaluation we have to make from this side of the table on the effectiveness of what you have as a program is going to have to get to that point where a clear demonstration is made from the Chairman or the EDO to the entirety of our staff, this is what we expect coming our of this and this is how we expect our staff to go. That's an editorial comment.

On a question related to that, you've done a very good job internally of looking at how we've done this, looking at lessons learned, how we craft a corrective action program. Have we considered outside comments by our licensees for example who do run corrective action programs, INPO which evaluates corrective action programs or any of our other stakeholders, Dave Lochbaum or other interested parties, to get their input on we're proceeding in our corrective action program and does it meet their expectations of what we ought to be doing? Have we done that yet? Do we have a plan for it?

MR. PLISCO: Not yet. When we developed the program we had, we call it bench-marking, but we outreached to several other Federal agencies, we picked several utilities, both from the commercial reactor side and the fuel facility side to look at their corrective actions and talk about common issues of how they address issues and we used that information when we developed our program.

Specifically we looked at one agency that had an GAO

audit on their lessons learned program and had a lot of comments on their program and we went back to talk to them on how they addressed those comments and how they incorporated those comments into their revised program. So we took lessons from other Federal agencies and other similar programs and some commercial programs and then we actually met with INPO, and we talked to INPO not their programs involved with licensees, but their own internal program and how they looked at lessons learned and we met with them on their program.

COMMISSIONER MERRIFIELD: Well, and I applaud all of that. I think in terms of the information gathering you've gone precisely the way I would have if I were heading it up I would want to do it. But the flip side of it is having and I know you want to get this aligned in the way you feel comfortable about opening it up to the world, but I do think at some point whether it's NASA, whether it's FAA, whether it's INPO, whether it's other entities, I think we should expose ourselves to some outside commentary to make sure that what we've interpreted from what we've learned and the program that's been put together does have the robustness and will drive and hopefully increase the appreciation for what we're doing.

CHAIRMAN KLEIN: Commissioner Jaczko.

COMMISSIONER JACZKO: Commissioner Merrifield raised a good point about the issue of training and I was just remembering that at the November meeting where we talked about lessons learned I think I asked the specific question to Luis. Luis isn't here so I'll guess I'll follow up with maybe Loren or, Bill, you can try and answer it, specifically,

on what we were doing with Davis-Besse. At the previous meeting, Luis mentioned that we had a lot of new staff coming in and many of them, I think the phrase he used, were either not born or in diapers at the time of Three Mile Island. So we put together a training module to teach them about what happened at Three Mile Island and I asked the question at the time, have we done a similar thing for Davis-Besse. So I guess I'm wondering and at that time there was no plan to move forward or to develop a training program or a video or some kind of thing for Davis-Besse. I'm wondering if we have that or if that is in the works as part of again this idea of learning the lessons, correcting the action and then training people and incorporating it into our knowledge management program.

MR. KANE: I could take a stab at it in terms of what we try to do. I think Davis-Besse, for example, I think all the regions, all the regional administrators have talked about Davis-Besse to their staff and the lessons learned from Davis-Besse and how they're applied. You know, a good example is -- and are they lasting? A good example I think was I went up to Region I last week I guess it was and attended one of the Division of Reactive Projects morning meeting and they visibly had some of those lessons actually present in terms of having all the plants there tracking, for example, one of the issues was to be able to take these long-standing issues that were occurring day after day where you had some unidentified leakage, maybe it didn't trip any tech spec limits, and they did that. And the other regions do it as well.

Another thing that --

COMMISSIONER JACZKO: I guess I'm more interested in really for new employees and what we do with new employees coming in. Do we have a specific module on Davis-Besse where we walk them through – here's what happened, here's the corrosion in the vessel. Pictures, the whole sense of this was a major incident in the agency and the agency's history and really just exposing people to this is the kind of thing you need to be aware of as a specific example.

MR. KANE: Maybe Loren can help me out. I'm not aware of any specific module, but the senior management team goes out to the counterpart meetings where you have all of the residents and all the other inspectors and we go through all of the historical events. We go all the way back. I've made a presentation to all the regions on plant events that go into the `70s and beyond which obviously TMI is part of it.

COMMISSIONER JACZKO: I think, Mike, you want to --.

CHAIRMAN KLEIN: I think we might have a comment.

MR. WEBER: If I could, Mike Webber from the Office of Nuclear Reactor Regulation. As you may know, our office recently implemented a new qualification program and we do have specific training as part of that on Davis-Besse lessons learned and other significant events that have come up and we've learned from. So it's our intent that as we move forward with the lessons learned program that it is a feeder into that qualification training. We do need all of our staff to have that information because it's very important.

COMMISSIONER JACZKO: Thanks. I think the staff has done a really good job putting this program together. I think it is a good

program. I think one of the key elements of this program though are these criteria of how we determine whether something gets into the lessons learned oversight board, I believe, if I got it right. I always think it's useful to look at these things in the context of a example and I think right now about the same time this program was completing we had, Stu is back there, we had Tritium Task Force that was wrapping up and certainly it was to my knowledge one of the first programs that has gone, or task force that has gone through the lessons learned and I was somewhat surprised to learn that it didn't meet the threshold for getting into the corrective action program.

This was a program that I think we would all acknowledge had minimal safety significance. It has taken up a tremendous amount of resources for this agency, has generated a tremendous amount of public interest and has really caused us to work and do a lot of things. I think that would be a program that would behoove us to learn some lessons from or that task force. And the task force, I think, was very comprehensive and there were a lot of good recommendations that came out of it.

So as I look through the response coming back from the lessons learned oversight board, getting the "O" right, it seemed to me that almost every recommendation met two of the criteria which was root cause exists or can be identified and resolution is actionable. So those seem to be a fairly low threshold.

Some things and I think appropriately so met the significant implications and they seem to be just as I look through those

seem to appropriate. Not a single one met the challenge of strategic outcomes and if I look at some of these items, I think I'll take one. One of them was require adequate assurance that leaks and spills will be detected before radio nuclides migrate offsite. I mean that was the crux of the problem was that we weren't aware of this. That one didn't meet any strategic outcomes. So as a result, that recommendation didn't meet and didn't get into the corrective action program. That would be one that I would certainly think is one that we might want to get into the corrective action program.

So I don't raise this necessarily with any conclusions in mind other than I think that some of these should perhaps be in there, but again it just gives a specific example, I think, of maybe how these criteria are working and are they really the right criteria or are they working effectively to really get us the outcome that we want because again this is a program, as I said, that has taken a lot of resources in this agency, created a lot of public interest, I think that it would be a failure of our corrective action program if immediately we came out and we had this hearing today and then somebody asked a logical question, what about the Tritium Task Force, anything get into the corrective action program from that and the answer right now is no. So I think that's something that we may want to take a look at and certainly as Commissioner Merrifield suggested the Commission may want to have a voice sometimes in some of these things and this may be an area for the Commission to take a look at, this particular task force, some of these recommendations perhaps rising to that threshold.

MR. KANE: Could I respond?

COMMISSIONER JACZKO: Sure.

MR. KANE: First, we have tasked each individual recommendation out of that report in the October 20th tasking from the EDO to the applicable office directors to address each of those recommendations. Each has an assigned due date and each has an EDO action tracking system number and a due date for which it has to be completed. So all of those recommendations are being dealt with and will be accomplished on those schedules or thereabout.

But I would like to have Jim Wiggins who chaired the Lessons Learned Oversight Board address the more general question of why none of those rose to a level that --

COMMISSIONER JACZKO: Sure, and if I could just, before he does that and I appreciate that. I think this is an important issue and I understand that all of these are in the EDO tracking system, but I think the idea with this program is that things that go into the EDO tracking system, there are lots of things in the EDO tracking system. One of the first things that happened when I became a Commissioner was I asked a question about updating guidance documents and Reg Guides. Lots of those things are always on people's lists and they're always on people's desks and they're always on their minds, but they're not always getting done and I think that's really -- well, the important thing is those things are in the EDO tracking system. Every year we're faced with budget challenges, we're faced with resource constraints and so some things that are tracked, due date slip, priorities get shifted and changed and the idea

of this corrective action program is to keep things that are important on the front burner. And again, I would have just thought some of these recommendations from the Tritium Task Force would have met that criteria. If we could go a little bit longer on my time, I would certainly appreciate it.

MR. WIGGINS: I can keep this very quickly. Let me just try and give you a view of what was happening in the board meeting. First, I agree with you. These determinations, they look objective, but they're always going to be fundamentally subjective.

That's why there's a board and that's why the board people are the senior people that they are. It's the best judgement people who have been around awhile. They've seen things. A number of us, at least Loren and I, have managed programs in the region. We have been up and down licensees' corrective action programs. We know what the problems tend to be.

So we applied the criteria. But understand also philosophically we approached this question on this particular matter, the Tritium Task Force, with an understanding that there would be a tasking for the EDO. There would be actions that the offices would take. We asked ourselves would any of these qualify for needing extra oversight, the added oversight provided by the program, the added discipline of walking corrective actions through a board rather than satisfying the EDO in a straight line chain. We came out where we came out and I would agree with you. You can look at it another day and a person could come out differently on it.

That's what guided our conclusion. We tried to apply the criteria as best we could given our experience with the underlying assumption was that these things would be corrected.

COMMISSIONER JACZKO: I appreciate that and as I said, I think the reason we have the corrective action program is to give a different sense of surety that those things will get corrected and that the priority is that they won't get shifted and pushed back and the time it takes to get them corrected will not move too far. But again, I appreciate the response.

MR. PLISCO: And may I add one more thing.

COMMISSIONER JACZKO: Sure.

MR. PLISCO: The other thing we built in our program is an annual assessment, an assessment process. We knew it was new and a lot of these issues we have been debating about a year and we made a decision and put it in the Management Directive. But as we go through this process to relook at it once a year and we've assigned the task to the program manager to take input from the offices and from the oversight board and once a year look back and say is it working the way we think it should be working and do we need to change parts like the criterion and that's something we could look at. Is it working? Is it giving the answer that we expect and to look back. So we have that part of the process too to go back and look at is it working.

COMMISSIONER MERRIFIELD: Mr. Chairman, I don't -- I appreciate the issue that Commissioner Jaczko is raising. I have enough information from what the staff has given me right now to make a

judgment call about whether if you wanted it in a SRM coming out of this meeting that the staff should include this in the corrective action program and it may well be what we may need to do subsequent to this meeting is have Jim Wiggins, meet with our TAs and provide perhaps a little bit more robust an opportunity for Jim to explain the decision tree that he used to make the recommendation not to include this in the corrective action program. I certainly would need that before we go down the road of a tasking.

CHAIRMAN KLEIN: Commissioner Lyons.

COMMISSIONER LYONS: My first two areas are going to sound a lot like what Commissioner Jaczko was talking about. Greg talked about a Davis-Besse lessons learned module. I would just like to mention something I mentioned before that I think it would be very, very useful if there was literally a model of the Davis-Besse corrosion that was sitting in our lobby and/or was shown to every new employee. I don't care if it's made out of metal or plaster or whatever. One answer I got back the last time I raised this was it's too expensive to make it.

I think instead of looking at a picture of that thing and by the way, I have still not managed to see it myself. I'm told it's at Lynchburg, but I haven't seen it yet. To me, that would be a very, very useful and very graphic reminder to every one of us as we come in every day that this really happened and it was close to being serious. Okay. So much for Davis-Besse. I'd like a model.

I also was going to talk about my surprise on the point that Greg was raising that the liquid radioactive release study didn't scope in

or screen in and as I too went through how it didn't screen in and tried to follow the logic tree and as Greg mentioned, it was Category 2, Criteria 2, that screened it out, that's where we looked against our strategic outcomes so called and what was brought home to me as I read through that was there was nothing in our strategic outcomes about maintaining public confidence.

We have very specific things in our strategic outcomes, no fatalities, very specific items. What we don't have is maintaining public confidence and I would at least like to suggest that there be a re-look at those strategic outcomes to see whether a public confidence item should be added. I think had that been in there then the screening would have come out somewhat differently. At least, that was my perception.

COMMISSIONER MERRIFIELD: Can I answer that one because the issue of public confidence since I'm the only remaining member at the table today of that Commission that made the decision of that Strategic Plan, FY 2004 to 2009, it was a deliberate decision and I helped craft the language that took us from the previous public confidence element of that plan to the openness concept that we have today and there were some very deliberate reasons that we did that. The previous Commissions have wrestled for a long time in terms of different ways of looking at meeting criteria of that general sense and I think the staff is dealing with what the Commission, I and the other two, handed it in that regard.

Now we do have under way right now an opportunity as we are again looking at their Strategic Plan in this Commission, the five of

us will have another opportunity to make a determination do we want to go back to that measure or keep the one that we had from the most recent Strategic Plan. So I think that's part of the reason why the staff is applying the template of what the Commission gave it.

COMMISSIONER LYONS: I absolutely agree they were applying the template. To me, an openness is in there as you say but to me, the openness and public confidence maybe aren't quite equal and I think public confidence is important. So I am at least raising the question about including that in strategic outcomes as we re-look at them in the future.

Another comment I wanted to make is we have an annual agency action review meeting. I haven't attended one of these but I gather that it is a very carefully structured meeting to review major actions, but also I think it includes lessons learned. And I wondered if there was some plan to include the outcomes or the current status of the lessons learned program in that annual action review meeting. It just seems to me they are very closely related.

MR. KANE: I could take a stab at that one. I think this program is designed really to take on specific issues that come to us whether it's event based or whether it's some other kind of a problem, but it's more specific to events, whereas, in the AARM we each year do an assessment of the reactor oversight process.

So lessons learned from that process throughout the course of the year are built into that program. So we take on such things as how we treat crosscutting items for example, how we document those

in our annual reports. So that's kind of built into the process and this is more event or issue driven. I might have to talk to you further on this, but I don't see that it is a nice clean fit to merge those two programs.

COMMISSIONER LYONS: Okay. Fine. I appreciate your looking at it, but I appreciate your comments.

MR. KANE: We can dialogue further on it and maybe there's something that I'm missing. I'll look into it. Loren, did you have any additional thoughts on that?

MR. PLISCO: No, I think the only point I would make is that this program is even though we usually talk about the examples of the technical events that happen in plants, our vision really covers a lot more than that. Our own internal, if we have a problem with a, say a, major rollout of a key system that we learn lessons from that we need to make sure that don't recur, those type of things, so administrative items and things on how we do our day-to-day business, our vision is those kind of things can be captured into this program too. AARM is just really focused on the plants, but I could see if there is an ongoing lessons learned having to do with the plants, there would be some interaction on those.

COMMISSIONER LYONS: It just seems to me that they are closely related in that the lessons learned program might well be looking at longer term issues, but even if they're not specific to a current event, that still might be a good opportunity to remind people of some of the focus areas. I'll stop there.

MR. KANE: Well, they tend to cross over when you get to issues like Davis-Besse for example. That review that we did, that

lessons learned review did identify some things that we needed to adjust in the reactor oversight program. So they do come together but again, I think they're more, at least the way it's envisioned here, it's more issue driven.

CHAIRMAN KLEIN: I think as a little bit of a follow-up to Commissioner Lyons' comment, you know we do get into these event driven issues and we get into lessons learned that then turn into lessons implemented. With all the new people that we're bringing on, what would be nice is to get ahead of all of that issue and be more proactive so that we don't have events that we have to learn lessons from. Have you thought about how do we get ahead of that curve so that we're proactive to the point that we don't get into those situations? Do you have any training programs or something like that?

You know, it sort of gets into continuous improvement, but you know what it would be nice to be is if we’re far enough ahead that we're anticipating situations rather than reacting to them. Do you have a program that looks at event prevention or something like that, in other words, so that we're a step ahead rather than reacting?

MR. KANE: I think where it comes together would be in the qualification program for new employees and I think Mike addressed some of that and what we have to do, I think, is to bring in some of these lessons we have learned in the past and make sure that's part of the training program and clearly communicate to them that we need their eyes to be looking at what's going on and try to anticipate issues or problems that perhaps we're not seeing.

CHAIRMAN KLEIN: I think one of the challenges that I had observed when I was on the INPO board is that we have metrics, but usually they're after the fact. So you end up if a utility is getting in trouble, somehow we don't have the metrics that tell us they're heading down that slippery slope and it would be nice to somehow have those metrics that give us those early warnings so that we don't get into those situations. But that's a hard issue.

But that's the goal. The goal would be to have these early warning systems so you don't have the problems. So it might be good for our staff to talk to INPO from the operational standpoint to see if there isn't some metrics we can start looking at to keep all our operating plants, the new ones, at a high level that continuous improvement is something that we tend to get into a problem of not necessarily complacency but it ends up in that. Things are running along and we catch those metrics early enough. Easier said than done. Commissioner Merrifield.

COMMISSIONER MERRIFIELD: Yes, your questions prompts me to ask another one. I'm sort of thinking about licensee corrective action programs and looking at issues associated with the primary side and the secondary side. It seems to me that, and we expect them to have both, even though our principal interest is in the structure systems and components associated with the primary side.

We're looking, if you look at the reviews conducted, at where something went wrong with one of these plants. How do we respond to it? How can we improve? And that's sort of the generalized focus you have at the task force.

But it would seem to me that if we're going to be robust in a lessons learned corrective action program, we also ought to be looking internal to our process, the timeliness of our review process. Are there examples where we had licensing actions that really strung out over a long period of time and are there lessons to be learned from that to help us improve the timeliness, effectiveness and efficiency of what we're doing?

I said some nice things about ADAMS. I think we're doing pretty well with ADAMS now. We had a problem. It took us a long time to get to where we are today. Have we incorporated a lessons learned in our IT program to make sure that the efforts that we had to go through to get a successful program which took us a long time to do have we incorporated the lesson learned from that into our programs today so as to avoid that in the future?

So I think in a general, this is more of a comment than a question, I think we have a corrective action program and it doesn't merely look at what our licensees are doing and how we're responding to that, but also is it looking inward to us in terms of how we're operating the agency and how we improve what we're doing? Now I may have missed that in the presentation you made, but certainly I think one could take from some of the slides that it has more of that external focus.

MR. PLISCO: The list I mentioned that we developed when we picked the six has a lot of internal lessons just like my OIS friends that there is an ADAMS lessons learned report and that's on the list when you talked about ADAMS.

COMMISSIONER MERRIFIELD: Okay.

MR. PLISCO: There are issues having to do with handling of FOIA requests and there are issues having to do with other internal processes where we have generated a lesson learned report. So there are items like that on the lists that we have been pulling together to find out what we have in our history.

COMMISSIONER MERRIFIELD: Okay. That makes sense.

MR. PLISCO: We just picked -- we thought for the value of the resources we were expending, we picked those six because we thought there was a lot of value in those, but there is value in some of the other ones too.

COMMISSIONER MERRIFIELD: Okay.

MR. WIGGINS: I'd like to add just a quick perspective.

COMMISSIONER MERRIFIELD: Yes.

MR. WIGGINS: If you know what the events are from the title, you know that the biggest piece of it for us is the internal piece. The Vogtle issue, the TMI issue, yes there's significant licensee site issues that will be dealt with through the normal process, but there's learnings internally on each of them and I believe that's likely why they selected those to look at. Those are the lessons that we're looking to see is the internal ones here and it may not come out from the presentation the way it was discussed.

COMMISSIONER MERRIFIELD: These are more event based. These are event based, the ones that you have here.

MR. WIGGINS: The events have highlighted both

problems with licensees and problems with what we did.

COMMISSIONER MERRIFIELD: I understand.

MR. WIGGINS: Then or in the past.

COMMISSIONER MERRIFIELD: I understand. I'm talking about non-event based issues where you have -- it takes us a real long time to do your licensing action, it took a real long time to do your licensing action and what we learned from that. How can we improve it? That makes sense.

Given the direction we're going, I think the Commission as a whole, and the Chairman in particular, and the EDO have embraced or certainly with the support of the Commission, are looking at more things like Six Sigma. Can we use Six Sigma as an approach for this as well? I think these things are going to integrate. If you're going to do that kind of a look-back at some of our programs, lesson learned and Six Sigma I think make a lot of sense integrating in that respect.

The second one again plays on an earlier comment. How much -- what is the budget we have for conducting some of the activities we have going forward and I want to hear just a little bit more and I know you already said some things about it, but how we can insulate that so we can continue to get that improvement without having it subject to a budgetary axe?

MR. PLISCO: I think in general as far as doing the legacy reviews going forward, there isn't anything in the budget and that was part of our recommendation to the EDO, in the out years we need to start including that. If we want to work our way through the big list and include

those historical lessons into our system, we need to budget for that because it is resource intensive to go back and pull the story of those older events. That part there isn't anything.

CHAIRMAN KLEIN: Is there anything in the 08 budget to continue this activity?

MR. PLISCO: Well, the IT component actually is an `07, our plan is to finish that in `07 and then there's some continuing operating costs for the IT component of our system. But as far as the budget for the offices to conduct future effectiveness reviews and lessons learned, I don't think those are budgeted.

MR. KANE: I don't recall it being in the budget. But what we would do is certainly we're not going to be precluded from doing these kind of reviews. If there is an issue that merits it, we would have to rearrange priorities and conduct the review.

COMMISSIONER MERRIFIELD: Well, let me be the first to suggest, Mr. Chairman, that it may be that there may be a paper coming out on this from the staff outlining what are the various options for the Commission to consider to fund. Efforts are currently not in the budget to allow to take advantage of furthering the knowledge on lessons learned and improving our corrective action program. Thank you.

CHAIRMAN KLEIN: Commissioner Jaczko.

COMMISSIONER JACZKO: I just want to follow up a little bit on what Commissioner Lyons said and I certainly agree. I think you can look at this as the issue with say the Tritium Task Force and not meeting the threshold. It's either an issue with the threshold or the criteria

and those may be, the issue may also involve looking at the strategic outcomes and making sure that we have the right strategic outcomes to properly reflect now in the corrective action program.

An issue that I wanted to talk a little bit about certainly separate is this program seems to focus very much on the program offices here at Headquarters. I was wondering if you could talk a little bit about how the regions interface and how issues can be brought forth from the regions and introduced into the process to potentially look at lessons learned. Of course, when we have a lot of inspection activities in the more event based things may actually be originating in the regions and how that gets brought into the process.

MR. PLISCO: Well, coming from a region, since I led the team, my perspective is we're equal to the offices in our participation and interest in the program. We actually had two regional members on the working group that put this together.

COMMISSIONER JACZKO: So there's a link.

MR. PLISCO: When we say offices, we think that also means regions.

COMMISSIONER JACZKO: Okay.

MR. PLISCO: When we use those words. I'm looking at Bill for confirmation.

(Laughter.)

MR. PLISCO: We look at ourselves as equal partners.

MR WIGGINS: Research certainly views it that way

COMMISSIONER JACZKO: So you feel comfortable

there's mechanisms for, say, inspectors if they have an idea of a process that they went through an inspection and they thought it could have done better, they can introduce something into the lesson, get something before the lessons learned oversight board and get in into the process.

MR. KANE: There's actually another process that we've instituted within the regions for the conduct of their activities and that is a program for best practices and that is a program that is apart from the one that we're talking about here and it is more operational in terms of how, for example, daily information coming in from the plants is assessed at the morning meetings. What we do is get together, charge one of the regions with the lead, and get the best practices identified. So we tend to apply it that way. But a major lesson learned, they could come from a region as well as --

MR. PLISCO: And I think one good example is the Hurricane Task Force and Mel can talk about that.

MR. LEACH: Yes, Commissioner Mel Leach. I was the leader of 2005 Hurricane Season Task Force and the three items that we categorized as Category 1 out of our task force charter and those same three made it through the screen. Two of them were primarily regional items. One is a single agency procedure because three of the four regions had their own individual procedures and Headquarters had one and we wanted a single procedure.

The staff safety accountability was primarily a regional issue as those are the folks that can be in harm's way. Some Headquarters' folks respond as well, but those two were significantly

regional issues and we had all four regions represented on the task force.

COMMISSIONER JACZKO: Thank you. The only other comment that I would add is I think Commissioner Lyons makes a good suggestion about the idea of incorporating some of this into the agency action review meeting. I think there is a nexus to a lot of these issues, corrective actions, and plants are looking at an issue that I know I brought up at the last one is the idea of -- and perhaps this gets to one of Commissioner Merrifield's ideas of not just have this be event driven but the idea what do we do with a plant like Point Beach that continues to be in column four and as of yet, I haven't heard of a plan for them getting out or if there's a plan for them getting out of column four, I don't think they've gotten to be able to fully implement that. So that may be perhaps another one of these non issue based or event based problems for which we might be able to learn some lessons about how we do this in the future so that when a plant gets into column four, they get out of column four because I think that's the idea and not by moving into column five, but going down in the right way. Thank you.

CHAIRMAN KLEIN: Commissioner Lyons.

COMMISSIONER LYONS: Just a couple of questions on some of the IT issues. There was a mention of the need to develop the IT issues. In the, I think, it was the August memo from the EDO, there was reference to delays in getting the IT work started, reference to delays in funding availability of about three months, all of which has pushed back the IT schedule. I was partly wondering why was there a delay of three months in the funding and is there anything that the Commission should

or could be doing now to ensure that the necessary IT resources are available or are they now available?

MR. PLISCO: I can speak to the funding part of the question. The problem at the beginning was when we started the task force since we budget two years out, when we started we weren't in the budget. So in the development of our process, we developed some estimates and we went into the midyear request, the `06 midyear request, and then we did get our funding around the June/July time frame of this year in the midyear adjustments that were made and we did get in time so we're in the `07. So our funding, we have the funding now.

COMMISSIONER LYONS: So the midyear adjustment didn't occur until June?

MR. PLISCO: Yes.

MR. BAKER: That's very typical. The staff gets together and make the decisions and then if there's a reapportionment that has to occur it does take -- we have had as late as August receipt of midyear funds.

CHAIRMAN KLEIN: I guess a midyear must get shifted because I would think August is pretty late in the year, not midyear.

MR. PLISCO: I think the decisions get made by the midyear. By the time you actually get the money in hand –

MR. BAKER: By the time you do reapportionment sometimes you're that late.

CHAIRMAN KLEIN: I guess this may be a subject of another Commission meeting.

COMMISSIONER LYONS: It at least puzzled me about what we do for resources.

MR. PLISCO: As far as the funding now, we have the funding. We couldn't start formally into the IT part until we know we have the money. Now that we have the money we entered into the process to get the system up through all the checks in the system approval process.

MR. BAKER: The thing that I would mention is it's not that we haven't started because there are other initiatives that are directly applicable. Particularly I mentioned the linking of the documents within ADAMS. That is moving forward and it's actually a shared effort. I mean we're doing that and our licensing processes is directly applicable to what we're trying to do with lessons learned. So we are making some progress on the system pieces, the components that will make up the system.

EDATS is continuing to roll out, which is the tracking piece. The piece that's not moving forward at the moment is just the web interface that Commissioner Merrifield mentioned and we'll be working with what are the requirements for that particular piece to make sure you deliver what's expected on that.

COMMISSIONER LYONS: Well, I think as the Chairman said, that may be appropriate for a different meeting format, but at least I'm personally surprised that a midyear decision takes that long to implement. I'll leave it at that.

CHAIRMAN KLEIN: As a very newcomer to the agency, we seem to have a dilemma in implementation. I can tell you that other departments don't take as long to get decisions made and implemented

as I've seen here and I think that's something that we need to look at so that we can -- again, we have to do it right. But I have seen other areas that do it right and do it more timely.

COMMISSIONER MERRIFIELD: But just for clarity though and I mean not to disagree, and, Chairman, you may be entirely correct. But there may be multiple things that the staff is dealing with. I mean there is a series of priorities that we identify specifically in the midyear that we work our way through.

Also during the course of this year whether in November soon after the fiscal year begins or August soon before it ends, that we realize that programs or issues that we have funded don't need the full funding. Money arises as a result of that and through whether it's November or August, the staff presumably on a continual basis will say we realize we don't have money here. We have an emergent need and we're going to fund that as we go along and not wait for a twice-a-year opportunity to fund that. Isn't that part of what you're trying to do as well or am I being too generous in my comments?

MR. KANE: We do that on an ongoing basis. As situations change and funds become available, we have to do that. But one of the things we have to do at midyear is to assess what our needs are and if they trip a certain level, we have to go back to the Commission and get approval to perform those activities and then the rest of it is getting the money from the CFO. So there are several months involved there to get that decision made and it may well be too long and it might be something that we have to take a look at.

CHAIRMAN KLEIN: I guess what I was hearing was that we make a midyear decision but by the time it's implemented it's August and that seems to be a long time. Now I realize events, if there are budget shifts that are unexpected, that you reprioritize. But if we do a midyear budget review, it shouldn't take to August by the time that money arrives. I think what Commissioner Merrifield was saying is if there are unexpected events that's different.

COMMISSIONER MERRIFIELD: I completely agree with you. What I was trying to provide for them is an out in that in this particular instance --

(Laughter.)

COMMISSIONER MERRIFIELD: They didn't pick up on it obviously. In this particular instance it may have been even something that fell outside of the midyear review but obviously I don't know. We didn't get that answer, so I don't know, Mr. Chairman.

COMMISSIONER JACZKO: The only thing I would say and again perhaps trying to give the staff an out, but again agreeing wholeheartedly with the Chairman is that some of these may be a little bit of a misnomer. While it's a midyear, it appears not to be in the middle of the fiscal year. It is often lately with spending bills not getting passed until late in the calendar year and already into the fiscal year that we don't get an OMB allocation until sometime in, or whatever they call it, I don't know if it's OMB, is that the right or whatever it is, we actually get approval from OMB that this is our appropriation for that fiscal year which is already several months into the fiscal year. So midyear review happens later than

one would think because the process starting with, I don't want to necessarily put blame on the Congress, the Congress often is a little bit later. So again, that may be some of the --

COMMISSIONER LYONS: I'm just recalling at our midyear review, so-called, is in February and that the midyear review typically identifies both puts and takes in the budget based on our best knowledge of needs at that time. Again, I don't want to belabor it. It just surprised me that it took that long.

And the other thing I would belabor is I still don't think our new staff should have to travel to Lynchburg to see a model of Davis-Besse.

(Laughter.)

COMMISSIONER LYONS: I think that's a sobering example that we should look at every day.

COMMISSIONER MERRIFIELD: Maybe we could take the metal from that God awful sculpture we have between White Flint One and White Flint Two –

(Laughter.)

COMMISSIONER MERRIFIELD: And melt it down and create the vessel head that you're seeking out in our courtyard.

COMMISSIONER LYONS: Well, I was told that it was too expensive if we made it out of metal. I don't care it's plastic as long as it looks like metal.

COMMISSIONER JACZKO: We could maybe ask one of the local high schools as a science project to do the model for us.

CHAIRMAN KLEIN: Well, I think as for lessons learned, we've learned models and we've learned budgets, so this has been a productive meeting. Any additional questions?

COMMISSIONER MERRIFIELD: No thank you, Mr. Chairman.

CHAIRMAN KLEIN: I'd like to thank the staff. I think you did a good job. I think you made some key points in your presentation that really are important. One is keep them fixed when you have the problems identified. The other one is we do have a lot of individuals that are coming on board and so we need to make sure they are trained and understand the issues and gets those lessons learned and see the model that Commissioner Lyons wants to see. Then the other thing is to go for continuous improvement. I think we hold our licensees to high standards. We should hold ourselves to high standards and always strive for continuous improvement. So thank you very much. The meeting is adjourned.