

UNITED STATES NUCLEAR REGULATORY COMMISSION
DISCUSSION OF SECURITY ISSUES

WEDNESDAY

MAY 30, 2007

The Commission met in closed session, 10:30 a.m., the Honorable Dale E. Klein,
presiding:

NUCLEAR REGULATORY COMMISSION:

DALE E. KLEIN, Chairman

EDWARD McGAFFIGAN, JR., Commissioner

JEFFREY S. MERRIFIELD, Commissioner

GREGORY B. JACZKO, Commissioner

PETER B. LYONS, Commissioner

PRESENTERS:

NUCLEAR REGULATORY COMMISSION:

Luis Reyes, Executive Director for Operations

William Travers, Regional Administrator, Region II

Michael Weber, Director, Office of Nuclear Materials Safety and Safeguards (NMSS)

NUCLEAR FUEL SERVICES (NFS)

Dwight B. Ferguson, Jr., President and CEO, NFS

Timothy Lindstrom, Executive Vice President, NFS

B. Marie Moore, Vice President, NFS

John Nagy, Licensing and Compliance, NFS

PROCEEDING:

COMMISSIONER MERRIFIELD: Who made that particular call and upon what basis in the slide was used for making that determination?

MR. WEBER: If I can, I think the staff made that call based on our incorporation of the material that was provided to us by NFS, and NFS designated that material "Official Use Only, Department of Energy," based on the guidance that the licensee received from the Department of Energy.

You may recall back in 2004 we got new guidance from the Naval Reactors Office in the Department of Energy. We have had some recent discussions with them, and I can fill the Commission in on where we may be headed in reconsidering those designations.

COMMISSIONER MERRIFIELD: Well, I would say I can understand the backup slide, which shows a (inaudible), although the enclosure slide doesn't have the statement "Official Use Only, Department of Energy Only." The cover slide does. But I'm at a loss to understand why the information contained in the staff's other slides – maybe the solvent extraction and room layout, but again that's not labeled "Official Use Only," even though that to me appears to be the only piece in there that would be Official Use Only. Those could have been put in the backup slides.

This sort of goes to my notion of why this could not have been in a public forum.

CHAIRMAN KLEIN: Since you raised that issue, before Annette reads her guidance, based on the comments that we had below and the fact that this could have been and could potentially be an open meeting, I'd like to see whether we would like to make a decision that if there's nothing classified that's discussed, can we then make the transcript public? Now, I don't know –

MR. REYES: On the first part of the meeting? Not on the licensee

presentation, or both? I'm just –

CHAIRMAN KLEIN: If there's nothing classified in either your part or their part, what I would do –

MS. CYR: We could send that to DOE to make that determination.

MR. REYES: Yes. I think we could raise – I think that the transcript – we could send it to DOE and raise the question and let them give us a reason.

CHAIRMAN KLEIN: And I would, I would favor that, based on the comments we had below, that I would recommend that at the end of the proceedings that we do send that to DOE, make a determination, and if it's not viewed as classified that we do then release this publicly.

MR. REYES: Or portions of it.

COMMISSIONER MERRIFIELD: Yes. I was going to say, there may be – you wouldn't want to be in the position where – You could redact those portions which are classified.

MR. WEBER: Classified or Official Use Only.

COMMISSIONER MERRIFIELD: Right, right. But I would say, Mr. Chairman, as a caveat to that, I remember, and I think Ed would as well – there have been some videos presented by the Department of Energy which we would have claimed would have been Official Use Only or SECRET, and were insisted on by the security office at DOE that, no, this is public information; they let everybody have it.

And then to see, and then to see sort of this level of stuff that gets labeled as classified, with all due regards – I know we've got DOE folks sitting in the room – but there's a lack of consistency within various parts of the DOE in terms of labeling things as being Official Use Only.

CHAIRMAN KLEIN: I like the acronym for "For Official Use Only."

MS. VIETTI-COOK: We had understood that this could go as high

as Secret, Restricted Data.”

MR. REYES: Correct. It depends where the questions take us.

COMMISSIONER McGAFFIGAN: Well, if it goes, that won't be on the transcript.

CHAIRMAN KLEIN: So we will then, unless – we will probably at the end of both presentations see if there is information Official Use Only or classified, and if not we will pursue that we will then release our discussions.

COMMISSIONER MERRIFIELD: Right. And Mr. Chairman –

COMMISSIONER LYONS: Subject to DOE involvement.

COMMISSIONER MERRIFIELD: Right, right.

COMMISSIONER LYONS: I think it has to be, whether we like it or not.

COMMISSIONER MERRIFIELD: Yes. We can have a dialogue about what's appropriately classified.

But Mr. Chairman, and I appreciate that suggestion, frankly I was looking particularly at the licensee slides. I think there's some things that they could take credit for. We'll hear from them, but I think they're trying to implement a safety culture program to deal with some of these issues. We're going to ask questions about it. But those are things I think are useful for the public fora. And I think in the future, like I said downstairs, I think the staff ought to think about are there portions of which could be presented in public, which clearly are not classified, and if there are portions where we want to get into the details of exactly where on your production line did you have the mistake and what was involved, obviously that's not public information and if we ask questions about that it shouldn't be in the public forum. But there's a balance.

Thank you.

CHAIRMAN KLEIN: Thank you.

Well, before we begin, in the event that this does be redacted or classified, I think Madam Secretary has some rules of engagement.

MS. VIETTI-COOK: Today's meeting may include the discussion of Secret, Restricted Data material. This is a closed meeting under the provisions of the Sunshine Act. Please be advised of the following security considerations in effect for this briefing:

All participants in this meeting must have an appropriate access authorization. Any notes taken on information discussed at this meeting may also be classified and must be appropriately marked and protected. Any questions regarding classification or notes taken at this briefing may be referred to the Office of Nuclear Security and Incident Response.

The following items are prohibited in the room during the meeting: Any electronic equipment, such as personal data systems, cellphones, pagers, tape recorders, and cameras.

CHAIRMAN KLEIN: Thank you.

We will begin. Luis.

MR. REYES: Okay. Good morning. It's still good morning, but that brings me to a question. We're prepared to give a 20-minute presentation on the slides that you have and we can do that. If you want us, we can try to shrink that and give you more time for questions and answers, if that will serve the Commission better. So –

CHAIRMAN KLEIN: I would recommend shrinking your presentation.

MR. REYES: Okay.

CHAIRMAN KLEIN: And if we have questions we'll ask them.

MR. REYES: Okay. With that instruction, the shrinker starts.

(Laughter.)

MR. TRAVERS: I think I can do that. Thanks for the lead-in, and good morning. It's good to be at the table with the Commission.

Slide 2 has a outline of what I would like to cover and I'll try to do it succinctly, give you plenty of time for questions. But basically we want to talk about why we're here today, what are the issues that we have with NFS, what's been occurring to warrant the kind of discussion we're going to have with the Commission today. What kind of actions has the agency been taking? The NRC staff, and even at some level the Commission, has been engaged on these issues as well.

I want to talk about the current performance, and this is a period of time of about seven months or so. The blue facility where the spill occurred at the facility has been restarted as of about October of last year. So we've got about seven months or so of experience, and I'll touch on our experience with their performance since that time. And lastly, next steps: Where are we going in the context of our NRC oversight program?

I was going to give you some background on the facility. I won't do that. I think you're familiar with it, so I won't touch that information.

So why are we here? At our recent AARM – the Chairman used that acronym, so I feel safe using it today – Region II, in consultation with NMSS, recognizing the kinds of issues that are listed here – recurrent safety and security performance issues, ineffective corrective actions, and most recently the spill. Region II, in consult with NMSS, recommended to the senior managers that we talk about where we're at in the context of NRC oversight, enhanced oversight actually, at NFS. And the senior managers ultimately at that meeting agreed that these issues – the level of them, the significance of them, the recurrence, some recognition of the ineffective corrective actions that

have not resulted over time in their correction – warranted some additional discussion with the Commission. So we're glad to do that.

The issues that are most – let me touch on the kinds of issues that have been occurring. We've seen issues in procedural adherence and operations, procedural adherence in material control and accounting, utilization of problem identification and correction, the corrective action program, engineering design, configuration management. Nuclear criticality safety analyses have been at issue at this facility.

So these are all important focus areas at this facility that over time – and I'm really talking about the period beginning about June of '04, when the facility, the blue facility, began operations – we've noted an increase in these types of issues arising from the blue facility. You may recollect that there are two principal activities at the facility: the blue or the downblending side of the facility, which began operations in I believe it was June of '04, and the nuclear fuel production side of the facility, which has been in the period I'm about to discuss largely event-free and a reasonably well-performing side of their operation.

So what I'm going to talk about today is largely focused on actions or problems that have been encountered in this relatively new process that they have been doing at the blue facility.

So I've mentioned the kinds of things we've seen, and most importantly certainly has to be the significant event that occurred in March of '06. And as you know, that involved a process enclosure, a glove box, that had never really been placed in operation at that facility, being linked to a transfer line, a transfer line of high enriched uranium uranyl nitrate. Configuration management would have suggested there was an isolation valve in the line that would have prevented any of that material being introduced into the glove box.

That wasn't the case. As a result, in the course of a transfer 31 liters – I believe that's the number – of uranyl, high enriched uranyl nitrate, spilled into this glove box and outside of the path of the flow that it was intended to follow, spilled onto the floor, and made its way out – and I have – let me go to the slide number 4, that is relatively a cartoon. It doesn't give you a lot of information, but it describes a 80 foot by 30 foot room. And it shows you the flow path of the 31 liters or so of the uranyl nitrate that spilled outside of that glove box.

This was significant and two severity level 2 apparent violations were identified in the course of our assessment of the significance of that, principally because the configuration management controls that were not in place could have resulted in an inadvertent criticality in either the glove box or in an elevator pit that they were not aware of was existent just outside the flow path. You'll see it in the left corner of the slide.

Neither of those two things occurred, but the event was significant enough to warrant a great deal of concern on the part of the agency.

So what have we been doing?

COMMISSIONER MERRIFIELD: Just so I understand, and to refresh my recollection, on the diagram on slide 4, it also notes an operator "B" and that person's evacuation route. Was there an issue about the ability of one of the operators to exit the area once the spill had occurred?

MR. TRAVERS: I think what we were looking at is the path that the operator would have had to have taken in the event of an emergency and whether that path could have introduced that person to a substantive health effect in the event that a criticality did occur. So we were looking at all aspects of the event, including the points of ingress and egress that were available and what this situation might – it did not, but might have resulted in.

CHAIRMAN KLEIN: Was there only one exit?

MR. TRAVERS: Yes.

COMMISSIONER MERRIFIELD: Has that been resolved or does it only remain one exit?

MR. TRAVERS: I believe there's still just the one. It's just the one point of exit.

COMMISSIONER McGAFFIGAN: Presumably, the valve that they thought was there is now there?

SPEAKER (audience): There are two exits, but one of them is outbound and goes basically the same path.

MR. TRAVERS: It's the same – you still have to go through – the corrective actions that we're most interested in and have been most focused on, of course, are preventing this type of event from occurring. It's been the focus of the engagement we've been having with NFS over the last several months.

COMMISSIONER MERRIFIELD: Two quick questions. What did this rank on the –

MR. TRAVERS: INES?

COMMISSIONER MERRIFIELD: – INES?

MR. TRAVERS: Level 2.

COMMISSIONER MERRIFIELD: This was a level 2 on INES.

MR. TRAVERS: And it was reported to INES, Commissioner, as you know, without identification and attribution.

COMMISSIONER MERRIFIELD: Had there been another event which would have caused either a criticality or where the operator, for whatever reason, had to basically walk through the area where there was the spill, what was the possibility – what is the range of INES?

MR. TRAVERS: I think of someone had been harmed it obviously would have been higher. I don't know at what point it would reach the level 3 or

2 on that scale.

MR. WEBER: Or 4 for fatality.

SPEAKER (audience): A severe injury would have a 3 (inaudible).

COMMISSIONER MERRIFIELD: Thank you.

MR. WEBER: Now, keep in mind, too, it would not have posed a risk to offsite individuals. So you're primarily focused on worker safety here because of the near effects of criticality.

MR. TRAVERS: And we actually looked and made some dose estimates associated with the criticality event that might have occurred, and found that it would have been, could have been, one rem or so, but much lower than the 5 rem PAGs that are associated normally with offsite effects.

Slide 5 touches on what the NRC staff has been doing to engage on the issues that I've mentioned briefly. In response to security and performance issues, operations, NRC has been taking increased and enhanced oversight. We have been doing things like adding a resident inspector to the site IN 2005.

MR. REYES: An additional one.

MR. TRAVERS: An additional one. We have a senior and we normally have one senior resident inspector at a category 1 facility. We've added one.

The licensee performance review has been increased – or reduced, from 12 months baseline to 6 months. Additionally, Region II, NMSS, NSIR, and even the OEDO have been engaged with NFS management to meet periodically too assess the actions that NFS has been taking, to give them feedback on our view of these actions. In these meetings, NFS, as I expect they'll do today, have discussed their actions to improve performance and their results of those actions, from their perspective.

We've also used special inspections over the course of the last year or two. A special inspection team obviously was chartered to review the facts and circumstances of the March 6th special event at NFS. Based on the results of the team's review, we issued a Confirmatory Action Letter, confirmed a number of actions that NFS would take before they could restart the BPF facility.

We've conducted several team inspections to assess their readiness for restart. There's been three phases actually. I think I mentioned earlier that BPF actually began operation again in October of 2006, after about seven months of outage from that facility.

Special inspections activities were also carried out when union workers went out to strike on May of 2006. That strike resulted in NFS shutting down the naval fuel process operation for about one month while salaried staff were being trained. NRC staff provided increased oversight, including around the clock inspections, for the first few days while NFS restarted the naval fuel processes using salaried employees.

As a result of the BPF event and the operation of the plant using salaried staff, the NRC oversight using Region II and NMSS inspectors was doubled, effectively doubled, including five team inspections. Particular attention was given to the naval fuel operations and changes to the BPF facility and procedures needed prior to NRC allowing restart of that facility. Afterwards operational readiness review inspections of BPF were used to determine restart readiness. And of course, the BPF event was determined to be an abnormal occurrence and was reported to Congress as such.

A number of enforcement actions have occurred over the last year or so. We have identified eight severity level 3 issues at NFS. Several of these issues involved willful violations of NRC requirements. And as I mentioned

earlier, the event in March resulted in two severity level 2 identified issues.

While several of these problems were addressed using traditional enforcement, we decided to use ADR, alternative dispute resolution, and see if we couldn't really better focus on the root cause of the issues, and we offered that to NFS. They accepted it. We went into a period of negotiation, and we believe we've leveraged their willingness to agree that safety culture, configuration management, and areas of concern, including performance, procedural adherence, corrective actions, some of the areas that I've mentioned, really were the fundamental issues that needed to be resolved through a great deal of management attention. And I'm going to talk a little bit about some of what was resultant from our efforts in ADR.

We have established, the NRC has, an oversight panel to review the actions that will be resultant and required by confirmatory order following ADR. We are going to look at their actions or activities in the area of safety culture and configuration management and look at those things critically as they proceed over the next several years.

COMMISSIONER McGAFFIGAN: Has the CAL been issued already?

MR. TRAVERS: Sorry?

COMMISSIONER McGAFFIGAN: Is the CAL issued?

MR. TRAVERS: Yes.

COMMISSIONER McGAFFIGAN: The CAL's issued.

MR. WEBER: It's a confirmatory order.

MR. TRAVERS: A confirmatory order has been issued as a result of ADR.

COMMISSIONER McGAFFIGAN: Okay.

MR. TRAVERS: It confirms a number of things.

COMMISSIONER McGAFFIGAN: When was the confirmatory order issued? Because you mentioned a CAL also.

MR. TRAVERS: It issued February, February 21st, or something of that sort.

COMMISSIONER McGAFFIGAN: February 21st of 2007?

MR. TRAVERS: Correct, 2007.

COMMISSIONER McGAFFIGAN: And the confirmatory action letter was issued?

MR. WEBER: That was back in March.

MR. TRAVERS: That was right after the event, and it confirmed a number of actions that they would need to take to be able to bring that facility back on line. So it was a very near-term effort to understand and to document commitments that they were making prior to them beginning operation again.

As I mentioned, that facility was shut down for about seven months.

COMMISSIONER McGAFFIGAN: None of this is in the public domain.

MR. TRAVERS: Correct.

COMMISSIONER McGAFFIGAN: Because of various rules.

MR. TRAVERS: The only information as I understand it that's in the public domain at the moment is the information that was included in the abnormal occurrence report.

MR. REYES: The abnormal occurrence report, that's the only information that's out, other than the INES report, which doesn't describe the location of the facility.

CHAIRMAN KLEIN: I have a clarifying question, and our General Counsel can tell me if I cross over the bound. In general, when I think of ADRs I think of cases where the licensee may disagree with our assessment, and I

assume that's not the case here, that basically the licensee agrees with the NRC's assessment, and so the ADR is just clarifying implementing actions.

MR. TRAVERS: Right.

CHAIRMAN KLEIN: And not disagreeing with our assessment.

MR. TRAVERS: I think that's a very good characterization. And the outcome of the ADR is what I think is most important. The outcome, which had NFS committing to very specific actions to carry out safety culture assessment programs, configuration management license amendments, and several other activities.

COMMISSIONER MERRIFIELD: If I can jump in, because I've been the one sort of pushing ADR on the staff for a while. What ADR really is a tool is to say, rather than use our traditional enforcement tools, rather than impose fines and penalties and go through our normal approaches, it says, okay, let's use an individual coming in to go through an ADR process to see if there is perhaps, still meeting the outcomes that we want to have, a different package of things that we may be able to do. So rather than simply saying we're going to levy a – name the number – \$50,000, \$100,000 fine on these folks, are there a number of commitments that we can get them to make to change their behavior and things that they can proffer up other than a dollar number that in the end would be satisfying to both the agency and the applicant more so than that traditional enforcement tool.

CHAIRMAN KLEIN: It would have just sounded better if it would have been an "alternative resolution," because the "dispute" sounds like you're disagreeing.

COMMISSIONER MERRIFIELD: That's a term of art. That's a legal term of art. ADR is a process that has been, depending upon where you sit, blessed by the legal community as an alternative to resolving the differences.

MS. CYR: It's essentially a dispute over what the penalty should be, what the ultimate remedy should be.

COMMISSIONER MERRIFIELD: Right.

MR. TRAVERS: I mean, as a result of the ADR, for example, we will not be citing a number of violations that we might have otherwise. So there's a benefit on that side. But I think we are in largely, largely at least, in agreement on what the focus of –

CHAIRMAN KLEIN: I'm familiar with ADR in civil matters and so I just wanted to clarify that this was not a disagreement of the NRC's assessment.

MR. TRAVERS: No, I don't think that was what it was.

Current performance. Let me turn to slide 6. As I indicated, BPF became fully operational again in October of 2006 following about seven months of shutdown. Currently NFS has also nearly completed the integration of all the workers who had gone on strike. They did this slowly to try and assure that they were training and setting expectations for the work force, also because I think there was a practical limitation on how many they could bring back at any given point along the way.

But we have not identified in that period of time any significant safety or security issues or violations since BPF restarted. We've seen NFS begin activities such as benchmarking several other facilities in areas needing improvement and in safety culture. They have also brought in a new manager of highly enriched uranium operations who brings significant naval nuclear experience.

NFS has also joined INPO now and has INPO tools available for their use and their program improvements. NFS management has committed to make a number of improvements in all the areas that we had identified and

certainly the ones they had. It's not been a long time and we've actually seen improvements in the past that have not been sustained, so we are looking forward to, obviously, to a sustained level of performance, while we're glad to see in the last seven months that their efforts appear at least initially to be paying off.

Slide 7. So what are we doing next as we continue to implement an enhanced NRC oversight program? Our next steps were discussed at the AARM with the senior managers. They really focused on all of the areas that we've just been talking about. We're going to follow very closely the implementation of the confirmatory order in all of its specifications. We've brought together an oversight panel to do this at least quarterly, I believe. We've got branch chief level membership from NMSS. I believe that's their Region II.

So we're going to provide input to the corrective actions that are being proposed by NFS. We're going to oversee an improved staff assessment of NFS's proposed safety culture evaluation process. We're going to meet periodically with NFS, as we have been actually, to review the progress on improvements, and when appropriate recommend NRC management closure of the order as those issues are identified.

We've actually, in establishing the panel, laid out closure criteria that will help guide that panel as they review the actions and activities that are required by the confirmatory order.

COMMISSIONER MERRIFIELD: Mr. Chairman. Another clarification that goes part to Slide 7 and part to Slide 5. You mentioned earlier that the list of actions that you've taken – the enhanced oversight, the management meetings, escalated enforcement and whatnot, are information that we have not revealed publicly because of an agreement that we have with

the Navy under the auspices of DOE.

I don't understand that. Why is that the case? What about this is Official Use Only that we're taking these – I get it that the processes obviously are things that we need to ensure aren't disclosed. I don't think it's a national secret that NFS provides fuel services to the Navy. So what justifies the use of Official Use Only regarding our process? I hope someone can explain it to me because as a Commissioner I think that goes against the openness policies that we have in our strategic plan.

MR. WEBER: I'll attempt to, but you'll be the final judge of how responsive I am. And I'd start out by saying we are reconsidering this. We had a conference call with Naval Reactors two weeks ago now and the bottom line from that discussion is we both agreed we need to go back and look at how we've been implementing this policy. Back in 2004, Naval Reactors raised concerns with the staff because there were security issues that arose based on an analysis that they did where they looked at what was publicly available and put it together in such a way that it could reveal vulnerabilities.

That resulted in our exchange meetings with the Department of Energy and ultimately it led to the 2004 letter, which we in turn incorporated in our internal guidance on how are we going to protect this information, basically, answering your question, designating the material as Official Use Only. That was so broad as to encompass just about everything we had on not only this licensee, but another licensee.

Now when you look at it, I had the same reaction as you did. When you looked at the slides you said, well, what's sensitive in this information? We're not disclosing insights that could be useful or exploitable, and we're not disclosing other information.

COMMISSIONER MERRIFIELD: I was here – both Ed and I were

here, and I had multiple phone calls with Steve Troutman on this issue dating back to 2004. And I got it at the time. There was security stuff that we had that was available on the web site, and we all sort of were running to the door to make sure we fixed it. I never, ever would have conceptualized that it would have gotten to this point, where the totality of our process has gotten some cloak over it. And I don't think that was what – and I don't want to speak for Steve, but I don't think that was what they were asking for at the time, either. At least that wasn't my interpretation.

So I would encourage strong review of this.

COMMISSIONER JACZKO: If I could just add on, that particular letter in 2004 specifically excepts or exempts, whatever – I've never yet determined which is the right word – the blue process. So I think this is more a question of it's not an issue of our agreement with NFS, it's more a question of our implementation of that, that we have been inappropriately withholding information that according to the agreement was not intended to be withheld.

But I think hopefully we will get that clarified as we move forward.

COMMISSIONER McGAFFIGAN: I agree with Commissioner Merrifield and I didn't know there was an exemption for the blue process. We have licensed the blue process in the open, and once it's licensed it goes into the dark. I think most of this could be easily handled. The chart that shows the actual building and criticality, maybe that needs to be left out. The fact that we were on this, we were on this from day one, that we were aggressive, that we've done this sort of thing, I think it's a good story and we're going to tell it now when Congressmen are sort of demanding why didn't we know about this before.

It would have been better I think for everybody to sort of see the normal NRC process used at this facility.

You also mentioned safeguards issues or security issues, and that up to this meeting those are different incidents. But we could talk about those at some point maybe in a way that most of this transcript wouldn't have to be redacted. That part would have to be redacted, but that's a separate story.

But I remember the blue licensing process was a long process, longer than many wanted. It was thorough, and then it goes into the dark when we start enforcing something, a criticality issue. That doesn't make sense to me.

CHAIRMAN KLEIN: What's your schedule for having this reevaluated?

MR. WEBER: Based on the conference call, we're owed some information from Naval Reactors. Once we get that, we will work with our partner offices in NSIR and OGC. And I'm expecting we're going to move out fast on this, like in a matter of weeks, not months, years, because I think as the Commission is communicating, the staff had a very similar question when we looked at our strategic plan back when this whole issue unfolded back in 2004, and said: Well, this isn't right; why are incident notifications not even being made public?

But it's important to point out there's three parties here. There's ourselves, there's the Department of Energy, and then there's the licensee. And one of the critical pieces that we have asked for is what guidance has DOE provided to its contractor, the licensee, because in part what the staff does is reflect the designation of the material that comes in from the licensee, and if the licensee believes they're faithfully implementing the guidance that they've received from the Department, then our issue is with the Department, not with the licensee.

So I think we all have to come together and reach a common

course.

COMMISSIONER MERRIFIELD: I'm going to wag my finger. If you guys thought in 2004 you had some questions about this, lesson learned, you should have raised that to the Commission. I can't imagine going back to 2004 –

MR. WEBER: I think we did.

COMMISSIONER McGAFFIGAN: We don't want any security information out there that's going to help a terrorist. That's entirely separate from dealing with the criticality event.

MR. REYES: I think it's an implementation issue. I don't think – the Commission feedback and all, I think we need to take a hard look at how do we translate that direction into the actual mechanics. My guess would be, I'll venture to say that's probably where we need to make the correction.

MR. WEBER: Correct.

MR. REYES: Because I think – with all the discussion, I don't want to repeat it. But I don't think we're on different pages on this. We just need to get ourselves back. The pendulum maybe swung too far. We want to make sure we don't go the other way, but we need to come back to some reasonable middle point.

CHAIRMAN KLEIN: But there are going to be checks and balances.

MR. REYES: Correct.

CHAIRMAN KLEIN: Before things go public, that it's verified that there's no inappropriate information released.

MR. REYES: We have the mechanisms to do that.

COMMISSIONER McGAFFIGAN: When this comes out, now – it's been out in the abnormal occurrence report, but when we have a public meeting, which probably we should, at some point out there on the part of this

that is not sensitive, and say this is what's been going on, there are going to be a few people who are going to say, sorry, I wish I had known this before.

MR. REYES: We do have public meetings with NFS when we do their evaluation of their performance.

COMMISSIONER McGAFFIGAN: Has this come up, criticality?

MR. REYES: There are parts of the meeting that are open and parts of the meetings that are closed. But I don't want you to think we don't do anything out there. In fact, some of the criticisms that we had was an inspection report that was out there, and that's where you could gather from that information from those documents.

MR. WEBER: And when we made the change in 2004, there was not a large outcry from the community saying: Hey, we've been getting all this information, how come you don't have it any more?

MR. REYES: In my previous position, I held open meetings at NFS Erwin and in the audience was the local chief of police and the local citizens and the external public interest groups that drove in. I have been there. So we do have open meetings at the facility, but their sessions are actually closed.

CHAIRMAN KLEIN: My guess is what happened was after 9-11 the pendulum swung a little bit too far and we need to bring it back into a reasonable implementation of the process. And I think you probably gather we'd like that sooner rather than later.

MR. REYES: I think we're together on that goal.

CHAIRMAN KLEIN: Any comments?

MR. REYES: Do you have any questions for the staff?

COMMISSIONER JACZKO: Just a brief question on the order, on the safety culture program. Are there aspects of that that are permanent, the safety culture program?

MR. TRAVERS: We hope so. But it's a process. It requires very specific things, like we've just received information on their independent proof of experts.

COMMISSIONER JACZKO: So I guess those aspects, will any of those things be permanent in that sense, that they have an independent group?

MR. TRAVERS: They're probably going to be talking about this. But we expect that they will take the information that they gather from their assessment, incorporating those insights into their programs to address the root cause of some of the issues that have been plaguing them over the years.

But we hope to sunset the order in the specifics and get out from under it and make it a very succinct –

COMMISSIONER JACZKO: So there isn't a requirement that they have to every five years do a safety culture survey or something to that effect?

MR. TRAVERS: There is a requirement for another one, I think it's within two years.

COMMISSIONER JACZKO: But not after that.

MR. REYES: Not for the life of the facility. Hopefully, they'll incorporate the intelligence from the surveys and enhance their programs, and I think they'll want to brief you on that.

MR. TRAVERS: And as Mike Weber indicated this morning, the staff more broadly for the fuel cycle facilities is embarking on an effort to see if we can learn from the reactor side of the house. And we're going to use two fuel cycle facilities at the outset in this pilot to see how safety culture might become more embedded in our infrastructure of oversight.

COMMISSIONER McGAFFIGAN: Which two?

MR. TRAVERS: I haven't – we haven't selected them.

MR. WEBER: We're still working with the licensees.

COMMISSIONER JACZKO: So the staff is comfortable that there's enough in the order right now that the safety culture changes that the order is expecting will be permanent and that we won't find ourselves in six years back here again looking at safety culture problems and then going back and reinstituting a program where we do surveys, where we do –

MR. TRAVERS: I don't guarantee anything, but the expectation is, as I mentioned, is that once you go through a process like this you learn from it, you incorporate it, institutionalize it in your program, and carry it forward. I think that's our intent.

CHAIRMAN KLEIN: Commissioner Lyons, any questions for the staff?

COMMISSIONER LYONS: I'll wait for NFS.

CHAIRMAN KLEIN: Okay. Thank you, and we'll hear from NFS.

(Pause.)

CHAIRMAN KLEIN: I think we're now ready to hear from NFS, so if you'd like to begin.

MR. FERGUSON: Well, thank you. I believe all of the titles and everything are in the information that you provided.

Let me say this, that we are very happy to be here to explain where we are today and where we're going and our commitment to excellence at this facility. And without further ado, I'm going to turn the main part of our program over to Tim Lindstrom, who's our Executive Vice President of Highly Enriched Uranium Operations. And he's going to go through the presentation, and then we can proceed from there. So Tim.

MR. LINDSTROM: Thank you, Dwight.

I would have to take exception with Dwight's happiness at being here. We at NFS have found our performance as described by the staff as

unacceptable in the past, and I think that Mr. Travers did a good job in describing the short-term actions that were taken in response to the violations in the event that we had the spill.

I want to focus on what we found company-wide to be perhaps our longer term issues and what we're doing to solve those longer-term issues. I think we had what we found were three fundamental issues at NFS. The first of those is we were focused on compliance. Our goal was compliance. And if you – if you meet your goal 99.99 percent of the time, that very small percentage that you miss your goal you're in violation. We need to focus on excellence beyond compliance, and I'll talk about some of the things that we've done to take our focus beyond compliance.

It was mentioned here that we don't want to be back here in five years. We need to focus on sustained execution. We have a track record in the company of fixing problems and moving on and then having that problem recur. We need to find ways to institutionalize our fixes, to make those fixes longer. And again, I'll talk to some of our programs to do that.

Then finally, you know, the big topic here this morning was one that we think is a problem for us, and that's we do have insular tendencies. Our main product is classified. Our main customer is classified. We're one of two category 1 special nuclear material facilities commercially in the country, and that causes security issues for us. So we are not in touch with the rest of the nuclear industry as much as we should be. We don't share the best practices that we might share with those folks because of those, because of those issues.

So I want to address, focusing on excellence first, and I think fundamentally NFS management has made a commitment to excellence. We've made several organizational changes that highlight that commitment. My position is Executive Vice President of Highly Enriched Uranium Operations is

the first time that we've brought together under one manager all of our HEU operators. We've brought the downblending facility along with naval fuel and our waste water facility all under one common, high standard. This allows me the ability to enforce that standard across the company.

We've also instituted two new Departments within our company, one for configuration management and one for human performance. Both are areas that we think we had fundamental gaps in and both are areas that we think we need the commitment to excellence, the commitment of resources to change.

Across the company, we have instituted better accountability. From our labor force through our supervisors and our technical and professional folks, we're looking at ways to provide our expectations and then hold our folks accountable to those expectations. An example might be in our professional ranks we have instituted performance agreements in lieu of performance evaluations in holding people accountable to meet those technical agreements.

Then finally, one of the things that we've learned from our primary customer, Naval Reactors, is we have taken our core values from that organization and we have focused on the core value of formality and discipline throughout the company. We have highlighted that to all of our employees, and additionally we have taken steps to focus on formality and discipline across a wide range of areas, certainly in procedural compliance and in operator performance, but also in things like plant appearance and housekeeping we have tried to raise the standard, and I think we have dramatically raised the standard, to give the employees that sense of working for a very professional and excellent organization.

To address our issue with sustained execution, we've formed a leadership team made up of the very senior vice presidents within the company:

myself in operations, Marie Moore in safety, our site services vice president, finance vice president, and human resources. This team is putting together a safety culture strategic plan with objectives and metrics that we can use to assess our performance and modify the plan, but make sure that we are meeting the program objectives in all areas.

Additionally, in designing and in making major modifications to our processes we found that we were not putting safety first, and so we revamped our design and startup process to put in stakeholder identification and input very early in the process. Through our engineering tollgate process, our operational readiness reviews, and our validation and verification, we found that our modifications and new process startups have been much smoother and trouble-free.

Then to help eliminate our insular tendencies, we've embarked on a benchmarking program. Certainly the primary element is – was brought forth by NFS in the ADR process. We proposed a safety culture board of advisers to do an assessment, and we think that that independent and very knowledgeable, very experienced group is going to really be the hallmark in the next couple of years in providing input to us on industry best practices and where we're not meeting them, what gaps we have.

We've also taken other steps. We've joined INPO as a supplier participant and we think we're going to get a lot of value out of that association. We have done targeted benchmarking with both the nuclear power utilities, with nuclear materials facilities, and other chemical companies in the corrective action programs, in configuration management, and in safety culture and human performance in general. But as was pointed out, we don't want to be back here in five years. This is not a one-time shot. We're institutionalizing that benchmarking process through our self-assessment program and we'll cause

ourselves to do that on a periodic basis regardless of our performance.

COMMISSIONER McGAFFIGAN: Has the safety culture board of advisers – is it in place now?

MR. LINDSTROM: Yes, they've had several meetings. They have developed a work plan which has been shared with the staff, and in fact we have a meeting with several members of the board and your staff this afternoon to kind of go over that plan before conducting the assessment.

I'd like to talk briefly about some of the major programs that we have in place as parts of that strategic plan. The first of these is a safety-conscious and compliance work environment. Fundamentally, this is an awareness and a communication program to ensure that our employees understand our priorities, and certainly safety is our number one priority. They need to hear that and they need to hear it constantly.

We also need to reinforce that with the decisions made on the floor by our supervisors, by our employees, and by our managers. And we're doing that through incentive programs and also in reforming our disciplinary action program so that we don't appear retaliatory, but in fact we invite reporting problems, we invite people to bring in problems to management for correction.

The second area that we think needed major modification was our configuration management program. We completed a horizontal and vertical audit after our spill in last March and made any necessary short-term corrective actions based on that horizontal and vertical audit. But we also established an oversight board of senior technical people and managers as an interim measure to get us to a point to implement an industry standard.

We are implementing that standard as a result of the confirmatory order that came out of the ADR process, and we have begun implementation of an electronic software package that will aid in implementing that standard.

In the area of a corrective action program, we think we have a good tool. We need to learn all the capabilities and use that tool correctly. We've been focusing on entry of all problems, no matter how small, into that program. And we've seen some very positive trends. The rate of reporting has gone up and our assessment of the severity of the problem has actually gone down. We're seeing more smaller problems identified and that's exactly what we'd like to see.

We've also begun identifying precursors and near misses. That program has been going well. We try to treat those just as we would an event with consequences and take appropriate action. We're working on enhanced employee feedback so that each employee understands the corrective action that was taken on issues that were reported in their area, not just that they reported, but kind of area-wide.

We're also developing more relevant metrics from our program that can be used in our self-assessment program to help managers understand what's relevant to them and what they need to do to correct it. Our post-event procedures are in revision to better and more quickly gather the facts of an event and rapidly develop corrective action, and we're planning on implementing a lessons learned program to get plant experience, both our own and relevant industry experience, into the right hands at the right time.

In our benchmarking efforts, one of the areas that we found we were completely lacking was in human performance. We did not have a human performance program per se, although some of the tenets were incorporated in some of the functional areas. So we made an organizational change to have a human performance manager, and we are beginning to develop a human performance program. However, we have instituted some elements of that program already. We're training our supervisors in the DuPont STOP, Safety

Behavior Observation Program. And we've also selected from the INPO tool list a couple of human performance tools and have implemented them plant-wide.

COMMISSIONER MERRIFIELD: Can I just for a clarification?

MR. LINDSTROM: Certainly.

COMMISSIONER MERRIFIELD: The staff will probably smile because I always ask about acronyms, but I'm familiar with the STAR program, Stop, Think, Act, Review, or Assess, Review. What is "STOP"?

MR. LINDSTROM: STOP is a Dupont-trademarked program – Safety, Training, Observation Program. It is designed to train someone to do an observation, observe any safety-related deficiencies, and then feed that back immediately to the employee in a kind of a confidential manner to correct the behavior, but also to develop trust in the manager or the supervisor-employee relationship.

So we have begun the first steps of implementing a human performance program.

In the area of procedural compliance, we found that we had several elements of our program in need of revision. We need to incorporate human factors training and compliance monitoring into our assessment programs. Many of our procedures were not user-friendly, and we need to simplify and put into the employees' hands procedures that they can use, that actually have human performance enhancements embedded into them.

But we've done this in some of our most critical procedures, where we have what we call a safe-to-unsafe geometry transition, and those revised procedures have been very well received and have been relatively error-free.

We need to expand that to the rest of the plant. We need to get all of our standard operating procedures into a format that is easy for the operators to understand and comply with. We also have to develop a philosophy and a

procedure writing guide for our technical folks who write procedures, so that this can be carried forward without the expense of a separate contractor coming in to write those procedures.

MR. FERGUSON: We did benchmark this as well.

MR. LINDSTROM: And then finally, one of the things that we found was that while we could correct a problem, we could do a corrective action and implement that corrective action, we did not have a good program of self-assessment where we would look broadly at the indicators that we had, either the problems that had been identified or the NRC inspections, and try to become more predictive, try to put our resources in areas where we might see problems in the future and thereby prevent those problems.

We have done a pilot self-assessment in our naval fuel area. It received very positive customer feedback and we're now in the process of implementing that self-assessment program company-wide.

I'll just finish up by saying that we certainly agree with the NRC's assessment of our past performance. We are appreciative of the staff's involvement in our efforts to correct ourselves, but fundamentally it is an NFS issue. NFS takes ownership for our performance, and I think you will see us continue to improve in the future.

Dwight, do you want to?

MR. FERGUSON: I might say, gentlemen, back in the March-April time frame when we had meetings with you all, I committed when I went back in as President of NFS that if it didn't improve I would resign. And so you've got my personal commitment that this company is moving forward. Where we were was unacceptable, and we're going to continue this and drive it to the point of excellence that Tim has talked about here today.

CHAIRMAN KLEIN: Well, thank you.

Since this is a continuation of our morning meeting, we'll start with Commissioner Jaczko.

COMMISSIONER JACZKO: Just one comment I want to make and then I'll probably ask a similar question to what I asked the staff. The one bullet I guess that I'm somewhat troubled by I guess is the first bullet that you led off with, about focus on excellence beyond compliance. Perhaps you could just ease my mind a little bit by explaining that you don't see these problems as being a problem of not meeting excellence, but this was fundamentally a compliance issue. So we're not in the beyond compliance space here.

MR. LINDSTROM: No, not at all.

COMMISSIONER JACZKO: I mean, I don't want to discourage you from seeking excellence certainly, but I just want to make sure that you recognize that there were violations.

MR. LINDSTROM: Oh, absolutely. And we have found in several of our violations that our operators, supervisors, or managers were trying to find ways within the compliance space to achieve an objective, rather than stepping back and saying, what's the right thing to do here? What is the most safe thing to do here? Let's avoid the problem altogether. They weren't taking the excellence approach; they were taking the compliant approach.

At times they would try to find shortcuts within the compliance space that wound up being noncompliant.

COMMISSIONER JACZKO: Yes, and I guess that's – I guess this is troubling me to some extent, several ways, I guess. One, I'm not sure what you mean maybe by that last statement about what – when you say that they were doing something that was in compliance space, but not in excellence space. Are you talking about compliance with NRC regulations or compliance with –

MR. LINDSTROM: Compliance with NFS company procedures.

Particularly our operators comply with our procedures.

COMMISSIONER JACZKO: So there's a gap there between your procedures ultimately then and regulatory compliance.

MR. LINDSTROM: Exactly.

COMMISSIONER JACZKO: Okay. That helps me understand that better.

COMMISSIONER MERRIFIELD: Maybe I'm confused now. You're saying your company compliance was under the NRC compliance requirements?

MR. LINDSTROM: No.

COMMISSIONER MERRIFIELD: Okay.

MR. LINDSTROM: Our rules are written to comply with NRC requirements. They at times allow some latitude for the operators. Our operators would find a way within their judgment to be compliant with our rules.

MS. MOORE: What they thought was compliant with our rules.

MR. LINDSTROM: What they thought was compliant with our rules.

COMMISSIONER JACZKO: Which we're all clear was not compliant.

MR. LINDSTROM: Which was not compliant.

COMMISSIONER JACZKO: With NRC regulations.

MR. LINDSTROM: Exactly.

MS. MOORE: Or with our procedures.

MR. NAGY: In some cases it is, in some cases it isn't. But the point is that you need to have focus on excellence. You need to be doing things the best way we can do them. This is for business purposes as well as for safety purposes. Compliance is a given. It should underlie that.

MS. MOORE: You should always be compliant.

MR. NAGY: There's sort of a higher calling. We don't want to train our employees, what we want you to do here is to just be compliant.

MS. MOORE: Just meet the bare minimum compliance.

MR. NAGY: That's the standard.

MS. MOORE: We want to be beyond that.

MR. NAGY: We're going to bring that perspective to anything we do, and that all is encompassed within compliance.

MR. FERGUSON: Let's take a practical example. The last thing we talked about was procedures, and of course the more difficult those procedures are, you're attempting to comply. But you can have issues because of the complexity, or the lack of discipline, where perhaps there ought to be in-use procedures. We've benchmarked that to what we felt like was a level – in fact, Bob Bernaro assisted us in that benchmarking – where we felt like we had a model that we could go by that would get us above where we were.

Then incorporating the human performance position that we're currently trying to recruit is going to further enhance that. So it's a matter of saying, well, we're down here and we aren't complying or attempting to comply, but we could be up here at a matter of excellence, and you look at that in terms of configuration control as well, where we've joined the configuration – the Institute of Configuration Management, we are implementing ED Nuclear software that has a whole lot of protocols in it that help enforce all of that kind of thing.

So that's what's meant by trying to achieve excellence, is you're getting the level up so much higher that compliance is never an issue because you're way above it.

COMMISSIONER McGAFFIGAN: But to use the reactor space as regulatory margin, you start having huge regulatory margin.

MR FERGUSON: Yes, That's what we're trying to achieve here.

COMMISSIONER JACZKO: I don't want anyone to think that I'm not supporting your striving for excellence, but to make clear when we're talking about compliance that we're not talking about unsafe activities, and there's a bit of confusion I think there about the use of the word "compliance" and that there were activities that were going on that were compliant, but yet those turned out to not be safe from an NRC regulatory perspective.

MR. NAGY: Well, communications is a very good one, and working within the corrective action program and making sure that people are aware enough, but also communicating enough, and they get feedback and all these things, you won't find anything in the rules, in the compliance space, that says: Thou must have feedback to an employee within X amount of time. There's nothing there.

If we focused on whether that we were compliant in that program, we'd never have a good program. What we want to do is focus on excellence in that program, and then that does involve getting employees feedback and making sure that they feel part of the process and understand what's happening. That is a good example, probably better than maybe some others, where the compliance base is not a complete base unto itself. It is simply a base, from which you build excellence or not, and we need to make sure we're building excellence in all of these different program areas, whether it be training, development of procedures, corrective actions programs, our engineering configuration management, et. cetera.

That needs to be our standard.

MR. FERGUSON: And we talked about formality and discipline. And one of the things that was mentioned was housekeeping. If you've got people focused on keeping things, everybody, all your uniforms, getting all your

uniforms for the guards, so that people are taking a pride when they come in to work and they've got new clothing, improvement in their locker rooms, if they take a sense of pride in what they're doing, because I think that really carries over if you've got a clean, well-organized facility it carries over into the work that's being done and having people comply with procedures.

I think perhaps sometimes it might be difficult for somebody to go into a locker room that's jumbled and a mess and all of a sudden perfection is expected once they cross the threshold. We need to make sure that that threshold is crossed the moment they enter that plant. There's a number of simple things like that as well.

COMMISSIONER JACZKO: As I said, I'm trying not to discourage you from excellence, more just to make sure we have – we certainly from a regulatory perspective have the right compliance levels, too, and that we're establishing the right benchmarks.

The last question I would just ask is similar to what I asked the staff, and that is, you talked about essentially the bulk of the safety culture aspects will be institutionalized via your self-assessment program, and you talked about that a little bit in your presentation. But maybe you could just go into a little bit more detail about how that, how that program will be functioning five years from now or ten years from now, and what commitments we have or can get right now that we won't be back here in ten years talking about a self-assessment program that you terminated for budgetary reasons or other aspects?

MR. LINDSTROM: We've taken several self-assessment program models both from INPO and from Naval Reactors, and designed a program where we look at, each functional manager looks at their own data, which might include observations, personal observations, senior management observations,

audits or compliance type inspections, NRC inspections, customer feedback where appropriate, and then looks at the data that they have and whatever metrics are appropriate in the relevant areas of performance for that manager. Certainly safety will be relevant for all the managers, but in the naval fuel it might be contract compliance. It might be another area that might be relevant.

They do that self-assessment, they look at where their weak areas are and what they need to do as a manager to improve in those areas. We're going to have quarterly reviews at the CEO level with each of the functional managers to look at how they did the assessment, because we're new at this and we don't think everybody will get it right the first time, and we do have some significant experience in self-assessment within the company now, and then to see that they are moving in the right direction in their corrective action.

We've institutionalized that via our procedure, and so that procedure will be available for your staff to look at and comment on, sir.

COMMISSIONER JACZKO: Thank you.

CHAIRMAN KLEIN: Commissioner Lyons.

COMMISSIONER LYONS: Well, I very much appreciated the personal comment from you, Dwight, and I appreciated, Tim, your going through the list of improvement initiatives that you're undertaking. It did strike me in listening to the list of improvements that it's very much a work in progress and certainly both for you and for us the proof is going to be in the execution of those, which suggests to me that both you and we need to continue to stay focused on that.

I had particular questions about the advisory board that you brought in.

MR. LINDSTROM: Certainly.

COMMISSIONER LYONS: The Safety Culture Board of Advisers.

Certainly, a few of those names are well known. They all seem to have excellent credentials. But it struck me that the extent to which that group can really help you will depend a great deal on the level of flexibility that you're giving to that board, their freedom to go anywhere, ask anything. Can you talk to that a little bit?

MR. LINDSTROM: Yes, absolutely. We've certainly made a commitment to the board and to the NRC that they are available to go anywhere and talk to anyone. We actually sat down with our union leadership with several members of the board there and had a discussion about what the board would do in their process, and as a form of communication, to make sure that the union leadership and union membership didn't feel threatened by this activity at all. We are in the process of obtaining security clearances for all the members of the board so that they are able to go into the plant unencumbered with escorts and that type of thing.

We have made communications with all our employees that they are to be just as open with those folks as they possibly can. We don't intend to oversee their activities individually. If they're doing an interview, if they're doing a document review, it is the board doing that, not the board with NFS management next to them.

All of the interview results will be confidential to the board. They'll aggregate the results, but there will be no information that's attributable to an individual employee. We feel very strongly that the board needs to have the trust of all the employees in doing its work, and I think we've communicated that to our employees and will continue to communicate that.

COMMISSIONER LYONS: You mentioned the need for clearances, and that also came through in some of the material that we had to read. Are there mechanisms to expedite clearances? NR could certainly help on that.

Are those clearances being expedited for those cases where you need them?

MR. LINDSTROM: Yes and yes. We have assurances from NR that they're working those through their system as rapidly as possible. But they're certainly not at a standstill without those clearances. As we talked about here earlier, our downblending facility is available to them to tour right now, and they can certainly talk to anybody in the company. So they're planning to proceed and do the stuff that has to be done in the classified facility at the end of their work.

COMMISSIONER LYONS: Has there been any thought to perhaps setting up a mechanism by which employees can interact with members of that board outside the work setting if for any reason they're uncomfortable doing it within the work setting?

MR. LINDSTROM: We have not, but that's a good idea. We'll talk to that.

COMMISSIONER LYONS: Some sort of open door policy outside the work setting might be, might be conducive to getting additional information.

MR. LINDSTROM: We appreciate that.

MR. FERGUSON: That's a good idea.

MR. NAGY: It does bring up the point, though, that the board is self-directed, and so the assessment plan that we passed along to NRC is their plan. It's not the product of our management with their consulting. It's their product, which we saw, and I believe without a single change, passed on to NRC under their cover letter. So they're quite independent.

That doesn't mean we can't suggest – and we will certainly suggest – anything that you would recommend. I just wanted to make that point at this moment.

COMMISSIONER LYONS: The only other thought or suggestion I

might make, or question, I don't know in the details, but you certainly had a significant strike duration. You had some personnel brought in to work during that strike. A number of management personnel I believe were involved. It strikes me that it could be very useful for that advisory board to have access to the full range of personnel, both – I don't know if it's fair to say strikers and non-strikers. I don't know what the correct way of describing the different –

MR. LINDSTROM: All of our returning workers will be back by June 11th. So everyone who's going to be working in the plant is going to be in the plant, and all of our replacement workers that we hired are still employees and are available.

COMMISSIONER LYONS: So it's not like the replacement workers left and are no longer –

MR. LINDSTROM: Exactly, correct.

COMMISSIONER LYONS: I was just hoping that the board would have access to both.

MR. LINDSTROM: Absolutely.

COMMISSIONER LYONS: The regular work force and the replacement workers, because I can well imagine that the replacement workers coming into an unfamiliar situation may have insights that might not have been as apparent to the workers who had been in the same situation for several years.

MR. LINDSTROM: The vast majority of the replacement workers were our own salaried employees, who we retrained. I think there were –

MR. FERGUSON: We only actually had 15 from the outside, and we had about 23 that crossed the line. And of course, we had more that we could bring in if they had not come back.

But I think one of the real advantages if you had to go through

something like that is we had our whole salaried – not our whole – a large percentage of our salaried work force out on the floor doing things that they couldn't do before, and we spent a lot of time trying to capture information, particularly in terms of looking at Lean Sigma and that kind of thing as to what it really took to be able to do a job. So we – our yields went up. We've been able to maintain that with the returning work force.

But there was a lot of experience gained and a lot of input as to how we can improve what we're doing as a result of the salaried work force being there and doing those jobs.

COMMISSIONER LYONS: I very much appreciate your answers. I think that this board of advisers can be extremely useful to you. I appreciate that they have full access, and it strikes me that that will be a very important tool to you as management in getting NFS where you want it to be. Thank you.

CHAIRMAN KLEIN: One of the aspects that's very important, you mentioned you were isolated and so that you tended not to go out and look at others. I think that's what I'd observed with INPO for a number of years, that those utilities that don't go out and see how others do, you end up not having as much vision. So how often do you go out on INPO teams?

MR. LINDSTROM: We're not yet part of – we're a supplier participant and we don't go out on the inspections per se. We have some limitations there. John, do you want to talk to that?

MR. NAGY: Yes. It's different type of membership in INPO. It's one where some of the fuel cycle facilities are involved. There's also companies such as PBMR out of South Africa that is a supplier participant. But we're not able to have the assessments or right now participate in those. But we are privy to the protocols and we also get to sit at the table when we have these large meetings and start getting involved.

There's a lot of knowledge-sharing and such.

COMMISSIONER MERRIFIELD: That's not quite accurate. That's not quite accurate.

MR. NAGY: We're new members.

COMMISSIONER MERRIFIELD: I had a long dialogue with Honeywell. Honeywell had a number of problems at their facility in Metropolis, Illinois, and I had engendered a dialogue between Nancy Dicciani, who's the President of Honeywell Specialty Chemicals, and Jim Ellis. And in fact, Honeywell has in fact received assist visits from INPO to conduct evaluations of their processes, and that may be – that may not – you may not have had that yet.

MR. NAGY: We can make a request and if they can support it they will entertain those requests, but we're not part of the basic approach.

COMMISSIONER MERRIFIELD: I would – let me just finish the sentence. As I suggested to Nancy Dicciani, that I thought there was value in that, I would suggest that having INPO assist in visits along the lines of what they did at Honeywell would be of assistance to you as well.

MR. LINDSTROM: They will come in and do assisted visits in specific areas. I think what John was mentioning was that they don't come in and do the site-wide inspection like they do with the reactor plant. We do intend to have them come in, or at least request that they come in, in some of our targeted areas – configuration management, human performance, our corrective action program – and then, based on the Safety Culture Board of Advisers, there may be other areas that we want to have them look into.

MR. NAGY: They may change, too, because one of the things that I wanted to do was be able to put people on the teams that went to the power plants to do assessments, because I think that would have great value, if there

were people from our facilities going out and being on those teams at that point. They can't do that right now.

CHAIRMAN KLEIN: My expectation would be that you should be fairly aggressive on going out and looking at other facilities on those INPO teams, as well as have INPO come in to your site, because you will get additional information. I think your comment about how people feel when they see the physical plant – I haven't been to NFS, but I have been to Y-12, and that's not where you want to be on a Y-12 type plant. So I think if you go out and you look at facilities like the commercial nuclear power industry, I think you would establish an expectation of where you need to be as a corporation and have the kind of facilities that would match that.

I have a technical question. Had the amount of material you spilled stayed in the size of the glove box, would it have gone critical?

MR. LINDSTROM: Jack, do you want to?

MR. NAGY: I believe the answer is no.

MR. FERGUSON: My understanding is there was not enough material for it to go critical.

MR. NAGY: Not in the conditions given that were physically present. That is not to take away from the fact that it was a near miss and all these other things do apply.

CHAIRMAN KLEIN: Because criticalities are devastating. I mean, if you would have had – and the kind of materials that you deal with lend themselves to the kinds of accidents that you will not typically see in a commercial plant.

MR. NAGY: But we weren't in control of the amount of material that went there either, and we understand that fully. We were not in control of the situation and therein lies the fundamental problem. Fortunately, safety controls

in place did work and those things.

MR FERGUSON: But it was uncontrolled.

MR. NAGY: But it was uncontrolled.

MR. FERGUSON: We had not released it for use, and I think one of the difficulties there, well, it could if somebody put something in it that would have blocked those drains. And then the fact, well, there wasn't enough material – well, there could have been.

CHAIRMAN KLEIN: Being lucky doesn't –

MR. FERGUSON: Being lucky doesn't get it.

MR. NAGY: Right, exactly. That's why we're in great agreement with NRC staff on this, and rightly said in the earlier comments about the ADR process not being a dispute resolution as much as just a resolution, to get together and make sure we were all on the same page as to how we went forward. It was an excellent process and we're very much in agreement with the outcome of that process.

CHAIRMAN KLEIN: What's your schedule to have reduced oversight from the NRC? When do you expect to be sufficient enough that you will not require?

MR. LINSTROM: I certainly don't want to be sitting at this table next year.

CHAIRMAN KLEIN: Do you have a –

MR. FERGUSON: My feeling is that from your standpoint I doubt that that can occur any faster than '09.

CHAIRMAN KLEIN: So do you have a schedule with milestones and deliverables that make it very clear what your performance will be to get out of that extra monitoring?

MR NAGY: No, I don't believe we have any such expectations.

MR. FERGUSON: And some of that will come with the gap analysis that we get out of our SCBA report.

NAGY: But I mean, if you're asking about NRC's oversight –

CHAIRMAN KLEIN: No, I'm asking you do you have a schedule with milestones and deliverables that will guarantee in a timely manner getting out of the NRC oversight, extra oversight?

MR. FERGUSON: No, sir, we haven't. We're not really to that point yet.

MS. MOORE: We have just started those discussions and it is our belief that it's a two-year process, but we have not put together schedules yet.

CHAIRMAN KLEIN: And when will you have that schedule?

MS. MOORE: We could have that schedule developed quickly.

CHAIRMAN KLEIN: I would recommend that you have a plan with milestones and deliverables that will get you out of the increased oversight.

MR. FERGUSON: I would look and think that the SCBA group, with the gap analysis that they will do, would get us a broader picture that needs to be incorporated into something like that.

MR. LINDSTROM: But I think, absent their look, we certainly have our own thoughts as to where our gaps are and things that we need to work on, which we've talked about here. We do have milestones and deliverables in each of these areas. We just haven't integrated them into how that relates to NRC oversight and where we think we ought to be relative to that oversight.

CHAIRMAN KLEIN: This should be your schedule, your expectations of when you expect to be out of that, not the safety board, not the NRC. This should be yours.

MR. LINDSTROM: Right.

CHAIRMAN KLEIN: Commissioner McGaffigan.

COMMISSIONER MERRIFIELD: Mr. Chairman, in light of the hour I'm not going to ask any questions, except to follow up on your comment. Ultimately, it's Bill Travers and the Region II. I mean, I agree that they can put together plans and they should talk to Bill about them. I've seen these things take a long time in reactor space to get out from under NRC scrutiny, and we're going to be skeptical.

By all means, you should have plans, and we'll have plans to observe you, and we'll see how long it takes, and it'll take whatever time it takes.

Thank you.

CHAIRMAN KLEIN: Yes, I didn't mean you would successful, but I just expected that you would have one.

Commissioner Merrifield.

COMMISSIONER MERRIFIELD: Well, I appreciate the time put into the review. On its face, it looks to me like you at least put together a plan that puts you in a position of resolving these issues, and the matter really is implementation and making it all happen, and that's a story that has yet to be told.

A couple of follow-up questions. One relates to the committee that you come up with. I know – is that, that group that you have – I agree with Pete Lyons, you've got a pretty good group of people who are on that. What is the expected duration of that particular group? How long do you expect them to be around?

MR. LINDSTROM: They are commissioned to complete an assessment I believe in the fall of this year, November; November; and then to conduct a follow-on assessment.

MR. NAGY: 24 months later, I think.

MR. LINDSTROM: What is it? Two years hence.

MR. NAGY: So about a 36-month term.

MR. LINDSTROM: Our board of directors actually passed a resolution that commissioned those folks to stay with us for 18 months, with a sunset clause. My expectation would be that we would extend that. I think they're a good group to have around in an advisory role if they're not in an assessment role. But the real, the hard milestones that we have now are the assessment due out in November and the follow-on in 24 months.

MR. FERGUSON: Another thing that wasn't perhaps brought out, but you see, one of those individuals in there is a retiree from Eastman Chemical, and we've done some benchmarking with them and we'll continue to do that, so we're going outside of the nuclear industry. We're not staying wholly within it to see what we can learn from people like that.

COMMISSIONER MERRIFIELD: The reason I raise that is because when you go to a lot of the utilities, as you probably know, they do, many of them, most of them I would expect, have independent nuclear safety oversight committees that will come in as part of the process in a regular way and provide an offsite, independent assessment of what's going on. While I appreciate and believe that there will be great value in having this group – I'm not intending to get these folks permanent jobs, but moving from this more temporary function to a sustainable offsite independent group seems to me has contributing value to a lot of utilities, so it may be something which your board may wish to consider.

MR. LINDSTROM: There was a large discussion at the board of directors meeting about the permanence of the group, and the general feeling was that they didn't want to put anything in writing that would make it permanent. They wanted a sunset clause. They just felt that as a general rule it was a good business practice. The sense was that in fact they would

continue them – I won't say permanently, but –

MR. NAGY: They talked about establishing a subcommittee of the board of directors that would be a permanent committee, based on looking at safety culture oversight, which may have a different makeup. But that would be a long-term –

COMMISSIONER MERRIFIELD: That sort of follows on in my other question. Is there a nuclear safety committee within the context of the board of directors? That doesn't fall within our –

MR. FERGUSON: Not at this time.

COMMISSIONER MERRIFIELD: There is not?

MR. FERGUSON: No.

COMMISSIONER MERRIFIELD: Well, it's not anywhere within our regulatory regime, but I think many utilities have evolved to a point where the board's leadership has a subcommittee whose principal task is to look at the nuclear safety issues, and in light of the enhanced obligations under Sarbanes-Oxley I think there's some real value in that. Now, INPO has a seminar that, they had the first one last year and they'll be having I presume a follow-up one this August, that goes to the issue of training members of boards of directors as to how to comport themselves being on a board that oversees a nuclear accident.

And if you haven't considered it, you may wish to consider the notion of having one or more members of the board attend that to get some better sense of how some of their other counterparts in the nuclear industry are carrying themselves.

MR. FERGUSON: I will say that, while we haven't had a formal committee, we have used certain members off of our board to do independent studies and assessments. But I think that's a suggestion that we will bring up

with the board, that we create such a subcommittee, and I think we would be well served in doing that.

But we have actually over the past years had certain of them do things.

COMMISSIONER MERRIFIELD: Well, when you put in more formality the likelihood that that will be carried on rather than dealing with the blips –

MR. FERGUSON: Yes, sir.

COMMISSIONER MERRIFIELD: The final one, to repeat what I said before, I would certainly suggest, Dwight, that you engage with Jim Ellis to see if there are some lessons to be learned from what Honeywell went through in terms of engaging with INPO and if that has any value. I'm not here to chauffeur for Jim Ellis, but I do think, in addition to the work that we've been doing from an agency licensee perspective, there is great value that INPO can contribute beyond just the different status you have in the supplier group.

MR. FERGUSON: Well, if we could do some benchmarking with them that would be great. We've done some with Westinghouse. I think we'd be well served in doing that, sure. We'll take a look at that when we get back.

COMMISSIONER MERRIFIELD: Thank you.

CHAIRMAN KLEIN: Thank you for the presentation. I think it's clear that you're not where you want to be and you're not where we want you to be. I'm sure you all heard that there's a road paved somewhere with good intentions. What we'll be watching is deliverables and milestones and metrics, and so we'll be watching and I'm sure our resident inspectors will be watching. So it's important that you not only have a good plan, but that you carry it out.

MR. FERGUSON: Thank you.

CHAIRMAN KLEIN: Any further questions.

COMMISSIONER JACZKO: No, I would just make a brief comment if I could. I think this – I know Commissioner Merrifield has had a lot of – has done a lot of work on the ADR. I think this is one of the most high-profile ADR resolutions that we have done as an agency, and I think a lot of really good things came out of this, that a lot of the safety culture things are things that we wouldn't in any other way have been able to get to through our normal process.

I think it was a good resolution. But by the same token, I think a lot of people will be watching to see how it gets implemented in the end. So I think our expectation is that this will make some improvements and get you on the right track.

CHAIRMAN KLEIN: The meeting is adjourned. Thank you.