UNITED STATES NUCLEAR REGULATORY COMMISSION

BRIEFING ON STATUS OF NUCLEAR MATERIALS SAFETY

Commissioners Conference Room
One White Flint North
11555 Rockville Pike
Rockville, Maryland

Wednesday, January 10, 2001
9:30 a.m.

Commissioners

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CHAIRMAN MESERVE: The Commission is meeting this morning to hear from the Office of Nuclear Materials Safety and Safeguards, the Office of State and Tribal Programs, the Office of Research, and from the Regions on the status of the programs in the nuclear materials safety arena. As I think everyone in the room understands, this is the first of a series of annual briefings we will have this year clustered into our various arenas for our activities. At last year's briefing on this topic, we discussed the fact that the NRC was transitioning its programs to those that are more reflective of a risk-informed performance-based organizational approach and I know that we're going to be hearing about the staff's continuing progress in that and related areas. If my fellow colleagues have no opening statements, Dr. Travers, you may proceed.

DR. TRAVERS: Thank you, Mr. Chairman, and good morning. As you mentioned, we are to provide you with a briefing on the status of the nuclear materials safety arena and of course, the arena concept takes on special significance. In the past, we've been providing annual briefings to the Commission on a programmatic or office basis and as you directed, we're expanding the participation in this meeting to include internal stakeholders from a number of offices. Not all of the offices who participate in the nuclear materials safety arena, but some of the principle offices. Today we're going to highlight for the Commission the achievements carried out in the past fiscal year, ongoing and planned staff initiatives involving management and materials oversight, and some of the key agency challenges that we see upcoming in the next, or in this current, fiscal year. As you are aware, the safety arena encompasses regulatory activities associated with a rather diverse regulatory or regulated community including: uranium recovery, nuclear fuel cycle, and nuclear materials users who are regulated either by NRC or by agreement states. Thus, there really are a number of cross-cutting and complimentary functions that are shared among offices including NMSS, Research, and State and Tribal Programs and of course the Regions, who play an important role in licensing materials activities, inspecting NRC licensees, and responding to events. In that capacity, Carl has a special role as an arena manager, as the arena manager for materials. In addition to Carl, today you're going to be hearing from Bill Kane, who is the Director of the Office of Nuclear Materials Safety and Safeguards, Tom King, Director of the Division of Risk Analysis and Applications in the Office of Research, and on my left, Jim Dyer, of course is the Regional Administrator in Region III, and Paul Lohaus, who is the Director of the Office of State and Tribal Programs. With that, let me turn to Carl who is going to begin today's briefing.

DR. PAPERIELLO: Good morning. Can I have slide number 2? In Fiscal Year 2000, the NRC met all strategic goals in the materials arena and these include the goals, these are all safety goals of no deaths, no major radiological events, no significant releases, no losses of formula quantities of special nuclear material, and no major environmental impacts. The agency also met all performance goal measurements. These include loss of material, no accidental criticalities, and goals with respect to over exposures, medical events, releases, and safeguard events. The agency also met all output measures for both NMSS, Research, and the Office of State Programs. The over, we continued to integrate office and regional support of the program. NMSS has worked very closely with the Office of State Programs on numerous issues involving coordination with the agreement states and NMSS and the Research program in this strategic arena are fully integrated. There are also close support and interactions between other agency offices to support this arena. The Office of Investigations, the Office of Enforcement, the Office of the General Counsel, Human Resources, and the various supporting offices. Could I have the next slide, please?

What are our key challenges? And these are challenges which are not going to be completed in Fiscal Year, we're not going to accomplish all our goals in Fiscal Year 2001, but these are challenges and issues that will challenge us over the next several years. They first include risk-informing our activities. This is a complex task because of the diversity of the areas that we regulate on this strategic arena. But they are doable, and they do represent the major challenge that will be addressing in the coming years. Connected with that, are communications. We will discuss more about communications later, but these include not only communication with the general public, but the very diverse numbers of groups in the professional communities in this arena. We found when we were doing Part 35 that there is a

very diverse medical community, they're not one community, Parts 30-40 represent many diverse industries. Agreement states are co-regulators in this area. We have of course our internal NRC communications and then I'll mention later all the various governmental agencies, other Federal agencies that we have to interface with as part of this strategic arena. We have the challenge, which I think we have all recognized it's not unique to this arena, of maintaining a highly competent staff, recognizing the age distribution of our staff and the fact that we will be challenged in maintaining skills over the next several years. These activities are going to involve recruiting, motivating and training staff. There has been a significant increase in the emphasis on entry level hiring by both NMSS and Research, and formal qualification programs have been established for our inspectors and license reviewers. I mentioned the challenge of interface with other governmental agencies. We interface with the Department of Energy in this arena on UMTRCA and orphan sources. I will be addressing you in a waste arena at another meeting and obviously we have interfaces with DOE in that arena too. In this arena we have an interface with the EPA on uranium recovery. We have interface with the FBI and other security agencies on matters of security and safeguards. We interface with the FDA on medical issues and we interface with the Department of Transportation on the transportation of radioactive material under the hazardous material transportation requirements. I'll now turn the presentation over to Bill Kane who will discuss reliability of data.

MR. KANE: Slide 4, please. There are two types of data that we're talking about here and Carl explained somewhat strategic goal data deal with deaths, significant radiation exposures, major environmental impacts. Those data are complete and reliable and certainly not in question. The performance goal and output measure data are at a lower level threshold and involve those items which could be precursors to more significant events such as over exposures and losses of material. We are improving the event data reporting so that NRC will be aware of these events in a more timely fashion. In SECY-00-0217, which we forwarded to the Commission in November of last year, we informed the Commission of the continuing issues in obtaining and reporting accurate performance plan materials events data in a timely manner and reported the actions that the staff has taken to address these issues. The paper noted and explained the reasons for performance data differences for Fiscal Year 99. These data were based on events reported by NRC and agreement states for the purpose of analyzing trends and determining areas requiring greater regulatory attention. When the data were first reported, they were based on the best information available to the staff at that time from NRC headquarters, regions and the states in the nuclear materials events database, NMED. However, we know the data were incomplete and the more accurate figures were reported in that SECY. We're also documenting the process used to verify strategic plan performance data. OMB Circular A11 requires identification of the means the agency will use to verify and validate the measured performance values. For each goal, we have documented the measure, established the lead office division, and how we would measure and validate the data.

Next slide, I will address the detailed assessment being conducted in FY 2000. The first of these involves the fuel facilities oversight process and we briefed the Commission on this last month and I won't go into a great deal of detail here at all on this. We have developed an oversight framework and cornerstones for safety and safeguards. We're continuing to work with the stakeholders to develop corrective action program guidance assessment and enforcement guidance and a significance determination process. In the area of threat assessment, in cooperation with the Office of Nuclear Reactor Regulation we are planning the process for maintaining the characteristics of the design basis threat and I believe the Commission is generally aware of the activities in this area. Next slide.

The first of these topics involves an event reporting working group. This group was put together to develop recommendations for making event reporting and assessment processes more effective and efficient. There are five areas, principle areas, that this group is working on to identify what event information is needed to examine guidance to the licensees on event reporting, to review the event information that's provided to the nuclear materials event database and recommend how the quantity, quality, and consistency can be improved, to review our generic issues identification program to make sure that program is robust, and lastly to examine the computer systems that support the program. The next principle area that I'll talk about, the risk task group efforts. We have also communicated with the Commission recently in this area. I would like to go back and talk about this program again in some detail here because it is a very significant program as Carl had highlighted the need to make our activities more risk-informed and I'm very excited about this program. Commission paper 99-100, and the SRM associated with that talked about, directed the staff to establish safety goals either to the extent practical in our areas and to do this, involve the stakeholders in this program. The stakeholder meetings, one of the outputs of the stakeholder meetings was the suggestions to do case studies. We have also established screening criteria that are used to determine whether specific areas of our programs are amenable to risk-informing and these case studies will be used to test those screening criteria. In 2001, there are five case studies, and I should point out that when I talk about this program it does span both arenas, so to some extent I'm talking about materials arena as well as the waste arena. But we have five case studies in 2001 and with the remainder in 2002 and we will use these to establish the opportunity for whether safety goals can be created and as I mentioned earlier to test the screening criteria. The objectives, just to repeat, of the studies are to illustrate what has been done and what could be done to alter the regulatory approach in a risk-informed manner, establish a regulatory framework for using a risk-informed approach by testing these draft screening criteria, determining the feasibility of safety goals. The intent of the case studies is not to open or reassess previous decisions made by the staff and the Commission. However, information gained by performing the case studies may impact future decisions. Individual case studies in the materials strategic arena include fixed gauges, gas chromatographs, static eliminators, uranium recovery facilities and Part 76. Each case study will be of limited scope but collectively the case studies will cover a broad spectrum of regulatory application. Periodically, as work progresses, and when the case studies are completed, the results will be presented to the Commission. Next slide, please.

Under, to address two related initiatives here-one is communications and the other is empowerment. With respect to internal and external communications, as Carl mentioned, our communications initiatives are both external and internal, developing policy and procedures guidance and individual communications plans, internal communication initiatives include regular meetings with office management and all NMSS staff, creation of an internal web site and use of an NMSS e-mail box for inter-office communication to all staff. We're developing communications plans which include, as I said, both internal and external components in the area of materials inspection, event response and assessment, Part 35, mixed oxide, fuel enrichment technology, uranium recovery, to list a few. Empowerment is a related initiative. This is the process of increasing the authority and accountability of the staff at all levels of the organization to make informed decisions and to perform tasks for which they are responsible to achieve organizational goals consistent with the NRC's strategic plan, the operating plan, and our organizational values. The objective, again, is to increase the authority and responsibilities of the staff. We believe empowerment is a mechanism that will improve NMSS' efficiency and staff productivity. Alignment of expectations is essential at all levels and is the key to the success in this area. Next, Jim Dyer will discuss additional assessments.

MR. DYER: Can I have slide 8, please? Good morning, Chairman, Commissioners. My part of the presentation today focuses on the staff's recently completed and ongoing assessments in the materials oversight program, and this includes the reviews of the licensing inspection and rulemaking activities of the byproduct materials. These reviews are being conducted in two distinct phases. The first phase, which was completed in November of 2000 was a lessons learned effort focusing on radio pharmacies and radio pharmaceutical manufacturing facilities. Phase I was prompted by numerous extremity over exposures at a radio pharmaceutical manufacturing facility and a single extremity overexposure at a radio pharmacy owned by the same parent company. These over exposures were the direct result of handling both NRC and state regulated radioactive material over several years' time frame. For Fiscal Year 2000, these over exposures did not reach the threshold of the materials safety strategic performance measures in that they didn't

result in a significant radiation exposure or any health effects but were counted against the performance goal in that they exceeded the applicable regulatory limits. Based on these consequences, their duration and the complex regulatory issues identified during the inspections, the staff felt it was prudent to review our overall program for oversight of these facilities. Cindy Pederson, the Director of the Division of Nuclear Material Safety in Region III, led a diverse team comprised of ten knowledgeable NRC staff from regional headquarters offices as well as member of the Conference of Radiation Control Program directors. It was important to have a state presence on this group due to the issues, concurrent jurisdiction at the facilities, and the total dose concept. Total dose concept was important since the dose from state regulated material was contributed to the majority of extremity over exposures at the manufacturing facility. The team concluded that NRC rules and licensing practices did not contribute to the event. However, the activities in the sterility lab of the manufacturing facility were not inspected by the NRC due to a perceived low risk and the entry requirements that made the lab access difficult. If we basically, if we'd inspected this area we might have identified the direct handling of radioactive material earlier. The team did make several recommendations for improvement of the NRC rules, licensing practices, inspections, and other areas. These recommendations included revising the inspection procedures, to require inspectors meet entry requirements for all areas of the facilities, inspect on all shifts for high risk activities and evaluate worker knowledge of risks, encouraging joint inspections at facilities with dual NRC state regulatory responsibility, having license reviewers visit certain sites for licensing actions and as part of their training qualification process, and requiring corrective action programs for certain complex, high-risk facilities. The phase I report did not consider the resource implications of these recommendations, or other initiatives that were currently in progress. The National Materials Working Group and Steering Committee were briefed on the results of the phase I for their deliberations and currently, NMSS is preparing an action plan to address the recommendations of the phase I group. Slide 9, please, next slide?

The phase II of the materials oversight review is beginning this month. It is a planned assessment scheduled the last six months and will be a much broader and more comprehensive review of the nuclear byproduct materials program than the phase I was. The review will address issues in current configuration of the program as well as how it may look in the future as the number of agreement states increase. It will integrate the results of the previous and ongoing initiatives such as the business process redesign, the byproduct materials risk review group, and the medical temporary instruction pilot and the working group on general licensed devices as well as the phase I review, and the goals are to improve program efficiency and effectiveness, apply a more rigorous risk basis to the program, and help control or reduce resource expenditures. The phase II review group will be headed by George Pangburn, the Director of Division Nuclear Material Safety in Region I, and comprised of members of both NRC headquarters and regional staff, and a member from the Organization of Agreement States. Activities will include bench marking other Federal agencies, interviews with managers and staff, review of relevant documents and brainstorming with subject manager experts. To the extent possible, the phase II review group will also consider how the national materials program initiatives may impact the materials licensing and inspection program. Similar to the phase I review, the phase II group will prepare an independent report to the Director of Nuclear Material Safety and Safeguards. This report will provide recommendations for rulemaking, inspection frequencies, NRC organizational structure, and assignment of duties between NRC headquarters and regional offices. However, unlike the phase I report, the phase II report will also include estimates of resource impacts of the recommendations which then can be considered in the PBPM process. This concludes my presentation.

MR. LOHAUS: May I have slide 10, please? A key challenge facing the materials program is the issue of how we will deal with the increasing number of agreement states to corresponding reduction in the number of NRC materials licensees and how we will continue to maintain the supporting infrastructure of regulations, guidance and other program elements that are necessary for implementation of an effective nationwide materials program. To evaluate this issue, you approved formation of an NRC-Agreement State working group, to prepare a report that would provide options for the Commission on a national materials program. The working group is chaired by Cathy Allen, from the Organization of Agreement States, and Jim Myers of the NRC staff. They've been hard at work over the past year and are on schedule to provide a report to you by the end of May. Following initial discussion, the working group concluded that the best approach to address this issue was really to conduct a bottom up functional analysis as opposed to a top down, programmatic analysis. What they wanted to do is really to define what the national materials program must accomplish first and then look at how those elements in what needed to be accomplished could best be carried out. The working group developed a range of options to implement each program element. They screened the options against a set of evaluation criteria. They are continuing further analysis and are pulling the information together into a draft for their report. With respect to stakeholder involvement, they've employed a number of mechanisms to provide stakeholder knowledge and involvement into the working group effort. All working group meetings are announced and are open to stakeholder attendance. The meetings have also been held at different locations. The working group, however, has not had significant attendance at their meetings. The working group also established a separate location on our web page where information about the working group is posted and updated and where draft documents have been made available for comment. They've also conducted a number of briefings. They briefed both regional and headquarters NRC staff. They conducted a table top exercise at the Agreement States meeting. They've conducted briefings at local health physics society-type organization meetings and also held a poster session at the Conference of State Radiation Control Program Director's meeting. They also published an article on their activities in the Health Physics Society newsletter and they also plan to hold a major stakeholder meeting in February to further opportunity for stakeholder input. Move on to the next slide, please.

Slide 11. A second area where we plan a program evaluation is the IMPEP program. We plan to address two areas here. The first is to examine and incorporate lessons learned from completion of the first round of IMPEP reviews. This appears to be a good opportunity for us to look at the experience, look at lessons learned, look for enhancements. Are there changes that are needed in our criteria, can we make the process more performance based? When you look at the NMED data and the data that we're reporting in our performance reports, are there areas there that we ought to look at that may help focus or identify some areas, questions that should be addressed in looking at the various common and uncommon performance indicators. A second part of the evaluation, we also plan to look the periodic meetings that are conducted between the IMPEP reviews. A number of the states have indicated that they believe the meetings can be made more effective. They've also indicated they'd like to see some closer, maybe more frequent contact with NRC through that process and also the Management Review Board, during IMPEP reviews, has noted that some of the performance areas or recommendations for improvement that were identified by the IMPEP review teams, that these areas appeared to be things that could have been identified during a periodic meeting, could have been addressed earlier, and could have been eliminated as a potential area of recommendation during the formal IMPEP review. So, one of the things we want to look at is can we make the meetings maybe more meaningful from the standpoint of identifying, helping identify performance issues that can be addressed before the formal IMPEP review and really sort of head off potential issues or problems at that time. That completes my talking notes.

DR. PAPERIELLO: Tom King will talk about the research supporting activity

MR. KING: If I could have slide 12, please. The Office of Research provides support in two main areas in the materials arena as shown on slide 12. Support in the radiation protection and health effects area involves technical basis development and participation in national and international radiation protection and health effects organizations and programs. Examples of technical bases we're currently under way, include completing an up to date assessment of inventories and doses from exempt materials using current information representative of actual uses of exempt materials, and assessing inventories and doses from slightly contaminated materials to support decisions on the reuse or disposition of such material.

Participation in radiation protection and health effects organizations and programs involves staying current on research and developments in these areas and assessing the implications for regulatory programs. Examples of organizations that we participate in are the Nuclear Energy Agency's Committee on Radiation Protection in Public Health and the BEIR-VII study looking at the linear no-threshold hypothesis. I'd like to note that work on radiation protection and health effects is really a cross-cutting activity in that it will affect waste and reactors as well as the materials arena. The second area Research is involved in is support to NMSS' risk informing activities. This is a growing area, and includes technical bases work as well as active participation in the NMSS activities. Examples of work in this area include a study we had done last year on looking at the risk from sealed sources. It really provided insights on important pathways that can lead to public exposure due to sealed sources getting into scrap metal. We're planning to participate in the case studies that Bill Kane talked about, provide support on methods development in the safety goal, looking at safety goals in materials area. We're also going to participate in phase II of the materials oversight program that was talked about on slide 9. And finally, Research is the keeper of the risk informed regulation implementation plan which provides some integration and consistency of risk informed activities across the agency. With that, I'll turn the briefing back to Carl.

DR. PAPERIELLO: Thank you. What is going to, as the program evolves, occur in fiscal year 2000 that differs from fiscal, rather 2001, differs from fiscal year 2000? I think that we will see a significant increase in the use of risk informed approaches. We have significant risk informed activities in the development of the Part 70 standard review plan. We have the case studies that Mr. Kane previously discussed. We will have the completion and a report on the pilot medical inspection program, which is a way of risk informing our inspections. We will have phase II of the materials oversight program and I believe that in this fiscal year we will be able to define overall under the context of the risk informed regulatory improvement plan, what we, activities we have ongoing in the materials arena with regard to regulations, licensing practices, inspection practices, and guidance, and be able to give you an idea of, and ourselves, what things are amenable to a risk informed approach, what ones activity are probably not worthwhile doing, or couldn't be done, and even if some issues like guidance, which probably ought to be dispositioned into consensus standards. And I think we are going to make considerable progress and have a pretty good vision by the end of fiscal year 2001 of where we're going. We have sunset TWRS, and that's a major resource impact we are no longer supporting the Hanford Tank effort. Whether or not something new will happen, I just don't know. I think we will see an evolution in the NRC-state relationship. We will have the reports on a national material working group. We are clearly going to gather over the next several years more Agreement States and that relationship will evolve. And then we will be, we are beginning, last year was the first year we used PBPM to develop a budget and we are now going to be using that process to take a look at what we've achieved in the past year and reprioritize everything that we're doing. Can I have the next slide?

I would, I've already talked about key challenges and they are somewhat global over a seven year, several year period. What do we have for 2001? First we have casework. We have significant licensing challenges. We have MOX to do. We have heard from the Veteran's Administration, we've had discussions with the Veteran's Administration for years, and I don't know what the recent discussions have been. I was involved as a Section Chief in 1979, so it goes back a long time and we do have a letter from them that they are now want to pursue a master materials license. If we can achieve that, that will be a major, that will be a major task and would be a significant achievement because as we get more Agreement States, one of the largest set of remaining licensees that we have to inspect are Veterans Administration Hospitals. So, if the Veterans Administration does achieve making this transition, has a major impact on the program over the long term. And we have to complete the review of the Paducah high assay upgrade program in this fiscal year. We have the program changes you have heard about. We have significant activities and rule development and implementation. We have interactions with the Commission on Part 40 and Part 41. I believe we have a meeting on discussing aspects of Part 41 in March. We have the challenges of the general license registration program and tracking. We have the implementation of Part 35 and we have the completion of the Standard Review Plan on Part 70. And I think we have the challenge of, we've done a lot of discussion and made a lot of plans on hiring and entry level hires and identification of core competencies. We have to implement this in fiscal year 2001. Next slide.

In summary, we have met our strategic plan goals. We have begun using the PBPM process to emphasize outcomes and I believe we are addressing the key challenges in risk informing our regulations, communication, staffing, and our interactions with other Federal agencies. DR. TRAVERS?

DR. TRAVERS: Mr. Chairman, that completes our presentation this morning.

CHAIRMAN MESERVE: I'd like to thank you all . This is obviously a sweeping program that's one that's very important to the agency and it's one that is undergoing very fundamental change. So this is a period of great challenge for you and the Commission and been very helpful summary of where we are now and where we're headed. Let me turn first to Commissioner Merrifield, see if he has any comments or questions.

COMMISSIONER MERRIFIELD: Yes, thank you, thank you very much, Mr. Chairman, for allowing me to go first. I have scheduled travel to go down to Florida. It will not be for ballot purposes I assure you, but I may need to leave before the end of the meeting.

COMMISSIONER DIAZ: You're not doing any counting?

COMMISSIONER MERRIFIELD: I'm not doing any counting. (Laughter) I'm sure the results...

COMMISSIONER DICUS: Jeff, I was in Florida, like, when they were still trying to figure it out and I tried to vote, but they wouldn't let me. (Laughter)

COMMISSIONER MCGAFFIGAN: And just again to defend Commissioner Merrifield, I understand they were wearing overcoats in the Florida Keys last night (laughter) so he may not get very good weather.

COMMISSIONER MERRIFIELD: But if I have to leave, I don't want the staff to take it as message that I don't think is important because I do. I first want to start with goes to some of our interactions with our Agreement and nonagreement State and Tribal partners. We've had obviously a strong interaction as it relates to the National Materials Program, both with the Steering Committee and the Working Group, and I think those have been very positive efforts so far and I'm supportive of them. In addition, I'm generally supportive of enhancing our ability to more appropriately devolved programs to the States where they are able to do so. However, I think as those programs move forward with that responsibility we give to those States, obviously there is some accountability that needs to go with it because of an expectation on the part of the Congress that we have a standard for safety nationwide. There are a couple of areas I want to explore a little bit this morning. One of them Mr. Dyer talked about, and that was the extremely serious issue of extremity over exposures that occurred with one of our licensees. You talked a little bit about some of the activities in the phase I and phase II recommendations being made to address those issues in a more generic manner. But, I, to get to the heart of the problem, do you believe that the interactions that we have with the associated states will put us in a position so that when we look back at this next year we can have assurances that the workers who are involved in those type of activities will have appropriate review by us or by agreement states to ensure that we can avoid this problem in the future?

MR. DYER: Yes sir. I think, absent the phase I review activities and that before that even started we had a pretty aggressive communications effort going with the States and all our licensees. We did issue an Information Notice on this particular subject and then after we had a second occurrence at the second pharmacy after the manufacturing facility, we put out the word to all the States, we had the State liaison officers and the regions call the States to make sure they were aware of this information notice and particularly I talked to Luis Reyes in Region II and we communicated the concerns and shared the information among the NMSS staff and that as well as. So I think, you know, and then we have subsequently issued the Temporary Instruction on extremity overexposure inspection which gets put out to the States so I think we've communicated now about as well as we can given this, and I'm confident, I'm hopeful, that we're not going to go through this again.

COMMISSIONER MERRIFIELD: And you believe that the states are carrying through in a manner which is appropriate to test those workers.

MR. DYER: Yes.

COMMISSIONER MERRIFIELD: Thank you.

The second issue associated with revolves the IMPEP reviews. Now I have, Mr. Lohaus has mentioned some of the reviews that had taken place and the fact that perhaps our more periodic oversight may pick out some things that may allow us to take advantage of some of our knowledge earlier than previously. But I have noticed there have been some occasions were we've been getting some recommendations lately that we conduct some our IMPEP reviews in a more timely fashion, i.e., in a shorter period of time than would be under programs that we had a higher level of confidence with. Does that mean that we, is there some kind of trend going on? Do we have problems with our IMPEP reviews or with the States or are you comfortable where we are right now in their activities?

MR. LOHAUS: In terms of the IMPEP reviews themselves, I think they have been effective to identify problems, and if you look historically there's probably been one State program on the average each year that's experienced significant difficulties, but what I've seen in the process, and this was not true going back to the past when we used this more detailed review process, that the programs turned around and improved their performance very quickly and I think it speaks well to the process in terms of our going back with a follow up review within a relatively short period of time with applying what we call the heightened oversight process, where we ask the State to prepare a plan of action and we maintain contact. We may have bimonthly conference calls with the program and that has been effective in addressing performance issues and bringing areas of improvement, and in some cases needed staffing to the programs. But at the same time, for example, on a recent program review, there were significant issues identified with respect to the status of the materials inspection program and that appeared to be an issue that on the period meeting, which took place about 18 months prior to that, that probably is something that could have been identified at that time and additional focus maybe placed on that area prior to the IMPEP review, and that's part of the thought is, there's some things that both the States and ourselves can do that could come out of that process, would help improve the performance at an earlier time.

COMMISSIONER MERRIFIELD: So, two quick follow ups. I take it then, that you believe you have a better ability to trend, to see a trend in these programs, as a result of this happening.

MR. LOHAUS: I, yes I do, yes.

COMMISSIONER MERRIFIELD: And you don't believe that there is any increasing trend of a larger number of States having problems-that what we've seen is consistent with what we've seen in the past.

MR. LOHAUS: No, as a matter of fact, my sense would be that it's actually moving in the opposite direction. In other words, before we come out on a program review, many of the States are doing their own review, applying the IMPEP criteria, and they want to really approach it having a clean slate, if you will, so it's having that kind of an affect as well. We see that in the programs.

COMMISSIONER MERRIFIELD: That's very positive. Different direction-Mr. Kane, I as well as Commissioner Diaz had an opportunity to participate this year in exercises that included some of our partners in the Federal community, notably, the FBI and FEMA, relative to activities, oversight activities of our plant with emergency preparedness. I know that we have further plans with those agencies next year. Do you believe that we, those activities that were conducted this year, those joint activities, were useful, were useful effort on our part and have enhanced our ability to communicate effectively with our joint Federal partners?

MR. KANE: Yes sir, I do. There are a couple of things I might just add to that. We have had, and just recently we've had the second meeting with the FBI in which we, along with the Office of Nuclear Reactor Regulation and the IRO, Frank Congel, go down to talk to them about, broadly about issues of communications, talked to them about feedback on information that they may have on events that may be of interest to us or activities that may be of interest to us from a safety standpoint. And also, trying to gain a further insight into their plans, their future plans, and compare those to ours in the area of exercises so that, so that there are no surprises, and our goal is that we know what they're planning, they know what we're planning, and there are no surprises. They have agreed to communicate with us and to share their plans with us and we are going to follow through on that and I think that's very positive. I have, personally, a very good feeling about the relationship in terms of communication between the organizations. I think it has improved. We're going to maintain a program of systematically every six months, sitting down with them, we've agreed to that. And making sure that, in fact, we're all on the same page.

COMMISSIONER MERRIFIELD: Thank you. That's, I think that's very positive. I know individuals in the IRO offices have worked very closely with our other agency counterparts. I think those have been productive given the level of interest in the nation and in Congress on issues associated with terrorism, I think this is an important priority for us to continue and I thank the staff for their strong efforts in that regard.

A final comment I would make, it's not a question, I understand that public meetings are not necessarily an appropriate place to address in any great detail issues associated with the impact of fees on our materials licensees. For my part, I am sensitive to the issue and I will continue to address this matter as it relates both to future budget reviews as well as future fee reviews. I would expect the staff would continue to be diligent in addressing what I think is a very sensitive issue, while at the same time ensuring the protection of the public health safety and environment. I just wanted to leave that message with the staff. I didn't have any follow up questions to that. This obviously remains a priority with me. Thank you, Mr. Chairman.

CHAIRMAN MESERVE: Thank you. Let me follow up a little bit on the last question. Is this, the fee issue going to be something that's, in terms of the arrangements with the State, something that is the National Materials Working Group is grappling with? Is that something we're going to get some insights out of that?

MR. LOHAUS: This is a key issue and they are grappling with that question from the standpoint if you look at each of the options, they're looking at what it's going to take to resource the option and who's going to be responsible for those resources. I'm not certain that they will maybe define what, how NRC might provide its resources or how the States might provide their resources depending on what, whatever option is identified. But it's certainly an area that they'll be addressing from a resource standpoint in terms of identifying what the resource estimates would be for an option and identifying who would be responsible for providing those resources. But I think to say whether it will be done through fees or it might be done through a separate appropriation, there may be some flexibility there to deal with that in terms of the implementation.

DR. PAPERIELLO: I don't expect the report to address how things get paid, how, we, whether we charge fees or get money out of the general appropriation. The goal of the report will say if you structure the program different ways, this is the program. What will the States do, which they will obtain funding for, and this is what the NRC will do, and we'll have to obtain funding for that and so that'll be gross but whether or not this funding of our portion is going to come out of fees or out of the general fund, I don't think we anticipated that the working group made up of the states and NRC would be the one that would make that recommendation.

CHAIRMAN MESERVE: Nor would I have expected it to. I mean, obviously the situation we find ourselves in is one in which we have a situation with more and more Agreement States with a shrinking number of licensees that are our responsibility and obviously with a shrinking number of licensees bearing the burden of fees. And I think what you're doing, which is to look at what the appropriate allocation of responsibilities are between the NRC and the Agreement State is the starting point, and then examining the resource implications of where you go and how you solve the problems.

DR. PAPERIELLO: That's exactly right, and my challenge and Joe Gray, between Joe Gray and I challenge to the working group is: if all states were Agreement States, and if the NRC did only the minimum

necessary as required by current law, what would the program look like?

CHAIRMAN MESERVE: Let me turn to a somewhat different matter. Obviously we are extraordinarily pleased that you have met the various goals and output measures that have been established for you. That's a significant accomplishment. It does raise the question of whether you are stretching enough. Now, obviously for some of the strategic goals there's no capacity to stretch because the goal is zero, as to deaths and you've obviously, we've not found a way to bring people back to life so we're not going to improve on that yet. But with regard to the performance goals and the output measures they're non-zero, some of them are non-zero and it does raise the question as to whether the strategy is in setting those as to whether we are, we are being aggressive enough and challenging ourselves to that mechanism.

DR. PAPERIELLO: Could I address that? I think you pointed out a couple of important things. The strategic goal measures are safety goals they are extremely important they are zero and we did meet them. I can think of at least one of them in year we did not meet. We had a death. So I mean it's not like it's a trivial thing. With respect to output measures. We have stretched them in 2001. And the Commission raised the issues and they were very important issues. For example, we had goals on timeliness. We said we were going to do 80% in a certain period of time. And the Commission said what about 100%. I wish I had thought of it. Because I in my role have always worried about what I called the stinkers. The ones that got us into trouble because somehow we lost the action. We have addressed that. So, now, will attempt to shrink that over the years and make them more and do better, yes we will do it. Now, let's look at the performance goals. My concern with the performance goals is right now I think some of them are not risk informed. And I think that's part of the challenge. Let me point out. Lost material. This is a big deal. A very important issue. But you have to look at the significance. It's absolutely essential that we have zero losses of radiographic sources, teletherapy sources, sources used in irradiators. They will kill people. We ought to not lose smaller sources but I probably can't achieve zero. Now what the goal be - should it be a risk informed goal - how should that be established. And I think in the coming year as we look at risk informing our program we may be able to change some of our performance measures to make them reflect risk which is what I would really like to achieve so I think in response to the question I think some of the goals won't change I think they're good goals and it's good that we met them. Others I think we ought to in terms of our performance our output we aught to stretch for and I think we are under our performance goals of efficiency and effectiveness improve them and then in terms of performance we want a low enough threshold on a number of these things so we know if something is changing. For some of them it is not clear that there's a risk connection to and that's what would be desirable to connect them to.

CHAIRMAN MESERVE: That's pretty helpful. With regard to the goals Bill when you had talked about reliability of the data you had indicated that the problems that we're getting our arms around with regard to the performance goals on the output measures in this is a SECY paper of course that we have that talks about the problems that we have there. I may not appreciate how we handle this program but part of the difficulties we've had have been that we've not always have gotten timely or complete or accurate data that been submitted by States. That's discussed in the SECY paper. It seems to me that there may be a question here if we have are we folding in on are goals. I am embarrassed that I don't know the answer to that. As a performance goal that reflects on the NRC the performance of a state of Agreement State in terms of its accomplishment of something that we named as our goal. What I'm worried about is that if a State does very well in a sense we're claiming credit for it that's the case or if a state does very badly we get the burden of it when it in fact is something that is the action of a different regulatory agency. I had not recognized the possible problem here until I read your SECY paper and heard you discuss this this morning and can you illuminate how we're handling this issue.

MR. KANE: Paul may have some insights on this as well but yes it is true there are certain goals that we are holding ourselves accountable to that impact the States contribute to and the inspection and the follow up activities associated with the over exposures which were some contribution of state regulated activities and NRC activities led to that or contributed to that goal. There are some activities going on certainly the IMPEP program which Paul can get into we look at that from that standpoint and the IMPEP program and so I prefer that Paul address that.

MR. LOHAUS: Very good question. If you look at our performance report it reflects the collective nationwide program so it includes both NRC and the Agreement States relative to the overall performance goals. With respect to the output measures the states are not included in the output measures but with respect to the overall performance goals that we include the State data there. This has been a continuing issue and we've worked - Bill's people and my folks have worked with the States and the States have really been responsive they've improved the reporting they've improved the timeliness in reporting but there's still further work that needs to be done and some of the things we're doing for example is we have a handbook on event reporting we recently revised that handbook we've tried to make it clearer in the handbook what data needs to be put into the NMED system what's really important we've included a sort of a tearout page which shows (inaudible) page some of the things that need to be done so hopefully make it clearer and Bill's folks are working to address issues in terms of the data base system itself they're trying to improve the ease and usability of that system so there are things we're doing but at the same time I want to make it clear that the states have been responsive, they are addressing this but at the same time there is some further work that we need to do particularly in terms of the frequency of reporting so that at the end of the year we have the complete set of data.

CHAIRMAN MESERVE: Let me say that I think there is an issue that we need to explore further. It seems to me that we issue a performance report it serves two objectives at least two objectives. One is how is the nation doing with regard to handling the nuclear materials and the various issues on which we report. And having something that's a comprehensive analysis serves that function. On the other hand, I anticipate that many people are looking at the performance report as a report card on the NRC and to the extent that we are reporting on outcomes that we cannot effect directly, it's not an accurate report card in the sense it doesn't really judge us it's judging how the intermediary is performing and we may be getting credit we don't deserve and we may it didn't happen this year but we may find another year that we are going to have a bad report card because of some failure by a State. I think it's on that latter point that we do need to worry about how this is used and I think that this is something that we may address at a different time. But it seems to me there is an issue.

COMMISSIONER MCGAFFIGAN: But Mr. Chairman I was going to explore the same area and I'll go to that then but since you're on this it strikes me that it may be OK in the strategical performance goals to have the States because it a measure of how well we're doing with what Section 274 requires us to do to have an adequate and compatible set of Agreement States and whether our IMPEP program is working and all that so we have some even though they're the Agreement States we still have some responsibility to make sure that they're functioning well and if we didn't have staff reflected somewhere in our reporting then conceivably we could we would not be carrying out our Section 274 duties vis-a-vis the Agreement States.

COMMISSIONER MERRIFIELD: Mr. Chairman on the same subject perhaps it may be I share your concern. I share your concern. It may be perhaps we should have sort of reporting with the States reporting without the States some transparent way of allowing others to see where the States where we stand vis-a-vis the States and I don't know but I do share the Chairman's concern.

CHAIRMAN MESERVE: Let me turn to a final area that was flagged by the slides and in the discussion of the slides. We have this important work that's underway by the National Materials Working Group that involves the Agreement States as I think a very important understanding that we need to develop with the Agreement States as to what our roles are and what their roles are. There is an IG report that we've dealt with that you have dealt with about the role the steering committee and so there may be some sensitivity with this group about that we need to be cautious about overlapping or redundant activities that affect and we've straightened out I believe the steering group issues as reflected by the IG report. But in your description of the Jim's description of the materials oversight activity you did discuss that it was going to be exploring the roles and responsibility of the Agreement States and it sounded like you were at least in phase 2 .....the connection between these but it

does seem to me that if we have a redundant activity here that we ought to make sure that it is thought through what the relevant allocation of responsibilities are and that these efforts are co-ordinated to the extent possible.

MR. LOHAUS: Perhaps I can address that. I think the what we're asking for from that group are their insights and recommendations certainly anything that would come out of that that would have a bearing on what steering group is working on we would certainly make sure they got the information. But it we really I think had that in the charter for completeness if there is some overlap or some issue that involves Agreement States we certainly want to know about it as a result of their looking. But you point is well taken we probably need to go back and take a look at how tight that connection is to make sure there is no confusion.

CHAIRMAN MESERVE: Thank you. Commissioner Dicus.

COMMISSIONER DICUS: Thank you. I have a couple of questions about communication, a few about training and a couple other items that came out of your presentations. How, and I guess direct this to either Mr. Kane or Dr. Paperiello. How are you ensuring that our external web site with regard to the materials arena is kept up dated that there's current and accurate information on it we've had some indications sometimes the information gets on is lagging a little bit people who are wanting to look at that information and I guess particularly the other part of the question is have you identified in each of the areas, because it is a broad area in the materials arena, a person or at least an office and a person in that office that is responsible for seeing that the web site is kept updated. Where are we on working into that.

MR. KANE: Yes. At one level the answer to that is yes. But you're pointing to an area that I have recently looked at organizationally with respect to information technology and how we're using it the way we're organized right now it is diffuse it is distributed to the divisions and we're looking at how we can collect that organizationally and put it into one place and so I can have a central location to go to make sure that our use of information technology is planned and organized and carried out the way that I expect it to be so that you'll be something shortly on it.

CHAIRMAN DICUS: Do you have a plan?

DR. TRAVERS: Well if I might just add there's a rather broader ongoing within the staff to look at our use of the web in connection with our public confidence goals and others certainly public confidence is the one I think of first when I think of information that's put out on the web but there's the question of ownership, which office, and then within each office who's the owner, who's the web person responsible, what are the processes that are used to ensure that the information that's put out there is information that we think supports what we're trying to direct to our stakeholders. So, and, there's also the question of consistency of format and level of information not just within an office but across the agency and so we're looking at that as well and there's quite a lot going on and I think we've had a chance recently to provide some presentations on some of what we're doing in that regard to if I don't believe the Commissioners themselves but your staff's and its kind of exciting because I think it really does have a great potential for supporting what we're doing and there have been instances where the information that's on the web is old and needs to be updated, is perhaps is even inconsistent with what we're trying to achieve in terms of some of the programs. So it's important and we're working it not just in NMSS but across the agency as well.

MR. KANE: We have gotten some positive feedback on occasion it's always good to hear I know in the area of again I'm moving out of the materials area but in the area of dry cask storage we got some very positive comments from people up in up state New York about how they were able to go to our web site and find out a lot about the program that they that helped them frame their issues and questions and concerns.

DR. PAPERIELLO: In planning for the budget for the coming year and future years, NMSS has actually defined a need and it goes to other offices with a great deal of the delegation to the program offices is a need to perhaps even create an organization within NMSS to deal with IT because you have ADAMS and you have Starfire as well as the web so its more than just web it's just some many pieces are coming over that you almost it isn't a question of giving the task as an ancillary duty we're going to have to create overhead positions just to deal with the volume and consistency and uniformity because as an ancillary duty we're losing it.

MR. KANE: As I mentioned earlier the empowerment initiative that we talked about and how important it is to have internal communications that are sound as we expect our staff to go out and communicate externally with the public they need to need to know what's going on there needs to be alignment at every level to be able to effectively empower so that drives your need to improve your internal communications.

COMMISSIONER DICUS: Very true. Continue the progress here. It's clearly important. You mentioned entry level hires, staffing, getting good people in, and so forth. This was an issue that did come up yesterday in the EEO briefing we're behind the scale there in entry level hiring. But also the issue becomes in either the intern program or your co-op program the activities that the materials arena has regarding that. What about our ability, and this is something else we talked about some yesterday once we get these people and they get up to speed on our processes, procedures and things that they eventually will become very productive to the agency. How are we going to keep them. Retaining these people is another part of the issue.

MR. KANE: Well, my personal belief there is that a couple of things. One is to make sure we have a good appraisal process and a feedback process with that and part of the appraisal process is to tell somebody how they're doing but it is also to tell them what honestly what are the areas that they can work on to improve and also to get a sense of what else they may be interested in doing in terms of rotational assignments we find and quite honestly from my standpoint I want people working where they'd be most comfortable within the agency if I have somebody on my staff who wants to go somewhere else in the agency because it furthers their interest and there's a connection there the managers will work with them to get that done. We like to look at it as what is the greater good for the agency and if we would tend to lose employees because of their not being able to rotate around to other organizations I think that would be a bad thing so I mean we have to accomplish our mission but we also have to make sure that we deal with our people effectively. Part of the answer to your question is communications. There have to be very sound communications between the managers and their staff such that problems such as this or issues such as this can be flagged early and dealt with. Some other initiatives that they were putting together but those are my top-level comments.

COMMISSIONER DICUS: I think the entire package we've put together for an incoming employee plus the ones that people who have been here for awhile is something that adds to this and I think one of the things we notice particularly again from our information from the EEO briefing and from the paper associated with that is basically the NRC is an aging organization. And I think for people who are coming into agency and perhaps for those who have been in the agency who are ready to move into supervisory or management positions that there is a great potential for upward mobility if that is your goal if that's something you to do.

MR. KANE: In fact we're looking at creating some upward mobility positions I think it can be done particularly in the IT area looking at some things there right now that I want to make sure are properly grounded before I launch them. I would say there is another aspect that we look at as well. The summer hire program is an effective program I think for spreading the information about this agency and one of the sensitivities that - I have a strong sensitivity to that program because it happened a long while ago but we found that and this is not since I've been in headquarters but a prior experience. We've found that we're getting summer hires into our system but we weren't making sure that they were given assignments that they could complete in the time frame that for the summer time frame and we weren't systematically going in and examining whether they were doing alright. And so we have incorporated in our summer hire program last year I sat down with all the summer hires twice once after they were there for a short period

of time to see if things were going alright and all but one everything was fine. We were able to address the one issue so I think we're looking at also from the front end. Are we going to send people back to these institutions that they came from with a good message about the agency so it even starts earlier than when they come on board.

COMMISSIONER DICUS: OK. Quickly moving on I was going to turn this into a question but I think I'll just make it a comment. It really has to do with training and when we get into and are in the process of really risk-informing in the materials arena training our staff headquarters and the region our inspectors to really be able to deal with the risk-informing process is going to be very important and I'm hoping and assuming that such training programs are being considered or in place or this is an issue that we're dealing with and the same thing is true we've talked quite a bit about communications with the public both verbally and written and also the importance of empowering the staff I think it varies between regions and headquarters as to what extent the training on written or oral communications is there and getting the job done and also with empowerment. So I thought I would just mention those more as a statement than to get into a question with them. Finally, with regard to the problems that occurred at the Radio-Pharmaceutical Supply House I think you made the comment that one of the findings was in our inspection process our inspector or inspectors had not gone into some areas that perhaps they should have gone into because the process or difficulty of going into those areas I'm assuming you say you have dress out I don't know if that includes respiratory protection or not but I was a little concerned with that because if we have that in other areas that's something I think we need to take a look at because when I visited this particular facility I did dress out and go into some areas. This was four years ago so I guess I'm still safe.

MR. DYER: Yes Ma'am. I believe I believe this was in a sterility lab. And there are certain FDA regulations for entering into the sterility lab and I'm not sure what it is it may even for some areas it may even require a DNA signature. So it may be a regulatory impact to the licensee as well as some privacy information even for our inspectors and that so we have to deal with that on a long term.

COMMISSIONER DICUS: Okay, but we are dealing with it.

DR. TRAVERS: But I wasn't sure we answered ..

COMMISSIONER DICUS: Yeah.

DR. TRAVERS: The question that I think arises from your concern and it's a good one and that is are there other areas where similar

COMMISSIONER DICUS: Exactly.

DR. TRAVERS: or something like that may be operative and I think we should find that out I think I hope I expect the answer to that is no but we should look at it.

COMMISSIONER DICUS: Okay. Well I think that would be a feedback that I think the Commission would like to have because if we do have this vulnerability and it was shown as a vulnerability in the inspection I think we're going to have to deal with it.

DR. TRAVERS: And when I talked I'm speaking of the materials arena in particular

COMMISSIONER DICUS: Yeah, and that's why

TRAVERS: in instances where there may be difficulties that are unusual. I can tell you that that is not operative in our inspection activities at reactors and fuel cycle facilities but let's look at it in light of the concern and in light of what occurred in this instance and get back to the Commission with a better answer.

COMMISSIONER DICUS: Yeah, on the National Materials Working Group you indicated that they're not having a lot of stakeholder input in the meetings that they're having. Now what about the web site - is that being used and if they have this major stakeholder meeting in February will anyone come.

MR. LOHAUS: I think the working group sort of looked at this itself and I think having the information available on our web site and a web site is used very extensively and I think that's helped making that information available it was done at a very early time and it's all tracked there as well but they were concerned as well and that's part of the reason for having a major stakeholders meeting. They are going to identify a cadre of individuals that would represent the various stakeholders to actually attend the meeting along with others who may attend so they're trying to get a cross-section of folks that will actually be there and make sure we do have some good feedback and good involvement.

COMMISSIONER DICUS: Thank you Mr. Chairman.

CHAIRMAN MESERVE: Commissioner Diaz.

COMMISSIONER DIAZ: Thank you Mr. Chairman. I have a few specific questions on this you know your broad presentation I would like when we finish to have an opportunity to make a general comment to be useful. The first one is I think we all agree that maintaining a highly competent staff is certainly a priority and I should discuss your issue here on page 44 you specifically focus on health physics staff. I was wondering if that is precisely what you mean or because you have MOX and high level waste and Paducah and other, you know, areas that are really not only require health physics expertise but other expertise whether you are also considering your needs in this very, very specialized areas to maintain a highly competent staff.

MR. KANE: Well, yes certainly the question is across the board we're expecting to maintain a highly competent staff. This area was I'm not sure why this was called out specifically, but that was not...

COMMISSIONER DIAZ: Well that's what the question is, do you have a specific need on health physicist no it was just put in there. In the area of communication which we all have talked about do you see any specific areas in which the agency can benefit in this coming year 2001 from increased public participation. Any area that you see that we can do better we can profit we can do better our job with the public and increase public participation specifically, not in general now.

MR. KANE: I would put at the top of the list risk informing our activities.

COMMISSIONER DIAZ: Okay. Alright.

MR. KANE: If I had to name one I would one should go to two then I could name quite a few.

COMMISSIONER DIAZ: Okay.

MR. KANE: But

COMMISSIONER DIAZ: (inaudible)

MR. KANE: _____principal.

COMMISSIONER DIAZ: Number 2.

MR. KANE: Certainly in the area of MOX mixed oxide fuel and how we're dealing with that.

COMMISSIONER DIAZ: As I read the entire paper risk inform is mentioned many times however performance base is not mentioned once. Is NMSS abandoning performance base or is just that your are embedding them into risk inform initiatives. I thought we were going to keep them separate.

MR. KANE: Yes.

DR. PAPERIELLO: I think at least I have probably made the confusion and yes mentally combined them. A very important aspect of what NMSS does is licensing. Where we start getting prescriptive is in licensing process not in 10 CFR and I picked up several in preparation for this meeting several of our standard review plans and I was I thought this was low hanging fruit but I think at least the ones I looked at we have done a good job in the last couple of years when we wrote the licensing guides to make them performance based you didn't want prescriptive, we've directed people to consent to standards and even where we said well, we're going to give you model procedures we did not give people model procedures. We basically said if you have a procedure you've got to cover these they're bullets. You need to cover these five topics. I think so I think the staff is getting into has gotten into the spirit of the thing but yes I have to agree Commissioner I think we have at least I have at times blended performance based and risk informed and they're not really the same. In terms of public interaction we keep thinking of a very quantitative PRA but there's also low hanging fruit. I like somebody to come in and say do ever look at this regulation. What do you get out of it. Because on the reactor side I had a briefing a couple of days ago on the meeting that Research had and where people raised issues. There's a provision in Part

20 for example on collecting previous dose. You can't map it on to any kind of risk at all yet it costs a lot of money to do so there are kind of things where I think public interaction you know you did this. We have a tremendous amount of paper somebody taps you on the shoulder "why did you do that".

COMMISSIONER DIAZ: But that's precisely why I asked the question. Because it seems to me like there is difficulty in becoming risk informed in certain areas but actually you can become performance based and it seems to me like the document lacks a mix or did not separate it which the Commission always wanted to have it separated. I think it is very important that initiatives to our performance based be clearly delineated and brought out.

DR. PAPERIELLO: That's why I said I think though, this fiscal year we're going to know by the end of this fiscal year have mapped out what we're going to do. What is there what is possible to do. What exists. What's the target of opportunity and then this is what we are going to do this is probably doesn't make any sense to do and this is probably fits in another box.

MR. KANE: But I would want to add that there is a major initiative that is performance based and that is the oversight program for the fuel cycle facilities which is designed as a I call it a parallel it's not the exact same design as the reactor program but it is a parallel design and it is one that is performance based in terms of as this evolves it will dictate what we do how we do it based on licensee performance.

COMMISSIONER DIAZ: Alright, I know it exists but it's not represented here. Alright. One quick one again we're make it a quick answer. We all know that the National Materials Programs Working Group there have been some problems and the report is not due until May. Give us a head up. Do you expect any significant change to take place in this fiscal year as a result of the National Materials Working Group anything that you can see that the Commission should be ahead of time.

DR. PAPERIELLO: I see what it will give the Commission is a list of options

COMMISSIONER DIAZ: I see.

DR. PAPERIELLO: and then the direction for how we're going to proceed over the next several years and not a quick fix or a quick change in the coming year whether you do anything with organization all these things take time and the idea at least my idea when we proposed this over a year ago was where are we going to get where are we going we have like 32 Agreement States now we have Pennsylvania in the wings we have a couple of other States in the wings we have to think about where we're going what are we going to do when we get down to a handful of Agreement States what's the program going to look like because if we have to make significant changes because of particularly resource constraints and the like we ought to know that now because anything you need to do you have to we're working on the 2003 budget 2004 budget I need to know now what I'm going to be doing in those years.

COMMISSIONER DIAZ: That's why I'm asking the questions. If there's something significant we need to know now. Because it's going to happen and if we if you don't' have the answer maybe we should get to know if there's some significant change. Alright, I'll go forward to research. Last year you have five research products that respond to high to medium priority needs. You know according to different technical bases. Looking ahead are you expected to complete some major products in this arena in this fiscal year specifically I know you talk about risk informed but any specific products that you are working on.

MR. KING: Backup Slide 7 lists the FY 2001 goal which is three products and the three products are we're going to finalize the report where we looked at exempt materials, we've gotten public comments now, we're working to finalize that - we're working on developing an approved cross section set for criticality analysis which will support particularly NMSS activities looking at MOX, looking at maybe advanced fuels and then the third one is the annual abnormal occurrence report we put out every February so those are the three..

COMMISSIONER DIAZ: Those are the three...

VOICE: Those are the three.

COMMISSIONER DIAZ: Okay. Alright. On page 26 of the Backup Slides it is noted that one of the major accomplishments was the staff participation in International efforts on realistic health effects. Can you explain what realistic health effects means and what how are these accomplishments tied into the Commission priorities?

VOICE: Don Cool, Director of the Division of Industrial and Medical Nuclear Safety. The ongoing work has a variety of issues which referred there in the slide in a variety of activities is to try and understand working with ICRP, the Nuclear Energy Agency, and a variety of other folks on both the modeling involved in the body where material moves, how it moves, the extent it's retained. I'm going to try and bring that to as realistic a representation of the body as possible and then the second set both of these are principally being worked by the Office of Research actually is the work such as BEIR 7 and other activities to go back and once again take a look at the questions of the actual relationship - linear, linear no threshold, linear quadratic and the coefficients that would be associated in predicting the health effects over time. Realistic in this case I believe should be interpreted as trying to see if we can continue to improve our understanding in an area where in fact for fairly obvious reasons we will never in fact have complete and accurate information simply because the body of information that would be necessary to actually articulate it and more engineering type certainty terms simply will not be there.

COMMISSIONER DIAZ: The issue is that when we quote us as a major accomplishment international effort on realistic health effects and since we are trying to communicate better we should define it someplace so at least internal communication the Commission should know and externally what people should know. You gave an explanation. We used the term and then it can be taken up 10 different ways so my question is when we use a term, I like the work realistic by the way, but I like to know what it means. And the point is we need to know what it means. Thank you Mr. Chairman.

CHAIRMAN MESERVE: Mr. McGaffigan.

COMMISSIONER MCGAFFIGAN: It's always great to go last. Just to start with the point that Commissioner Diaz just made and I'm going back to a question he asked performance based. I'm terribly frustrated with that word because I think Commissioner Diaz was asking about performance based regulation and the answer that came back was performance based oversight and the word means two different things. Performance based regulation we have tended to use performance based as an antonym to prescriptive and as a synonym to flexible. Performance based oversight means we are looking at the performance of the licensee and gearing our program to the performance and they really are two different words. We don't have flexible oversight well it's flexible it's not prescriptive oversight but they really are I think there are two different connotations for performance based depending on when you whether you're dealing with regulations as opposed to oversight as opposed to other things. And I could see the two of you sort of passing ships passing in the night from this end of the table.

COMMISSIONER DIAZ: I knew you were going to catch him. (Laughter)

COMMISSIONER MCGAFFIGAN: That's just a comment, there's no question there it's just the word performance based we use in many different context and it is not always the same word it's two different things. Go to the web. Just a caution here. I think we have had very many successes with the web. We get complemented. It's usually when we've done something extraordinary. The revised reactor oversight process we clearly have put extraordinary resources in - I've gotten complemented and I think the agency has we got the mid-term the six month updates on there you know wonderfully I mean you can go there and get anything you want to know about any plant in America. IP 2, Summer, the event there, we really have a very good web site and the only fear I heard in the earlier conversation I had hearing the earlier conversation was I don't want to see the people who are doing extraordinarily well I don't them seeming brought down to the lowest common dominator because other offices don't want to put the resources or other elements of an office don't want to put the resources in and it may be rational for them not to put the resources in to have the web updated as much. I think we need a web page whenever we do this revised program that is flexible enough that what we do really well some things that we know are extraordinarily of interest to the public and maybe there are some areas and you guys are the ones to determine them where the public probably is not checking the web page very often and they can afford a two year update requirement as opposed to a

monthly update requirement. I hope you build that flexibility in. I was hearing a little bit of you know we needed to have consistency and consistency sometimes is to the lowest common dominator.

DR. TRAVERS: That's not the intent.

COMMISSIONER MCGAFFIGAN: Okay.

DR. TRAVERS: Certainly design has flexibility in both what I call normal information sort of routine information and as you indicated at times the extraordinary information that needs to be put on the web. That's gonna be updated in all likelihood much more frequently you know almost a daily or weekly basis as it has been with IP 2.

COMMISSIONER MCGAFFIGAN: Mr. Dyer, you've been asked in the Mallinckrodt that in the radio pharmacy several times have we fixed I mean that sterility lab is somebody now been in it. If FDA requires that they be DNA tested has somebody is an NRC employee volunteered to have their blood work done so that they can then enter the lab.

MR. DYER: I do not believe we've been it yet. I'll have to get back to you. I know we were looking at it and that was one of the recommendations that came out of the phase one.

COMMISSIONER MCGAFFIGAN: Is the paper when you talked about the phase one paper you said it wasn't resource and then in response to Commissioner Merrifield you said we have done several things obviously. How many of those recommendations are going to be some of them look like things you should do fairly promptly. How many of them are going to be done promptly or are they all waiting for the phase two study to come along and we're only going to make decisions in resource things after the phase 2 one.

MR. DYER: I was going to say in response to Commissioner Merrifield's question the actions that we took between NMSS and the Regions were done independent of the phase 1 review. They were our reactive efforts to the overexposure putting out the information notice, promulgating it to the states, and issuing the Temporary Instructions specifically for extremity overexposure inspection to clarify it. The feedback that came from the phase 1 review had direction a lot of direction to revise inspection procedures to institutionalize in the procedures some of the lessons learned that we had passed out in a temporary fashion additionally had changes to the licensing actions I just saw a I got an E mail where I think a revision to one part of the NUREG on licensing had come out implementing one of the recommendations of the phase 1 already and I believe two of the inspection procedures have been rewritten.

COMMISSIONER MCGAFFIGAN: So you're taking some actions.

MR. DYER: Yes.

COMMISSIONER MCGAFFIGAN: But the sterility lab being visited and offsite all the shifts being covered during inspections those are things that are largely in your control as the Region III Administrator. If you rotate things around is that something you're going to do.

MR. DYER: Well, I think

COMMISSIONER MCGAFFIGAN: The nightshift, and the ___

MR. DYER: The nightshift has been I mean going into the backshifts and reviewing it we were doing that the inspection procedures didn't require it again you send a skilled inspector out and they're going to look at that kind of information. This is the question as whether or not the program required it. The issue of the sterility lab we're not sure yet whether or not that's the best way to review that if the licensee can take actions to make sure the sterility lab functions are proper then maybe that's a better way of approaching it. And again we have to look at what the implications are with the FDA but we haven't in a specific case where we had our overexposure we're very confident given what the reassurances of the licensees QA program and that that that's not ongoing right now. Two years from now as it's going is what we're worried about. Right now at that specific facility we aren't concerned.

COMMISSIONER MCGAFFIGAN: OK.

MR. KANE: Could I just followup. I want to make sure that you talked about all of these recommendations and perhaps a sense of what is it going to cost us. It's important to note that phase 2 program was envisioned before we actually had the overexposures and so we deferred that because the goal of that program was to see what further efficiencies we can create within the program. So those things that came out those findings the recommendations that came out of the phase 1 that could be implemented quickly were in fact done.

But the others are going to be necessarily held and assimilated with the other findings to see where we should go overall and we're mindful of the Commission's concern about increasing activity in this area. We're mindful of that.

COMMISSIONER MCGAFFIGAN: Let me go to the Chairman's questions about strategic goals and performance goals and output measures. I think that you've done well, I agree with the Chairman and but this is also the first year we really have done anything and so this is very much a work in progress and we've made some normalization as Carl referred to with regard to the timeliness goals that he wished he had thought of himself but that's why we have the Commission around. We help occasionally. But the other ones you know the issue that the Chairman raised as to whether we should be covering the nation or not in some of these strategic goals. My sense is that we're doing something analogous to what EPA and the National Highway Transportation Administration, FDA and others are doing where they don't necessarily have total control either and so many highway deaths per year or so many whatevers where EPA is largely working through States so we've fallen into a consistency issue vis-a-vis other agencies. I don't know whether it's the right answer but that's how we got where we are today. Everybody else seemed be working on strategic goals that were broad and covered the States and the rationale could be that we're through 274 still responsible for the States but it might not work. But let me get to some specific non-zero goals. The one strategic goal that is non-zero is no more than six events per year that result in significant radiation or hazardous material exposures from the loss or use of source byproduct or special nuclear _____materials.

Where did six come from. Does anybody here know that covers us and the Agreement States and we had zero. Our 2000 performance was zero and I think the 99 performance was zero.

But how does anybody recall how we ended up with six because it's the only strategic goal that is non-zero and I could understanding it being non-zero but why six.

MR. LOHAUS: Well, we used

Perhaps somebody can add to this but in all of these cases we used historically data to generate the goals. Unfortunately I can't go deeper than that.

COMMISSIONER MCGAFFIGAN: Okay.

MR. KANE: That's my understanding also it was based on the historical information that the program had based on what was in NMED. In reporting...

COMMISSIONER MCGAFFIGAN: We also know that NMED is a little unreliable so this is me speculating it could be totally untrue but a staffer knowing that maybe not everything is in there chooses a number other than zero with some margin of error because he isn't sure what it is that whether the States have been under reporting or not reporting at all and they choose a number that we probably can meet. Does that sound possible.

DR. PAPERIELLO: I think it's based on historic data. I did read the reference to it and what I suspect and I'll have to get back to you is that we included not only what would occur to a worker or a member of the public from the use of material but also medical events that would result in an organ or impairment or something like that - that's what I suspect - I don't know that I'll have to get back to you on that and it is based on I know I worked on these things these things did depend on historical data and that's why I said if I don't know on some cases particularly the performance goals when you talk about lost sources what they would look like if you based them on risk that's why I think it's important for us to look at risk goals because in a sense you in the ideal world they would be based on a risk a death is something that is deterministic and organ impairment is deterministic if you're talking about overexposure and just general lost material you're talking about exposures with a probabilistic and state whether or not a person gets cancer from it.

COMMISSIONER MCGAFFIGAN: Quickly go to one level below and just the question is going to be

do you discuss this stuff with the States since they are involved one of the goals is for example no more than 43 medical events per year in the 2000 data preliminary we're 29. And that presumably is largely a non I mean since we have a small fraction of the country and there are 30 odd Agreement States proportionately some of the 29 probably 18 were in agreement states maybe 11 were in our jurisdiction something like that. I don't know how it breaks down. In setting this goal, performance goal measure, is there a mechanism in all the others accidental criticality that's really ours but it should be mostly ours and the goal is zero there but there's 356 losses of licensed material, 39 releases per year to the environment of radioactive material that exceed regulatory limits. Are these all is there some mechanism for discussing the whether these are the right goals with the States that are largely
.....inaudible.....
.....Chairman's point .....
These are goals that are both for us....
Agreement states.

MR. KANE: I think these have evolved from the early efforts in terms of looking at strategic planning and defining the goals we have shared information with the States for example the draft of the strategic plans were shared with the States, however, we've really not in my judgment really interacted to an extensive level of effort as you're suggesting and this is something that we could in terms of sharing with them. We did share recently in correspondence the importance of the data, the relationship with our performance plan and the importance of having a complete set of data to reflect the performance in the nationwide program but this is an area I think we could do more in terms of interactions and discussions.

COMMISSIONER MCGAFFIGAN: This is all very new to us. The thing is that this is all very new to us and I can see why you wouldn't have in previous years there wasn't a lot to discuss a year or so ago because we were just starting but I think it goes to the sort of line of questioning the Chairman started if we are going to report the data for the nation with perhaps as Commissioner Merrifield suggests the separate reporting for the ones that are entirely under our control then we need there probably has to be some dialogue about whether these performance goal measures and perhaps this one non-zero strategic goal measure is the right measure and the Chairman talked about stretching. I don't know what amount of stretching is possible or appropriate but it probably should be data based but it should be reliable data based and we know we have some reliabilities here so if GAO and all the folks who are going to grade our performance plan are watching I just ask for some forbearance as we try to sort our way through this the next year or two because I think there is a lot to sort through. That's it.

CHAIRMAN MESERVE: Good. If there are no further questions..

COMMISSIONER DIAZ: No, I have a comment. I just wanted to say that this briefings are becoming valuable and I think they need to become increasingly valuable. We talk about internal communications I think you should consider this as a key part of the internal communication because we the Commissioners do not have day to day contact with the staff on many of these things and we really need to have a view and a perspective in fact I would even go further and say we need to be cognizant of what is happening in the broad picture as well as what is happening on a specific. I think you covered today a lot of the broad picture you used the Green Book as a guide, strategic goals but if I may label the process I'm going use some _____okay I might even say that in this case I think NMSS is a learning organization and (laughter) ...

COMMISSIONER MCGAFFIGAN: Is that good or bad?

COMMISSIONER DIAZ: Being from Florida I'm being impartial. (Laughter) It is important that we get some significant specific issues besides this broad picture. I think there are things that are happening that are of major importance and I think they're getting lost in this broad brush which maybe has be because of time but I personally think that it would be of value to the Commission to have some significant information that comes in these meetings that points out to either two issues, changes, significant problems or policy issues that are either emerging or have had some problems in developing and I think that is of value and I mean everybody wants to always say we did everything good but in reality the Commission needs sometimes to know that there are some problems in some areas and I think that needs to be highlighted. If somebody comes and asks me Commissioner what do you need we give you what you need I would say that's the problem the problem is that sometimes I do not know what I need and I think the burden is on the staff to make and study what is it the Commission needs to know and what are the areas that needs to be covered with a little more specific on it. If we need more guidance then may be two or three months before these meeting maybe the staff should call the TA's or meet and say what our areas that are of concern - what I think we need to improve you know the value of this meeting which is very good and take it to the next step where issues that are of importance including emerging policy issues have to be covered. Thank you Mr. Chairman.

CHAIRMAN MESERVE: I'd like to thank the participants today for their presentations and I'd also like to express our appreciation on behalf of the Commission for your accomplishments. You have a very important function for this agency, it's a critical activity for the fulfillment of our obligations and we appreciate your efforts. With that I'll call the meeting adjourned.

CERTIFICATE

This is to certify that the attached description of a meeting of the U.S. Nuclear Regulatory Commission entitled:

TITLE OF MEETING: BRIEFING ON STATUS OF NUCLEAR MATERIALS SAFETY (PUBLIC MEETING)

PLACE OF MEETING: Rockville, Maryland

DATE OF MEETING: January 10, 2001

was held as herein appears, is a true and accurate record of the meeting, and that this is the original transcript thereof taken stenographically by me, thereafter reduced to typewriting by me or under the direction of the court reporting company.

Transcriber: DARLENE K. WRIGHT

Reporter: (TAPE RECORDING)