

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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BRIEFING ON EMERGENCY PREPAREDNESS PROGRAM  
INITIATIVES

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Nuclear Regulatory Commission  
One White Flint North  
Rockville, Maryland

Tuesday

December 14, 2004

The Commission met in open session, pursuant to notice. Chairman  
Nils Diaz, presiding.

COMMISSIONERS PRESENT:

NILS J. DIAZ, Chairman of the Commission

EDWARD MC GAFFIGAN, JR., Member of the

Commission

JEFFREY MERRIFIELD, Member of the Commission

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Regulatory Commission.)

## STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE:

Secretary

General Counsel

LUIS REYES, EDO

ERIC LEEDS, Director, Div. of Preparedness and  
Response

RICHARD WESSMAN, Director Incident Response  
Directorate

JAMES WIGGINS, Deputy Regional Administrator,  
Region I

NADER MAMISH, Director, Emergency Preparedness  
Directorate

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

CHAIRMAN DIAZ: Good afternoon again. I think we are going to need to discuss emergency preparedness. It is something that I believe is kind of timely for this year, being 25 years from TMI, a good way of finishing the year in looking at one of the issues that I believe is closer to our stakeholders and to the public.

So we appreciate the staff coming and briefing the Commission. I think that since 9-11, we have moved forward in many of these areas, both in the emergency preparedness and the incident response. The agency has reorganized twice this year to be able to better address the issues that deal with both the emergency preparedness and the relationships with all of the security issues.

I think, you know, this meeting has definitely an informational aspect that goes beyond what the Commission needs. And it is a fact that we need to keep our public well informed of how the agency is handling the issues of emergency preparedness.

We look forward to the staff presentation and wonder if my fellow Commissioners have anything. With that, Mr. Reyes.

MR. REYES: Thank you, Chairman, Commissioners. The staff is here today to brief you on the status of emergency preparedness and incident response.

In addition to the NRC staff at the table, I would like to recognize that we have some guests from the Federal Emergency Management Agency. Craig Conklin is here, and Vanessa Quinn is supposed to join us, they're key assets to the implementation of emergency preparedness off-site and have really contributed to our work in the field.

As you stated, after September 11th the NRC changed its organization to make sure that we have an objective of connecting safety, security and emergency preparedness. And I think we have reached that objective. And we have members of that new organization here with us to make the presentation.

Eric.

MR. LEEDS: Thank you. Good afternoon, Mr. Chairman, Commissioners.

I will now discuss our emergency preparedness and incident response programs. We know that things are different in the post 9-11 world and we are changing to meet these challenges.

We also know that despite these new challenges, the emergency preparedness basis remains valid.

Now, good planning leads to good response. So with that in mind, I will start this discussion with emergency planning or as I will often refer to it, EP. And then I will discuss our emergency or incident response.

The overall objective of the Commission's emergency

1 preparedness regulations is to minimize radiation exposure to the  
2 public through a combination of protective actions and licensee actions  
3 to mitigate the consequences of an accident or event. This has been  
4 and continues to be our primary objective.

5 The increased staff resources for emergency  
6 preparedness allowed us to establish five teams within the emergency  
7 preparedness directorate staffed with emergency preparedness  
8 specialists. These teams are focused on specific program areas:  
9 outreach, regulatory improvements, security interface, licensing and  
10 inspection.

11 These teams are examining all aspects of the agency's  
12 emergency preparedness program to ensure that the NRC and our  
13 licensees are prepared to respond to incidents in the challenging and  
14 changing post 9-11 world.

15 This is what we mean when we refer to emergency  
16 preparedness as a dynamic process. The plans, by design, are flexible  
17 and can be modified as necessary to meet new challenges and  
18 incorporate identified improvements and enhancements. It is a process  
19 of continuous improvement.

20 The spirit of continuous improvement guides each of our  
21 teams. I will discuss each team's activities starting first with the  
22 outreach team.

23 Effective outreach and communications play a vital role in  
24 ensuring strong emergency preparedness and response programs.  
25 We are aggressively enhancing our outreach efforts.

26 We developed an emergency planning and response  
27 website that resides on our NRC website. This website, readily  
28 available to our stakeholders, is another way for us to reach out. We  
29 have heard from many stakeholders about the usefulness of those  
30 websites in locating information about emergency preparedness.

31 We are reaching out to State and local officials. We will  
32 be meeting just two days from now with local government officials from  
33 the four counties surrounding the Indian Point Energy Center. The  
34 purpose of this meeting is to discuss security and emergency  
35 preparedness issues.

36 As you are aware, the Indian Point Energy Center  
37 committed to run a terrorist-based emergency preparedness exercise  
38 earlier this year. This was an exercise with an intentional large  
39 commercial aircraft crash into the facility. We supported this effort with  
40 many meetings with State and local officials and members of the  
41 public. We regularly spoke to members of the media. And on the day  
42 of the exercise, we staffed an emergency preparedness information  
43 facility to answer questions from the media, Congressional staff and  
44 other stakeholders.

45 We are also making concerted efforts to reach out to

1 State and local officials at specific regional workshops to discuss the  
2 National Response Plan and security emergency preparedness topics.

3  
4 We have completed regional workshops in Chicago,  
5 Albany, and Dallas and have another scheduled in Orlando in January.  
6 We have received many positive comments from industry and other  
7 attendees at these meetings.

8 We are planning a specific meeting with the public to  
9 provide our perspective on implementing the National Response Plan  
10 in February.

11 We have supported numerous public meetings where the  
12 agenda didn't specifically include emergency preparedness such as the  
13 power plant annual assessment meetings. We know that there is an  
14 increased interest in emergency preparedness since 9-11, and we  
15 need to be available to respond to the public's questions.

16 In addition, we worked with local governments and  
17 response organizations through table-top exercises, observation of  
18 force-on-force exercises and full participation exercises. We have  
19 participated in several emergency exercises that provide for a detailed  
20 demonstration and analysis of emergency preparedness and  
21 operations challenges involving off-site response organizations.

22 Recent examples include Nebraska and Missouri for the  
23 Cooper Nuclear Station, the State of Ohio and the Perry Nuclear Power  
24 Station, and the State of New York for the Indian Point Energy Center.

25 We also visited Lynn County, Iowa, at the invitation of  
26 off-site emergency management officials to observe the enhancements  
27 to their off-site response program.

28 We are reaching out to the industry. We are dedicated to  
29 continued sharing of information between emergency management  
30 organizations and licensees to strengthen our response programs.

31 We have introduced our new organization, discussed the  
32 new challenges and NRC responses to those challenges at two  
33 Nuclear Energy Institute forums, the mid-year meeting of the American  
34 Nuclear Society and the National Radiological Emergency  
35 Preparedness Conference.

36 We also participate in open public meetings with  
37 individual licensees to discuss their emergency preparedness and  
38 response programs.

39 These efforts with industry and State and local officials  
40 have brought better understanding of the NRC's emergency  
41 preparedness expectations. Our programs and our licensees'  
42 programs have improved as a result.

43 Our cooperative efforts include other agencies within the  
44 Federal family. We work closely with the White House Homeland  
45 Security Council and the Department of Homeland Security on the

1 development of the National Response Plan.

2 We supported Homeland Security Council efforts to  
3 develop national level guidance on radiological counter measures and  
4 protective action guidelines for radiological dispersion devices or dirty  
5 bombs.

6 We have been and continue to be an active participant on  
7 the 18-member agency Federal Radiological Preparedness  
8 Coordinating Committee chaired by Craig Conklin of the Federal  
9 Emergency Management Agency. The FRPCC meets quarterly and  
10 works on a variety of radiological issues.

11 We have also worked closely with the Departments of  
12 Health and Human Services and Homeland Security to develop  
13 guidelines to support the implementation of relevant sections of the  
14 Bio-Shield Act, specifically HHS's implementation of a distribution  
15 program for potassium iodide tablets.

16 Another of our teams is the inspection team. The  
17 inspection team supports the regional inspectors in implementing NRC  
18 regulations and the reactor oversight process. It has been four years  
19 since the NRC implemented its revised oversight process for reactors.  
20 Emergency preparedness is one of the cornerstones in this oversight  
21 program.

22 When key indicators were identified, we selected  
23 parameters that were significant in terms of protection of public health  
24 and safety such as emergency classifications, protective action  
25 recommendations and notification of off-site authorities and the public.  
26 These key indicators are regularly tested, evaluated and reported,  
27 providing an overall indication of the licensee's current emergency  
28 preparedness programs and readiness.

29 NRC regional inspectors routinely perform on-site  
30 emergency preparedness inspections. As a result, licensee emergency  
31 preparedness programs provide for the assurance of public health and  
32 safety.

33 Publicly available information notices have been issued to  
34 industry to alert them to potential problems that have been identified by  
35 the emergency preparedness reactor oversight program and to clarify  
36 NRC expectations.

37 For example, during the blackout of August 2003, at some  
38 plants backup power supplies to emergency response facilities did not  
39 operate as expected.

40 An information notice was issued to industry to alert them  
41 to potential problems seen with backup power supplies to emergency  
42 response facilities. We requested they review the information for  
43 applicability for their facilities and consider actions as needed to avoid  
44 similar problems.

45 As a result of this communication, licensees are aware of

1 these potential issues and correct site-specific problems at their  
2 facilities.

3 We have issued notices to address procedural  
4 improvements. For example, NRC inspectors identified a lack of  
5 consistency in the application of protective action recommendations.  
6 Some licenses did not include sheltering in their protective action  
7 recommendations. There are instances such as for inclement weather  
8 where sheltering may be the best protective measure.

9 To ensure that licensees were considering sheltering as  
10 part of their overall protective action recommendations scheme, we  
11 issued a Regulatory Information Summary alerting the power plants to  
12 this potential problem in clarifying the NRC's expectation of licensees  
13 when making protective action recommendations. Through the  
14 inspection process we will continue to review licensee protective action  
15 recommendation schemes to ensure that appropriate consideration is  
16 given to sheltering.

17 One of the five teams I spoke of earlier is focused on the  
18 emergency preparedness aspects of licensing reviews for both power  
19 and non-power reactors. Licensing reviews are a significant part of our  
20 work. Within the emergency preparedness technical area in the past  
21 year, the staff has completed 33 licensing activities. We anticipate  
22 working an additional 65 licensing activities during the next Fiscal Year.

23 Major EP licensing activities include reviews of significant  
24 emergency action level or EAL changes, proposed common emergency  
25 operational facilities, emergency response organization shift staffing  
26 and emergency plan reviews.

27 Additionally, we are in the process of reviewing the site  
28 capabilities for three early site permit applications for potential new  
29 nuclear power plants received by the NRC.

30 The staff has also performed emergency preparedness  
31 reviews for new power plant design applications including  
32 Westinghouse AP1000 recently approved by the Commission. This  
33 further demonstrates the role of emergency preparedness as an  
34 integral part of a nuclear power plant's safety and protection of the  
35 public.

36 Another of our teams is dedicated to the post 9-11  
37 security emergency preparedness interface challenge. We are working  
38 to strengthen the security EP interface to reflect the latest  
39 developments from the intelligence community. We work with the  
40 Department of Homeland Security and Department of Defense,  
41 including NORTHCOM and NORAD to share information and to  
42 develop and implement nuclear and radiological security contingency  
43 plans that combined with the licensee's radiological emergency and  
44 security response provide for protection of the public.

45 We are an integral part of the security force-on-force



1 exercises. We evaluate the nuclear power plant operations and  
2 security staff's performance in required emergency preparedness  
3 actions and communications under the stressful and fast-moving  
4 conditions of a simulated terrorist attack.

5 Participation in these exercises is resulting in  
6 enhancement to licensee emergency plans. We issued  
7 communications to the industry on lessons learned from these  
8 exercises, noting areas where licensees may need to reinforce their  
9 programs.

10 My staff has participated in the integrated Federal  
11 table-top exercises run by the Department of Homeland Security to  
12 gain better insight into crisis management response. This has enabled  
13 us to further integrate crisis management and consequence  
14 management, which we believe will result in more effective emergency  
15 response to terrorist type events.

16 We also work closely with the Division of Nuclear Security  
17 to ensure that security enhancements consider the impacts on plants'  
18 emergency preparedness. In the past, commercial nuclear emergency  
19 preparedness was based on the actual or potential health effects from  
20 the release of radiation that could occur during an incident.

21 We anticipated a precipitating event that could escalate in  
22 a step-wise fashion based on equipment malfunctions, operator errors  
23 or other unintentional conditions. As part of our changing world, the  
24 post 9-11 environment has challenged us to consider acts of terrorism  
25 that have the intent of inflicting significant damage.

26 Let me take a few minutes to discuss the planning basis  
27 for emergency preparedness.

28 In the initial development of emergency preparedness, an  
29 entire spectrum of accidents was considered. This spectrum included  
30 beyond design basis, low probability, severe consequence accidents.  
31 No one specific type of accident sequence or sequences was selected  
32 to be the basis for emergency preparedness. Rather, it was decided  
33 that the basis would identify the bounds of the parameters for which  
34 planning is recommended based upon knowledge of the potential  
35 consequences, the timing, and the release characteristics of a  
36 spectrum of accidents.

37 Following the events of 9-11 the staff reassessed the  
38 existing planning basis for emergency preparedness in the commercial  
39 nuclear industry. A terrorist attack on a nuclear power plant was  
40 thought by some to be somehow different than our previously analyzed  
41 severe accidents.

42 Emergency preparedness staff has worked closely with  
43 staff from the Office of Research on their efforts to study these types of  
44 events on nuclear power plants. The studies examined such things as  
45 an intentional aircraft crash into a nuclear power plant.



1 National experts conducted detailed engineering studies  
2 using state-of-the-art structural and fire analyses and enhanced  
3 methodologies to predict realistic accident progression and radiological  
4 consequences. As you know, the specific details of these analyses  
5 and their results are classified.

6 However, I can speak to the general conclusions of the  
7 studies. The likelihood of both damaging the reactor core and  
8 releasing radioactivity that could affect public health and safety is low.  
9 There will be time beyond the minimum time frame used for the  
10 emergency planning bases to implement plant mitigating measures and  
11 off-site emergency plans.

12 We recognize, however, that the initiating events may  
13 occur more quickly and that response efforts may be different. But it is  
14 important for me to reiterate that even in the unlikely event of a  
15 radiological release due to terrorist usage of a large aircraft, NRC's  
16 emergency planning basis remains valid.

17 We have identified enhancements that we believe will  
18 strengthen overall emergency preparedness and response.

19 We are interacting with industry and other stakeholders  
20 on development of new emergency action level criteria that is based on  
21 terrorist events or threats. And these will supplement the current  
22 emergency action level criteria, not replace them.

23 We are also discussing further implementation of  
24 terrorist-based emergency preparedness drills. Such a drill was part of  
25 the biennial full participation exercise held at the Indian Point Energy  
26 Center earlier this year. In that exercise, there was a postulated  
27 deliberate large aircraft crash into the Indian Point site.

28 The time line and progression of events directly related to  
29 the postulated aircraft impact were realistic and this exercise helped to  
30 validate the emergency preparedness provisions at this facility.

31 In this exercise, the timing of events enabled off-site  
32 responders to understand that even with a large aircraft attack on the  
33 plant, there is time to initiate actions to protect public health and safety.  
34 Lessons learned from this drill are helping us inform our process going  
35 forward.

36 Many of the improvements we have identified are being  
37 brought to fruition by our regulatory improvements team, the last of the  
38 five teams.

39 This team develops emergency preparedness policies,  
40 regulations and guidelines, and coordinates as necessary with the  
41 Office of Nuclear Material Safety and Safeguards, Nuclear Regulatory  
42 Research and Nuclear Reactor Regulation.

43 Commercial nuclear emergency preparedness regulations  
44 were created in a step-wise fashion, with Appendix E approved in 1970  
45 and the remainder of the regulations and guidance developed in the

1 late 1970's and the early 1980's due to lessons learned from the Three  
2 Mile Island accident.

3 Implementation of the regulations and guidance has  
4 uncovered areas for potential improvements and increased clarity that  
5 would benefit the NRC industry and off-site response organization. We  
6 have undertaken several studies designed to improve the state of  
7 knowledge in emergency preparedness. For example, we recently  
8 completed two studies related to evacuations. The first study updated  
9 existing NRC guidance on developing evacuation time estimates.

10 The evacuation time estimate is the estimated time to  
11 evacuate individuals from the emergency planning zone. Technologies  
12 have substantially changed since we initially issued guidance on the  
13 subject, and additional potential considerations have emerged.

14 Some of the elements specifically considered in the  
15 update include computer modeling, improved traffic management  
16 systems, trip generation times, demand estimation, and shadow  
17 evacuations, which describe the potential for members of the public  
18 that are not within the emergency planning zone to evacuate on their  
19 own initiative.

20 While this new study will provide more detailed guidance  
21 that should be considered in development or updating evacuation time  
22 estimates, it also affirmed that the foundation for developing the  
23 evacuation time estimates in our original guidance, NUREG-0654,  
24 remains valid.

25 COMMISSIONER MC GAFFIGAN: Mr. Chairman, I think  
26 I said this last year and Eric was not at the table then. But I have been  
27 involved in something in the order of 10 to 15 exercises in my full team  
28 exercises in my years here. And we have never in all of those  
29 exercises ever tried to evacuate the entire ten-mile EPZ. We always  
30 start with the two miles and then some keyhole off on the five mile  
31 direction.

32 And even with the creative writers who write up these  
33 scenarios, we don't ever need to evacuate the ten-mile EPZ. So in  
34 some sense, this is the wrong question.

35 I mean, I don't know whether there has ever been an  
36 exercise with other Commissioners where the entire ten-mile EPZ has  
37 said you got to go right now, it's so bad. But I have not heard of such  
38 exercises. And they would stretch the imagination of even the scenario  
39 writers.

40 So I worry about this definition. ETE is the time estimated  
41 to evaluate all individuals to outside the EPZ.

42 Well, you know, if in the history of this agency, which  
43 goes back almost 30 years now, we have not found that necessary,  
44 even in our exercises with creative writers writing the scenarios,  
45 shouldn't we be thinking about evacuation time estimates for what

1 normally gets done, how long does it take to get the two-mile zone  
2 completely evacuated, how long does it take for various keyholes, how  
3 long does it take to -- and I know some States -- I mean, one of the  
4 issues we have is that some States want to do all azimuth evacuations  
5 despite our judgment that that oftentimes would actually hinder the  
6 emergency planning efforts and adversely affect public health and  
7 safety in a real event.

8 So, as I say, these evacuation time estimates are used  
9 and misused a lot of the time because they lead to this thought in  
10 people's heads that you have to evacuate 314 square miles as  
11 absolutely rapidly as possible. And we don't have to evacuate 314  
12 square miles as absolutely rapidly as possible. We almost never will.

13 In doing it, if the wind is blowing in that direction, focus on  
14 the people where the wind is blowing, and not the people where the  
15 wind isn't blowing, at least initially. That is what any public official  
16 would want to do, I think.

17 COMMISSIONER MERRIFIELD: Commissioner  
18 McGaffigan, to answer some of your question, I recollect, and this was  
19 an exercise I did that was associated with VY, Vermont Yankee, I don't  
20 know if it went out ten miles. But I do reflect in that circumstance it was  
21 a case where the State of Vermont -- you know, the evacuation went  
22 over a keyhole -- in that case the decision tree in that neck of the  
23 woods is if Vermont goes, then Massachusetts goes. And if Vermont  
24 and Massachusetts go, then New Hampshire goes too.

25 MR. MC GAFFIGAN: That's politics.

26 COMMISSIONER MERRIFIELD: There are other  
27 dynamics at play than some of the things you are talking about.

28 I thought I would add that to the record.

29 COMMISSIONER MC GAFFIGAN: It is something that I  
30 think is, in many respects, the wrong question. You know, how long  
31 should it take to evacuate 314 square miles of all individuals? That's  
32 the wrong question.

33 CHAIRMAN DIAZ: The staff needs to be able to answer  
34 the question. I think there are some very good practical aspects of your  
35 question.

36 I think the staff is always bound by the fact that when the  
37 planning basis was established, it needed to consider what those times  
38 were.

39 I think there is many good things in assessing. And  
40 you're right, we always do consider whether we do a smaller evacuation  
41 or a keyhole. I think Mr. Leeds was talking of the requirements of  
42 assessing what is the total time and if that time was adequate.

43 MR. LEEDS: Yes, sir. And also, Commissioner, certainly  
44 I don't disagree with anything that you said. That's all valid.

45 The study does provide for small segments so that you

1 can do evacuation time estimates in smaller increments, two miles, five  
2 miles as well as ten miles. There is more to the study than just a  
3 ten-mile emergency planning zone.

4 COMMISSIONER MC GAFFIGAN: Okay. Maybe those  
5 other numbers are more relevant.

6 MR. LEEDS: Yes, sir. And you make a good point. If I  
7 may, sir, I will --

8 COMMISSIONER MC GAFFIGAN: The question I asked,  
9 has there ever been in the history of the agency somebody who was  
10 passing a piece of paper, a case where the initial protective action  
11 recommendation and the exercise was to evacuate ten miles in all  
12 directions?

13 MR. LEEDS: Not that I'm aware of, sir.

14 MR. MAMISH: Not that I'm aware of. Unless there is --  
15 the states simply --

16 COMMISSIONER MC GAFFIGAN: Here is somebody  
17 who may know the answer.

18 MR. BARSS: Dan Barss, team leader for the licensing  
19 team. And the evacuation time estimates that we have, that were done  
20 they asked for not only the total number but they asked that they break  
21 it down, the guidance documents tell them to break it down by the two  
22 mile, the file mile and by the different sectors, so they can do a keyhole  
23 prediction and say this is what this keyhole will take to evacuate.

24 Now, it depends on who did the ETE and how they  
25 submitted it when it was done. They come in different forms. But  
26 generally speaking, you can pick out smaller segments of the  
27 population then the whole population by looking at those.

28 COMMISSIONER MC GAFFIGAN: I assume the answer  
29 is no.

30 MR. WESSMAN: But at least as far as my own  
31 experience in the last four years of exercises we have never seen the  
32 full ten that you talk about. We certainly see the two and five and  
33 sometimes an expansion of the two to maybe a semicircle of five. And  
34 that's about as large as it goes.

35 MR. BARSS: One comment being the State of  
36 Pennsylvania generally no matter what the licensee recommends, goes  
37 with the ten-mile evacuation in the entire ten-mile zone.

38 COMMISSIONER MC GAFFIGAN: And I would honestly  
39 urge the State of Pennsylvania to reconsider that if they are an outlier  
40 among the States in doing that. Okay.

41 CHAIRMAN DIAZ: All right.

42 MR. LEEDS: If I may, I will continue.

43 Our second evaluation study looked at 230 major  
44 evacuations that have occurred in the United States between January  
45 1990 and June 2003. This study found that evacuations successfully

1 protect the public health and safety over a broad range of initiating  
2 circumstances and challenges, including technological hazards, natural  
3 disasters and a newly introduced category, malevolent acts.

4 There are several insights from the study I would like to  
5 briefly mention.

6 Relatively large public evacuations occur frequently in the  
7 United States, about once every three weeks.

8 COMMISSIONER MERRIFIELD: For purposes of the  
9 record, can you define "large"?

10 MR. LEEDS: Yes, sir. Large is a thousand or more.

11 Shadow evacuations have not impacted the effective  
12 implementation of adequate protective actions. Emergency workers do  
13 report to duty when asked.

14 Public education is an important contributor to efficient  
15 and effective evacuations. And route alerting is an effective and a  
16 significant contributor to efficient and effective evacuation.

17 Now, I also alluded to a top to bottom review of the  
18 emergency preparedness regulatory structure. Let me take a minute to  
19 discuss this.

20 A top to bottom review will identify if and where  
21 enhancements could be made to address some of the uniqueness  
22 associated with terrorist events. Such things could include, for  
23 example, changes to the planning standard for protective action  
24 recommendations and guidance on alternative emergency response  
25 facility capabilities.

26 So much of our work in emergency preparedness and  
27 response is focused on the "what if". As we know, good planning leads  
28 to good response.

29 Let me take a few minutes to discuss our role during real  
30 events such as severe weather --

31 COMMISSIONER MERRIFIELD: Mr. Chairman? Before  
32 Eric -- I normally, there is a lot here. There is an issue here I want to  
33 get to.

34 I think these are important observations that the study has  
35 identified in supporting our EP planning basis.

36 My own understanding is that we have had two instances  
37 that I'm aware of Three Mile Island and in the more recent evacuation  
38 activities associated with the event at Honeywell about a year ago  
39 where individuals were evacuated.

40 One of the things I think is somewhat different, particularly  
41 if you look at Three Mile Island, the need for evacuation, unlike  
42 chemical spills, which is the vast majority of these evacuations that are  
43 pointed to in the study, are not as immediate. When you have a  
44 chemical spill, the notion of an immediate evacuation is much, much  
45 more likely.

1 In our case, you are going to have a -- generally, you may  
2 have some period of time before a decision is made for evacuation.  
3 And in the case of Three Mile Island, I forget what the exact time period  
4 was, but we are talking in access of 48 hours.

5 One of the things we need to reflect on, particularly as it  
6 relates to the issue of shadow evacuations, is that the closer the  
7 evacuation is to the event, the less likely you are going to have shadow  
8 evacuation. The more time that goes on and the more possibility of  
9 some confusion amongst the public about what is the actual  
10 consequences of the event, the more likelihood you could have the  
11 possibility of shadow evacuation.

12 So I think your last bullet here on slide 48, "route alerting  
13 is important contributor to efficient and effective evacuations," that is  
14 exactly right. And I think as a general notion also, effective  
15 communications about what is going on at the site that is impacted and  
16 how that impacts the public is also a key factor, I think, in making sure  
17 that these very same outcomes would occur at the plants that we  
18 regulate vice most of which here in the study were chemical facilities.

19 COMMISSIONER MC GAFFIGAN: Or I think a lot of  
20 these are natural disasters. I mean, Florida, hundreds of thousands, if  
21 not millions, of people during the hurricane fiascos during September,  
22 early October.

23 I mean, the point -- I agree with Commissioner Merrifield,  
24 the study, because it does not focus on nuclear things, when you have  
25 an evacuation in Florida for hurricane purposes, you don't have the -- I  
26 don't know what is the equivalent -- the committee against hurricanes  
27 providing misinformation to the public at the same time.

28 And I think it was the Witt report pointed out --  
29 Riverkeeper, of course, said it was not us, but I would point the finger at  
30 them -- that some of the information that gets put out by the public  
31 interest groups is malicious. It complicates emergency actions. And  
32 the longer the thing goes and you get these talking heads who are  
33 standing up and saying all sorts of ridiculous things, it is different.

34 If that was committee against hurricanes --

35 COMMISSIONER MERRIFIELD: The Chairman is much  
36 more capable than I am in commenting on hurricanes, but I am sure  
37 there are some in Florida who would analyze or make an analogy with  
38 some of the weather reporters in their ability to identify the actual  
39 certainty of where the location will be landing as an analogous situation  
40 to the effects of the consequences of a plant we regulate.

41 But I leave the Chairman to --

42 CHAIRMAN DIAZ. I think the point is that the need for  
43 clear communications and really getting to the public early with the right  
44 facts about evacuation is key. And in the case of "radiation," it  
45 becomes even more urgent because people could receive the wrong



1 information or could decide to start taking the wrong options.

2 So I'm sure we will talk a little bit about communications  
3 and the importance of it.

4 Go ahead.

5 MR. LEEDS: If I can, I will bring us back to the real  
6 events, getting back into the real events.

7 As I was saying, emergency preparedness and response  
8 is the focus on "what if". But let's go over real events such as severe  
9 weather, specifically, hurricanes to show how good planning leads to  
10 good response.

11 This year, we had too many opportunities to exercise our  
12 hurricane response. When a hurricane is projected to impact an area  
13 where there is a nuclear power plant, the NRC Regional Response  
14 Center is activated, staff is dispatched to coordinate with the Federal  
15 Emergency Management Agency and the licensee, and the staff at the  
16 NRC Headquarters Response Center are put on notice.

17 In addition, this year we sent NRC liaisons to the  
18 Department of Homeland Security Operations Center.

19 The NRC staff tracks the storm and closely monitors the  
20 power plant preparations for the storm. Response to severe weather  
21 events is a real and active part of the emergency plans for nuclear  
22 power plants. Specific plants staff action such as plant shutdown, may  
23 be required under severe weather conditions.

24 After the storm has passed through the area and before  
25 the plant is allowed to restart, a thorough examination of off-site  
26 emergency response capabilities is undertaken by FEMA. As you  
27 know, FEMA has the responsibility for off-site emergency planning. It is  
28 only when FEMA and the NRC are confident that both the on-site and  
29 off-site emergency plans can be successfully implemented do we, the  
30 NRC, allow the plant to restart.

31 I'm pleased to say that our strong working relationship  
32 with FEMA staff paid handsome dividends as both agencies worked  
33 extremely well together this past hurricane season to ensure public  
34 health and safety as we monitored the impact of the storms on the  
35 nuclear power plants affected.

36 We have also had to respond to actual events at fuel  
37 cycle facilities. As Commissioner Merrifield noted, about a year ago we  
38 responded to an event involving a puff release of uranium hexafluoride  
39 at the Honeywell facility in Illinois.

40 Although no one was hurt or injured as a result of the  
41 release, some local residents were evacuated during the event.  
42 Certainly the event, which occurred in the very early hours on  
43 December 22nd, illustrated the agency's ability to respond to events  
44 around the clock and the need for our licensees to have viable  
45 emergency preparedness plans.



1 I would like to turn my focus to incident response,  
2 specifically the NRC's Incident Response Center and its operations.  
3 We continue to maintain a high degree of readiness to respond to  
4 emergencies.

5 Our operations center is staffed around the clock, 24  
6 hours a day, 7 days a week by two operations officers. It is supported  
7 by sophisticated software and hardware. We have made upgrades to  
8 our systems as a result of advancements in technology and post 9-11  
9 considerations, including improvements such as new display screens,  
10 smart boards, secure video teleconferencing and enhanced storage  
11 capabilities for safeguards and classified information.

12 But the enhancements are not limited only to equipment.  
13 We are developing an improved qualification and training program for  
14 our response staff. Our response staff is composed not only of the  
15 dedicated incident response directorate staff, but is supplemented by  
16 many of the technical professionals throughout the agency.

17 We are in the middle of a comprehensive review of the  
18 agency's incident response program. And the staff, as well as the  
19 Inspector General, has identified opportunities for enhancement.

20 These include enhancing facilities and information  
21 technology, developing an improved incident response staffing and  
22 augmentation plan, developing and implementing an incident response  
23 qualification program which will include assessment of response as well  
24 as lessons learned and corrective actions, and benchmarking of the  
25 headquarters operations center with those of other agencies.

26 We have established a dedicated team led by Susan  
27 Frant to critically examine the Emergency Response Program. Their  
28 goal is to consider recommendations made by senior NRC managers,  
29 the Inspector General and the staff to take a fresh look at the agency's  
30 preparedness and response program and to explore the best practices  
31 of other response organizations. Their efforts will bring more effective  
32 licensee and agency response to incidents.

33 As a result of Commission direction, we are developing  
34 specific response teams that will train together, drill together, and  
35 exercise together. There are three teams that will support reactor  
36 licensee events and two teams to support fuel cycle, facility and  
37 material licensee events.

38 Along with this initiative, we are making changes in  
39 activation and response strategies to establish more efficient facility  
40 operation.

41 We have also identified the need for improvements to  
42 ensure prompt support of simultaneous multiple licensee events and  
43 supportive events that go on for an extended time period requiring relief  
44 for the initial responders.

45 We have examined a number of facilities including the

1 Federal Aviation Administration's Dulles Operations Center, the Federal  
2 Emergency Management Agency's Emergency Operations Center and  
3 the Montgomery County, Maryland's Emergency Operations Center.  
4 We plan to visit other facilities to learn their best practices.

5 We are working with the NRC training staff to develop a  
6 training and tracking system. We have gathered together the leaders  
7 of our reactor safety teams and protective measures teams to identify  
8 the critical attributes of each team and what is required of each team  
9 position. We will also be engaging the Commissioners and the  
10 executive team members in a similar manner.

11 In addition, we are also working to incorporate the best  
12 practices identified by the NRC regional offices.

13 While we are working on the improvement plan, we are  
14 still actively engaged in our exercise program. Since we last briefed  
15 you—

16 COMMISSIONER MERRIFIELD Mr. Chairman, I just  
17 think it's worthy of noting at this point we all have commented on the  
18 unfortunate changes that have been forced on our country as a result  
19 of the unfortunate events of September 11th.

20 Looking and trying to put a positive outcome on some of  
21 this, I think the increased focus that you, Mr. Chairman, and all of us on  
22 the Commission have made on the Incident Response Center, the  
23 significant achievements of our staff in enhancing the technological  
24 capabilities of that response center, and the enhancements in the  
25 overall capabilities of our personnel in responding to those emergency  
26 response activities has, I believe, significantly improved in the period  
27 since September 11th and is a real plus and a positive thing which has  
28 come out of that very unfortunate event.

29 I did want to note at this point because they have gone  
30 through a series of those slides specific to this, that that is something  
31 that we should reflect on and celebrate.

32 CHAIRMAN DIAZ: Thank you.

33 MR. LEEDS: While we are working on the improvement  
34 plan, we are still actively engaged in our exercise program. Since we  
35 last briefed you, we have successfully participated in radiological  
36 nuclear power plant exercises including Comanche Peak, Catawba,  
37 Cooper and Indian Point.

38 We engaged in a full continuity of operations exercise  
39 with the Perry plant in which we practiced our response assuming that  
40 the headquarters operations center was not available.

41 We have also successfully participated in inter-agency  
42 terrorist exercises including Unified Defense, Forward Challenge,  
43 Determined Promise and Amalgam Virgo.

44 These inter-agency exercises have led to a close working  
45 relationship with the Department of Defense and NORAD. They have

1 also enabled participation with DHS's homeland security operations  
2 center.

3 The close working relationships and the successes from  
4 these exercises enable a better response to events to ensure  
5 protection of public health and safety.

6 As you are aware, Homeland Security Presidential  
7 Directive 5 tasks the Secretary of Homeland Security to develop and  
8 submit the National Response Plan for review to the Homeland  
9 Security Council.

10 The National Response Plan which integrates Federal  
11 domestic prevention, preparedness, response and recovery plans into  
12 a single all discipline, all hazards plan was developed through a  
13 collaborative inter-agency process involving Federal departments and  
14 agencies and representatives from multiple State and local  
15 governments as well as the private sector.

16 The NRC staff was active in the development process  
17 and was part of the writing team for the nuclear radiological incident  
18 annex.

19 Additionally, headquarters and regional staff reviewed  
20 and commented on the drafts during the one-year development  
21 process. On behalf of the Commission, Chairman Diaz joined other  
22 departments and agencies and signed the National Response Plan this  
23 past November 29th.

24 In emergency planning we assume the improbable has  
25 already occurred and we implement our response plan to address the  
26 consequences. Whether events occur as a result of severe weather,  
27 terrorist acts or equipment malfunctions, emergency plans provide an  
28 effective framework for decision-making and response.

29 We have accomplished much but recognize that we have  
30 more to do. Emergency preparedness is a process of continuous  
31 improvement. But the foundations remain valid.

32 The NRC demonstrated a strong commitment to  
33 emergency preparedness before 9-11, and we will continue to meet the  
34 Commission's high expectations for effective emergency preparedness  
35 and response.

36 This conclude my remarks. Now, I will turn the  
37 presentation over to Jim Wiggins, the Region I Deputy Regional  
38 Administrator. Jim will provide some regional prospective on  
39 emergency preparedness and incident response.

40 MR. WIGGINS: Thank you, Eric.

41 I am happy to represent the four regions in this area and  
42 to discuss how the regions contribute to the agency programs in  
43 emergency preparedness and incident response.

44 As you know, the regions have a key role in both  
45 emergency preparedness and incident response. We routinely

1 evaluate licensees' emergency preparedness capabilities through our  
2 reactor oversight inspection program. Our baseline inspections cover  
3 both the basic program itself and an evaluation of the on-site part of  
4 license exercises.

5 In incident response , the regions are truly on the front  
6 lines. Our resident inspectors are typically the first to be notified by the  
7 control room operators of plant events. This initial contact with the  
8 residents routinely starts a chain of notifications among regional  
9 managers and subject experts.

10 For non-emergency events, the regional event response  
11 is often well underway even before the official headquarters operations  
12 officer notification occurs by the licensee.

13 Resident inspectors are also the NRC's first on-site  
14 responders for these events. Typically, also the regional incident  
15 centers staffed by our managers and technical experts are the first to  
16 be activated. Regional managers led by the Regional Administrator or  
17 the deputies lead the site teams as director of site operations during  
18 expanded activation role in the agency's response protocol. And the  
19 regions will continue to work closely with the headquarters counterparts  
20 in NSIR to assure a continued effective integrated NRC event  
21 response.

22 With that as a background, let me just discuss a couple of  
23 events of examples where the regions have demonstrated our incident  
24 response capabilities. The first one I will talk about will go back to  
25 August 14, 2003, the northeast blackout.

26 As you recall during that blackout, there were a total of  
27 nine reactors, some in Region I, some in Region III, that were affected.  
28 Both Regions I and III activated their instant response centers and  
29 monitored plant status and recovery efforts simultaneously for the nine  
30 shutdown reactors.

31 During this event, the regions and the headquarters ops  
32 center shared information through a common linked  
33 telecommunications bridge for management decision-making.

34 This was also, by the way, the first significant event where  
35 the NRC through the ops center here in headquarters interfaced closely  
36 with the Department of Homeland Security.

37 We have heard some already in the presentation about  
38 the hurricanes. The hurricanes this year and the hurricane season was  
39 especially heavy as it has been stated.

40 Regions II and IV demonstrated outstanding  
41 performance, in my opinion, in their response to these hurricanes this  
42 season. Hurricane incident response required close coordination  
43 between those two regions as some of the storms crossed regional  
44 boundaries.

45 The regions dispatched additional inspectors to the

1 affected sites and supported State response activities. And as you  
2 heard, NRC works closely with FEMA to assess the impact of  
3 emergency response capabilities prior to plant restart. Routinely, the  
4 individuals doing that are regional individuals.

5 The regions, led by Region II, completed an incident  
6 response best practices review this summer. And all of us are using  
7 the insights from this effort to enhance our incident response programs.

8 Examples of changes include conducting additional  
9 exercises, improved processes that track the training of our responders  
10 and enhancement of our severe weather procedures.

11 The regions have also developed protocol for ensuring  
12 continuity of incident response if emergency response capabilities are  
13 lost in the headquarters or even among the regional offices. We back  
14 one another up.

15 This capability was recently put to a test, not a significant  
16 test, but a test nonetheless, when in our region we had a power failure  
17 in the building that actually affected our telecommunications  
18 capabilities.

19 I was able to get on through a bridge that -- on a phone  
20 that we were able to get working through the ops center. And my  
21 counterpart in Region II, Loren Plisco, and I discussed how we would  
22 handle events. And we had a solid plan going forward that continued  
23 from about 3 o'clock in the afternoon when the problem started, to  
24 about 8 o'clock at night.

25 Fortunately, they were not any plant events to handle.  
26 But we were in a position to handle the events from the full spectrum of  
27 a monitoring approach through expanded activation.

28 And lastly, the regional offices will continue to want to  
29 sustain our high level of response capabilities and we look forward to  
30 working with NSIR's team to better our incident response capabilities.

31 Eric.

32 MR. LEEDS: Thank you.

33 MR. REYES: Mr. Chairman, that concludes our formal  
34 presentation. Before I turn over the discussion to the Commission, I  
35 wanted to recognize somebody here at the table.

36 Dick Wessman, this will be his last formal Commission  
37 presentation. Dick has had a distinguished government career but  
38 especially in the NRC in quite a few roles but the last role was with the  
39 Incident Response Center.

40 I just want to acknowledge all the contributions to the  
41 agency and the fact that it has been a pleasure and an honor working  
42 with Dick.

43 MR. WESSMAN: Thank, Luis.

44 CHAIRMAN DIAZ: We join the staff in celebrating your  
45 career and to take this opportunity to thank you for your many

1 contributions.

2 I know we have been across the table a few times and as  
3 always with some pains when we are dealing with incidents, but always  
4 have been fruitful.

5 COMMISSIONER MC GAFFIGAN: I agree.

6 COMMISSIONER MERRIFIELD: Ditto.

7 CHAIRMAN DIAZ: All right. Now, let's go forward here. I  
8 am going to forget that you are going to retire.

9 (Laughter)

10 CHAIRMAN DIAZ: Let me just take a minute here,  
11 because there is a tremendous amount of information. And the reality  
12 is that I don't remember that we ever had a meeting that dealt with  
13 emergency preparedness. And there are many good reasons.  
14 Specifically, because we are always dealing with it in some different  
15 form.

16 And I think the Commission wanted to make sure that we  
17 were kept informed of all the work you are doing, but also want to make  
18 sure that the stakeholders realize that significant changes have taken  
19 place.

20 In that regard, let me just backtrack and go back 25  
21 years, and then go in between and go to now.

22 There is no doubt that we probably -- by any assessment,  
23 we were not very, very ready to deal with Three Mile Island. And we  
24 were not ready in the way that the Commission functions. We were not  
25 ready in the way we communicated. The issues -- we were shocked.

26 And at that time, tremendous changes took place. But we  
27 didn't have either the technology nor did we have the information that  
28 we have today.

29 I think that the Commission changed. We reorganized in  
30 1981. The President proposed and the Congress enacted a change to  
31 make sure that command and control was established inside the  
32 agency. So, the emergency powers were assigned to the Chairman,  
33 and the Chairman can delegate to any one of the Commissioners or to  
34 the EDO. Much has happened since then.

35 But, you know, the reality is that although that was the  
36 accident in the nuclear power plant that really required the mobilization  
37 of the nation's resources, since TMI there has been hundreds of times  
38 in which there has been an incident where a source got lost, where an  
39 alarm was sounded, where the steam generator leaked.

40 So we have continued to improve systematically, slowly  
41 but surely incorporating both technical and personnel improvements  
42 into the way we respond and at the same time, the way that emergency  
43 preparedness gets handled, because these two things in many ways  
44 they should support each other.

45 I think 9-11, in many ways, is the other side of TMI in



1 which although nothing happened at a nuclear power plant, it  
2 happened to the nation in a manner that we have to reassess how we  
3 dealt with incident response and emergency preparedness.

4 And as a result of that, the Commission has been bringing  
5 cohesion to the organization, has been bringing parts that were  
6 sometimes separated because they occur naturally that were in the  
7 reactor or here or there. And now we have put them together in the  
8 regions. We have actually increased our focus on how we responded,  
9 how tight the personnel and the licensees work together.

10 Right now we are at a point in which we all realize that  
11 emergency preparedness incident response are tied in not only to the  
12 way our licensees function but to the way that the nation functions.  
13 And so, we are now working in a different environment in which  
14 practically before the NRC was almost by itself having -- or, one of the  
15 few agencies that had really an ongoing practicing forward emergency  
16 response outside of FEMA.

17 It brings me then to the question that somebody that is  
18 not really familiar with all of the things will ask, and that is in between  
19 these two events, let's call it, the TMI and what happened in 9-11, the  
20 question always comes up how, do we deal with an accident that  
21 happens and develops slowly in a reactor in a manner that is -- not that  
22 it is controlled but is a manner that is evolving and we have indications.  
23 And how do we deal with a terrorist event in which the incident  
24 develops -- the incident itself is fast, is more unpredictable, and we are  
25 making assurance to the public that we can deal with both of those  
26 things.

27 Mr. Leeds, will you take a minute and tell us how do we  
28 deal with these two different things in a manner that as you stated, the  
29 emergency planning basis remain valid and we are protecting the  
30 public health and safety?

31 MR. LEEDS: Mr. Chairman, the difference and how do  
32 we handle two different types of events, what we originally anticipated,  
33 as you said, the slowly developing event, an event that would progress  
34 in a step-wise function as opposed to a terrorist event, where an event  
35 could occur and you could see something that would cause as much  
36 destruction as possible in a short period of time.

37 Basically, in both of these events we found that from an  
38 emergency preparedness perspective, you have enough time, there's  
39 enough time for the control room operators, for the staff at the licensee  
40 to alert the off-site response organizations, make a protective action  
41 recommendation, get the folks who need to know the information such  
42 that they can respond.

43 In a slowly developing event, of course, it's going to  
44 progress in a much slower fashion over the course of hours, as we  
45 talked about with Three Mile Island.



1 In a terrorist event, although activity needs to take place  
2 in a quicker manner, we found that the probability of a release, the idea  
3 of something impacting the public still can't progress faster than the  
4 system that we have in place. We have a system in place such that the  
5 physics of the reactor are not going to change. We still can get what  
6 we need to do done to protect public health and safety.

7 So the difference -- and I hope I'm answering your  
8 question. The difference is that the scheme is there and will work for  
9 both events. For terrorist event, the biggest change for us and for the  
10 off-site responders is that we need the licensees to react quickly, get us  
11 the information both to the off-site responders and to the agency so  
12 that we can take appropriate actions.

13 MR. REYES: I think in a short summary, the key  
14 elements that we have, serve for both. In other words, the emergency  
15 action level initiation, whether it's a mechanical event that goes slowly  
16 or fast event that's from a terrorist act, and those classifications, that  
17 concept works for both. The communications to notify agencies off-site  
18 is the same for both.

19 So the infrastructure that we have, both the licensee and  
20 the regulatory bodies, local governments, is the same. It has to be  
21 handled slightly different but the backbone of making sure the response  
22 is there is very similar. Each one of them has to be handled different,  
23 though.

24 CHAIRMAN DIAZ: I do agree that from the standpoint of  
25 a radiological releases, we have good reason to believe that they will  
26 be bounded. However, the manner to deal with -- and I'm going to use  
27 now, one of Commissioner McGaffigan's favorite postulate which is you  
28 might not have the operators in there.

29 What redundancies do we have in the systems to be able  
30 to deal with the proper notifications? How do we actually go about, in  
31 simple terms, to notify the proper authorities to get the proper  
32 infrastructure activated?

33 MR. MAMISH: Through our work with the Division of  
34 Nuclear Security and licensees, the force on force exercises, we  
35 observed all of these exercises that took place. And did note that  
36 things are slightly different in the beginning and at the end of a potential  
37 terrorist attack.

38 And what we have seen is that there may be some  
39 communication challenges between the control room that are affected.  
40 And we have worked with the industry, we have communicated some of  
41 these issues to the industry, we issued a RIS, a Regulatory Information  
42 Summary, that articulated to the licensees, not only the need to make  
43 an immediate notification to the NRC so that we can get the word out in  
44 the event that we have a coordinated attack, but we have also  
45 communicated some of these challenges like backup procedures,

1 notification procedures, like the need to have local law enforcement  
2 agencies from close by jurisdictions to have mutual agreements, aid  
3 agreements.

4 We are also engaged with the industry to develop  
5 terrorist-based drills. The industry -- we have met with industry several  
6 times. The industry has recently sent us a letter indicating that they are  
7 interested in doing the same, although they have their own exercises  
8 in-house.

9 They are interested in doing a pilot program with us. And  
10 so, we are looking at sometime next year to begin this pilot program  
11 with the industry where we would actually go out to half dozen sites,  
12 observe these drills and then reassess whether licensees have all the  
13 procedures that are needed that you discussed, backup procedures for  
14 notifications, security, operations, EP interfaces.

15 MR. WESSMAN: Chairman, I would like to supplement  
16 also some of the work that the staff has done to improve NRC's  
17 capability to respond to a faster moving situation.

18 For example, we now have the satellite telephone  
19 capability if the existing land-based phones are not working. Of course,  
20 most everyone has cell phones and things of this nature. Selected  
21 individuals have secure telephones for the classified communications  
22 that might come as part of a terrorist type of event.

23 And finally, we have the capability in our operations  
24 center to do what we called a blast dial. And that means we can  
25 contact large groups of licensees simultaneously to alert them in the  
26 case of a single terrorist event being part of a coordinated terrorist  
27 attack at multiple facilities.

28 So I think our response capabilities have improved and  
29 we are looking further down the road in some of our information  
30 technology to improve the notification and call-out capability for the  
31 technical staff that might help respond to an event.

32 CHAIRMAN DIAZ: But in the -- like quoting  
33 Commissioner McGaffigan, in the -- have we now established  
34 procedures and systems that are able to cope with the time demands  
35 that could occur in the low probability of terrorist attack, are we there?  
36 How much more do we -- I know we have plants. How much more do  
37 we have to go? Where are we in the communications?

38 COMMISSIONER MC GAFFIGAN: Mr. Chairman, I can  
39 sense some discomfort in the staff. We are going to have a closed  
40 meeting next month and to talk about some of the stuff.

41 CHAIRMAN DIAZ: But this is without getting into  
42 sensitive information. I think the staff should be able to say, yes, we  
43 have improved or we are in the planning process. Where are we?

44 MR. LEEDS: Mr. Chairman, I will take that one for a  
45 moment.

1 I think we have made tremendous progress. I think we  
2 have more progress to make.

3 You have mentioned what if the operators are not  
4 available in the control room. Well, we have alerted the industry to  
5 think about that type of a contingency. We have learned a lot from our  
6 force-on-forces.

7 We said, all right, if the operators can't, then the security  
8 force needs to be able to alert the off-site response organizations.  
9 What contingency plans have you made? That's the beauty of the  
10 emergency plans, the flexibility, the ability to adjust as we learn more.

11 As I said, we are learning an awful lot from the force-on-  
12 force exercises. There's a very strong security operations EP interface  
13 there. And because of those, we get lessons learned.

14 We fed a number of those back to the industry in our  
15 Regulatory Information Summary that I know you are all aware of.

16 But as we do more of those, we expect to learn more.  
17 And as we learn lessons, we will get that out, communicate it in a  
18 number of forums, will communicate it, as I said, through our generic  
19 communications.

20 We also communicate to the industry through working  
21 groups that we have. We have an emergency preparedness working  
22 group with NEI. And as I have mentioned in my discussion, we are  
23 really putting a lot of emphasis with outreach. We have been attending  
24 meetings with the licensees and State and local officials and FEMA.

25 We are all getting together with all the affected parties  
26 and discussing some of these issues.

27 I hope that responds to your question, sir.

28 CHAIRMAN DIAZ: We are getting close.

29 We have talked about this top to bottom review that you  
30 are going to be finished by next year. Again, the issue comes that of  
31 course, we do consider a terrorist event to be a low probability event.  
32 And when you do the top to bottom review, you are going to have to  
33 consider the spectrum of events from the TMI type event to all of the  
34 other events that we are dealing with.

35 And in doing so, you are going to have to provide some  
36 balance that deals with the more probable type of event that we have  
37 seen through the years. TMI was a unique one, luckily, the only one.  
38 But we are going to have to be able to be responding to this events in a  
39 manner that we also establish the public confidence that we are  
40 capable of handling those things.

41 You talk about communications with the industry and local  
42 authorities. We also obviously need to do some communications with  
43 the public.

44 Now, in this top to bottom plan, when do you believe that  
45 that will be available and what can we expect from it?

1 MR. MAMISH: Chairman, we are going to be looking at  
2 the 16 planning standards to look at enhancements. We are not  
3 looking at any overhaul of those standards. As Eric pointed out earlier,  
4 the emergency preparedness basis does remain valid.

5 So we are looking at enhancements in the standards.

6 We are looking at reconsidering sheltering as an option in  
7 some of the terrorist based scenarios.

8 We are also looking at the 50.54Q process which is the  
9 equivalent of 50.59 changes that is a requirement in the regulations  
10 that allow licensees to make changes to their emergency plans without  
11 coming to the NRC as long as the effectiveness of their emergency  
12 plan is not impacted.

13 So there are a number of issues that we are going to be  
14 reexamining for potential enhancement.

15 As far as timing, Chairman, I don't believe it's going to be  
16 my time in the next couple of months. It will be sometime next year.

17 MR. REYES: Let us give you the schedule but it is next  
18 year. We don't have it with us. We have to give you the schedule on  
19 the progress we have but it will be 2005.

20 CHAIRMAN DIAZ: Are you considering including  
21 analyzing the recommendations of the Inspector General regarding  
22 emergency response?

23 MR. MAMISH: Within the 16 planning centers, we  
24 certainly would consider that, Chairman. But I believe that --

25 MR. WESSMAN: If I may comment on the IG activities.

26 You recall, of course, that the IG did an audit that took  
27 over six months and concluded with a report in September of this year  
28 and they gave us 17 recommendations. Actually, they gave us 16 and  
29 one of them was our own.

30 I think we had a very good working relationship with the  
31 IG auditors as they looked at the incident response activities both here  
32 in headquarters and in the four regions.

33 We then developed our reply and commitments to the IG  
34 on how we expected to go forward dealing with the 17  
35 recommendations, all of which we agreed with, and many of which  
36 were things that we had identified that we knew we needed to work on,  
37 where the regions had made suggestions to us as part of their regional  
38 best practices activity.

39 Many of these are unfolding as part of the task group  
40 effort led by Susan Frant to help improve our overall effectiveness of  
41 emergency response.

42 A couple of the highest priority ones that we are focusing  
43 on are those that are associated with the development of the NUREG-  
44 0728 and the management directive dealing with the incident response  
45 planning and the incident response program itself. And these are

1 necessary to meet Federal commitments in support of the National  
2 Response Plan.

3 But they are all tracked. They have been assigned to  
4 either individuals or teams. We are looking at them on a prioritization  
5 process with consideration of resources and recognizing that some of  
6 them will be captured as part of Susan Frant's effort.

7 Some of them, we have actually done work on already.  
8 For example, one of the findings concerned feedback to incident  
9 response individuals or a self-assessment process. And we did a little  
10 pilot work in that area on the Cooper exercise and will continue that  
11 process.

12 So, seeking to move well on those IG findings.

13 CHAIRMAN DIAZ: I think Susan --

14 MS. FRANT: I don't have much to add, Chairman --  
15 Susan Frant -- to what Dick Wessman has said, except to say that we  
16 have a crosswalk from the IG, the 17 recommendations in our  
17 improvement initiatives. And we have made sure that we have  
18 captured every one with a schedule, and as Dick said, it has either  
19 been assigned to somebody or it is assigned within a category of the  
20 improvement initiative.

21 So we are making sure that every one of them is  
22 addressed. And by the time we finish all of the ten categories of  
23 initiatives, we will have responded to all of them and then some.

24 CHAIRMAN DIAZ: All right. Very good.

25 Last question, you talk about training and upgrading the  
26 training and qualifications of our staff to be able to deal with  
27 emergencies. Can you elaborate a little bit on what do you mean by  
28 enhanced training, what are we doing? You talk about different teams,  
29 how will they enhance our capabilities?

30 MR. LEEDS: Yes sir. Susan.

31 MS. FRANT: Well, this is one of the major initiatives in  
32 our improvement initiative. And let me say that is no small chore,  
33 because we are looking at all the response teams including the regional  
34 response teams.

35 We started with the reactor safety team, the protective  
36 measures team and the executive team. And we are looking at what  
37 the essential functions are. Then we are taking that and looking at  
38 whether we have the right people at the table in the room to do those  
39 functions and then how we would qualify those people.

40 We have made a great deal of progress, I think, on the  
41 reactor safety team and the protective measures team. We still have a  
42 lot to do with the other teams.

43 We are working with the ERC's emergency regional  
44 coordinators. They are looking at the regional teams, both the base  
45 teams and site teams. The whole essence of our effort is that we will

1 have it all phased in, and I think by next time this year, we will have  
2 qualified all the teams that we are talking about, region and  
3 headquarters.

4 MR. REYES: I wanted to add that we have always had a  
5 training program for our emergency responders. And we have always  
6 had qualified people whether it was reactor, safety, security, health  
7 physics, chemistry.

8 But we are now taking a real review to make sure the  
9 process we have is really structured. That, in fact, for the duties of  
10 each individual that we have the right skills and therefore, the right  
11 training in every position.

12 So what Susan is doing is a very detailed review.  
13 Something that supplements what we already have.

14 CHAIRMAN DIAZ: All right. Very good.  
15 Commissioner McGaffigan.

16 COMMISSIONER MC GAFFIGAN: Well, why don't I stay  
17 with this.

18 I do think that this is important, but let me ask a couple of  
19 questions. I think the Commission has talked about this. I talked about  
20 this with some regional administrators sometime ago. And this is very  
21 much driven by the Commission, not by the IG.

22 But as you think about these teams, are you thinking  
23 about -- and I'm assuming that we have gotten ourselves in what  
24 Secretary Ridge would call an incident of national significance,  
25 probably not much has happened yet but could happen.

26 Who goes to the Homeland Security Council to the Sit  
27 Room to aid the deputy's committee as it sits and does things? The  
28 deputy's committee, I'm told, ran the NASA shuttle re-entry sometime  
29 back and the President was on the phone with Governors of various  
30 States rapidly. And who goes to the Homeland Security operations  
31 center to augment them? What tools do they have to bring with them,  
32 depending on the type of reactor?

33 Do they have -- you send the person down with what's in  
34 their head but visuals are sort of important. Do you have visuals for  
35 them to take with them to HHSC and to Homeland Security to the Sit  
36 Room so that they can, you know, properly inform various senior  
37 government officials?

38 MS. FRANT: Let me speak a little to it and then Dick.

39 One of the things we have done is we have gone to a lot  
40 of other ops centers including Homeland Security, FAA, military  
41 installations and looked at how they handle it. We have been working  
42 with Homeland Security to decide who needs to be there.

43 You know they have an inter-agency incident  
44 management group. Who would go there.

45 We have pre-stocked, if you will, the Homeland Security



1 operations center with a lot of pieces of information. We do have  
2 things on disks that are in a go kit. So we have looked at that short  
3 term.

4 Longer term, we have to look at the executive team, its  
5 function, and how the executive team director, the Chairman or one of  
6 the Commissioners would delegate who would go and where they  
7 would go to, because now we have many more players including  
8 Homeland Security. So we have the White House that was always  
9 there, but we now have Homeland Security Council and Homeland  
10 Security.

11 COMMISSIONER MC GAFFIGAN: White House and  
12 Homeland Security Council are the same, but the Homeland Security  
13 operations center and this incident management team –

14 MS. FRANT: And we have a duty roster, and we have  
15 SES managers trained to go to the inter-agency management groups.  
16 So we have looked at the short term.

17 Longer term, we have do more work on the executive  
18 team's operations.

19 COMMISSIONER MC GAFFIGAN: I think you need to  
20 think about this stuff and we need to continue to play at it in exercises.  
21 Because clearly, the executive team, we have done good things. I  
22 mean, we can absolutely sock the executive team with more  
23 information than they can possibly handle given all the  
24 telecommunications.

25 COMMISSIONER MERRIFIELD: Well, I don't know about  
26 that. Speaking on behalf of the Chairman, I don't think that's --

27 COMMISSIONER MC GAFFIGAN: I think we are at a  
28 capability than any human being whoever has lived, including Albert  
29 Einstein and Richard Feynman, could deal with in very short periods of  
30 time. And so, we do have to think it through, but there is an  
31 expectation, and it permeates a lot of these government planning  
32 documents, that Secretary Ridge and Ms. Townsend are going to be  
33 involved very rapidly and need to be very well informed.

34 And I think the Indian Point exercise was the closest we  
35 ever came to having very senior officials of HSC playing in our  
36 exercise. I think FEMA has always been good about having senior  
37 officials play. But I don't believe to this day that we have ever had the  
38 Homeland Security Council or its predecessors play in a exercise in the  
39 realistic way that they do play.

40 And getting all that to work is -- I think we have to think  
41 about it in advance because nobody else will. And we are an institution  
42 that has a fly wheel, because we don't change as frequently as the  
43 other agencies do in terms of our personnel.

44 So we can build up institutional memory and we can help  
45 educate them in a crisis as to this is what we think the procedure is.



1 And we will get you somebody. We will have somebody down there in  
2 20 minutes.

3 But I think we have to think it through, because  
4 everywhere else we have people rotating fairly rapidly and not a lot of  
5 institutional memory has happened.

6 I mean, I will play, if you want, in one of these darn  
7 exercises so long as the other Commissioners do. I will pretend to be  
8 Fran Townsend. And wait until you see how I expect information for my  
9 President and I need to get a press release out and all this.

10 I want to say, we do better than any other agency in terms  
11 of having very senior officials think about these things, go through the  
12 things, learn lessons. All of us have been through a lot of these  
13 exercises. But as the Chairman says, they still don't capture the  
14 inter-agency fog of war, especially with the new actors that we have  
15 happening.

16 The good thing is we built these plants so well that we will  
17 have time. And a lot of this is going to be to try to slow down, we are  
18 okay, that yes, this is situation. And we are staffing up. You have time  
19 to staff up. You don't have to make an announcement in the next five  
20 minutes.

21 But we need to practice that.

22 MR. WESSMAN: Commissioner, if I could supplement a  
23 little bit. We have made some progress in this area and there is more  
24 to be done.

25 Commissioner Merrifield may recall in TOPOFF 2 that we  
26 had Secretary Ridge, I believe, participating. And I think that was a first  
27 for DHS. And that stimulated all the federal agencies.

28 COMMISSIONER MC GAFFIGAN: I think that was  
29 excellent.

30 MR. WESSMAN: Yes, it was. It was very precedential.

31 MR. MCGAFFIGAN: That was the most realistic exercise  
32 that we have ever been involved in because it did involve top officials.

33 Too many of our exercises, both with the States -- we are  
34 dealing with radiation protection officials and with other agencies. We  
35 are dealing with folks -- I mean, in my most recent exercise -- I think it  
36 was my most recent --

37 COMMISSIONER MERRIFIELD: Can I add one thing?

38 We also -- I think there has been a little bit more practice.  
39 We had the TOPOFF. We have actually had two TOPOFFs so far.  
40 The second one was obviously much more involved than the first. We  
41 did have the transition to the Y2K, which was significant inter-agency  
42 Federal involvement.

43 And I would note about a year and a half ago, we did  
44 have the events of August 14th, the blackout, that did involve a  
45 coordinated phone call under the auspices of the Homeland Security

1 Council. And that was headed by some folks downtown. And I was on  
2 the phone, there were cabinet level folks on the phone.

3 So there has been, I think, perhaps a slight bit more of  
4 that than we sort of sit down and think through. We have had a bit of it.

5 COMMISSIONER MC GAFFIGAN: A lot of it are  
6 artificialities because the event that I'm thinking of was in the southeast.  
7 And some of the radiation protection officials got their noses out of joint  
8 because we assumed the Governor might want to know whether the  
9 NRC concurred in the protective action recommendations or not.

10 It strikes me that the only event we ever had Governor  
11 Thornburgh was very interested in NRC's protective action  
12 recommendations and whether the two staffs were aligned and all of  
13 that. There was, in that exercise, we are sitting there in the executive  
14 team and we discovered some low-level USDA official had gotten way  
15 ahead of the States in terms of dealing with food stuffs.

16 We didn't even have any radiation coming out of the plant  
17 yet. And we were scratching our heads saying how does that work.  
18 And I don't know whether that's every been solved, whether you all  
19 every found out -- but it strikes me that -- you know, when I show up at  
20 an exercise, the first thing I want to know is what is the standard  
21 operating procedure at that site.

22 It isn't rocket science. It's 63 sites, 2 CAT One facilities  
23 and some major fuel site facilities. We are talking less than 70 sites,

24 And it just strikes me we should know what the standard  
25 operating procedures are. Pennsylvania, somebody mentioned earlier;  
26 Vermont Yankee, I have done one there as well as Commissioner  
27 Merrifield. And you discover that at --

28 MR. WESSMAN: At the alert level they will do school  
29 evacuations.

30 COMMISSIONER MC GAFFIGAN: Schools -- parks, yes.  
31 Long before there is an emergency. The same was true at Nine Mile.

32 And we discovered that they were doing all sorts of stuff  
33 at a very early stage. And that was their standard operating procedure.  
34 We just have to understand it.

35 I do think that there is work that could be done to try to  
36 standardize. We are a Federal system and the States are closest to  
37 the people and all that. But I think we can standardize some of these  
38 standard operating procedures around the nation to the extent that it  
39 would be easier on folks.

40 I mean, you're sending high-level officials off to various  
41 places. And they are going to have to explain the politics of that State  
42 to the decision makers at HHSC or DHS -- or HSC. Hopefully, you can  
43 do that.

44 But I'm not sure how many folks have that information in  
45 their heads. Why are we dealing with the judge here in Texas. Well,

1 sir, that's the -- so I think there's more to be done. There are 60-odd  
2 sites. We can really do -- have an expert about all of this for each site  
3 or expert system, if it isn't a simple expert.

4 MR. WESSMAN: Well, if I can add one other comment.

5 I think we are making progress in this direction. For  
6 example, Region III recently in the move of their building and the  
7 development of their regional incident response center has acquired on  
8 compact disk all the licensee plans and State and county plans. So  
9 now these are effective to use on electronic bases and can be moved  
10 around.

11 We are working with that same example to reach towards  
12 the other regions and towards our own organization here, so we are not  
13 bound by paper copies and things that may be old.

14 We have been reaching out, both Roy and myself,  
15 towards DHS to have a cell or a small group of players, if that's all we  
16 can get them to commit to, to participate in some of our exercises.

17 We did a little of that at Indian Point, as was mentioned.  
18 We sought to do that for the Cooper exercise, and we had to supply our  
19 own cell because of other resource demands that they had.

20 So, the initiative is there. We certainly hear your  
21 message, sir, and are trying to keep working forward on these  
22 concepts.

23 COMMISSIONER MC GAFFIGAN: As I say, I think you  
24 have to work it out with these other agencies.

25 MR. WESSMAN: Sure.

26 COMMISSIONER MC GAFFIGAN: Something  
27 happened -- when was the Tokai event? Was that late '98.

28 MS. FRANT '99.

29 COMMISSIONER MC GAFFIGAN: And I remember I  
30 was acting that day. It was a Friday -- I think it was a Friday. And as  
31 the day went on, we were trying to communicate with the White House.  
32 And we were choosing OSTP.

33 We were not in charge under the plan. EPA was in  
34 charge but the fellow was off that day, because it was a Friday. And,  
35 you know, Secretary Richardson who was off in Moscow -- issued  
36 some statement because his ops center at -- wherever they are,  
37 decided they were in charge even though they weren't in charge. And  
38 we had a one voice initiative after that. We sort of all gently tried to say  
39 let's figure out what the rules are here.

40 The Japanese turned down the sort of gratuitous offer  
41 that came from the two energy secretaries sitting in Moscow. But it  
42 was not government at its best.

43 I was on the phone to EPA asking them to please be in  
44 charge. You are supposed to be in charge. We are ready to help. We  
45 are getting a lot of calls. And let's figure out what, if anything, we need

1 to do here.

2 That would not happen today because we have a  
3 Homeland Security Council. That would absolutely not happen. It  
4 didn't happen in the NASA shuttle disaster because we had Homeland  
5 Security Council by that time.

6 But I do worry about people making up rules as they go  
7 along. That happens a lot.

8 MR. ZIMMERMAN: Roy Zimmerman. Good afternoon,  
9 Chairman, Commissioners. I think you are on a very important point. I  
10 just want to supplement what has been stated. We are all about  
11 continuous improvement and that's really what we are talking about.  
12 We want to be doing more state outreach.

13 We recognize from the exercises that we have conducted  
14 that more can be done in that area. And as you have heard, that is  
15 what our plan is, additional state outreach, so that we better  
16 understand the individual makeup of the states and what is special or  
17 different about that state, so that we can learn it; they understand more  
18 about us.

19 The Department of Homeland Security being a relatively  
20 new organization, we have outreached to them, we have held table  
21 tops with them to understand in this type of event, whether it's  
22 radiological -- we went down two different paths, radiological and  
23 security. How would you see yourselves, what would your role be in  
24 this? So that we made sure that our role was clear, and their role was  
25 clear. We did it both for a straight safety radiological event and then for  
26 a security initiated one.

27 COMMISSIONER MC GAFFIGAN: How high level?  
28 Because Secretaries have a way of making up their own rules.

29 MR. ZIMMERMAN: It went into the Secretary's office.  
30 Bob Stephen was in the Secretary's office at the time. So that was  
31 very, very beneficial for us to be able to do that. FEMA was there at  
32 that activity as well.

33 Setting up the cells with DHS is something we don't want  
34 to go back from. We want to continue doing more, make these as  
35 realistic as possible. So we try to work with DHS far in advance of  
36 when our exercise is planned to let them know months ahead of time,  
37 we have a full participation exercise coming up. We really would like to  
38 see several cells set up in different areas. We would like you to play  
39 aggressively with us. So we bring as much realism as possible to what  
40 we would expect in a real event.

41 We are going to continue doing that. We want to, again,  
42 be moving forward with the State, Federal partners and drive this to as  
43 great a realism as possible.

44 NORAD is another area. The Chairman asked earlier  
45 about procedures that are in place.

1 We have required licensees to put procedures in place for  
2 dealing with imminent attacks, whether they be by land, by water, by  
3 air. And we have been practicing with NORAD with the licensees and  
4 having phone calls with NORAD, NRC on the phone and with the  
5 licensee on the phone; the operators are being in control room. How  
6 quickly something can occur so that the operators get familiar with  
7 NORAD's terminology and are able to implement those procedures that  
8 we require be put in place a couple of years ago.

9 COMMISSIONER MC GAFFIGAN: Can I ask, do you all  
10 have a time line for call out? I know the Chairman can be there in five  
11 minutes. So you have two operators and the Chairman in the ops  
12 center. But at night time, what is your standard for the people showing  
13 up?

14 MR. WESSMAN: There is a difference between showing  
15 up and having them there by phone. The nominal expectation for  
16 showing up could be as much as an hour from the time that we put out  
17 the call.

18 On the other hand, we expect to be able to put senior  
19 decision makers on the phone within a couple of minutes. One of the  
20 things we are working on in the improved notification system would be  
21 a capability blast dial, a collection of senior decision makers, blast dial  
22 the right regional people and this sort of thing.

23 So we are talking minutes from a telephone  
24 communications. But people have to come from wherever they are on  
25 Saturday afternoon to come into the center. That could take an hour or  
26 so.

27 COMMISSIONER MERRIFIELD: Dick has used this term  
28 "blast dial." In putting on my plain speaking hat, I will help explain what  
29 that means.

30 I happened to be on an exercise in which this new feature  
31 was tested. You may have been as well. But this feature was  
32 automatic dialing. I remember sitting there, I was having dinner with  
33 my family. And every phone in my house, including my cell phone,  
34 went off all at the same time, a somewhat horrifying experience.  
35 Fortunately, I had swallowed the food when it all went off quite quickly.

36 And very quickly after that, there was an assembled on  
37 the bridge. I was the ET leader for the purposes of that particular one.  
38 There was a large number of people on the phone, very, very quickly.

39 COMMISSIONER MC GAFFIGAN: One of the problems  
40 is figuring how many people you need on the phone. Chairman and I  
41 were on the phone call one Sunday. I was at Comp USA dealing with a  
42 computer issue and you were wherever you were and that was one we  
43 learned from. There were more people there talking about more things  
44 than we needed.

45 MR. REYES: One of the things we need to remember in

1 terms of reporting to the ops center, you don't need every position filled  
2 to start working. So we have identified critical positions.

3 COMMISSIONER MC GAFFIGAN: Given NSIR work  
4 hours you probably --

5 MR. REYES: We always have people here in the building  
6 seems like. So we can activate pretty quickly.

7 MR. ZIMMERMAN: If I can add an item. We do  
8 periodically do call outs to make sure that we can reach people and  
9 also ask those individuals how much time before they would actually be  
10 able to show up in the operations center. And many of us are able to  
11 arrive in 15 or 20 minutes.

12 So we do have folks that live further away. I'm thinking  
13 that Mr. Wessman may be one of those people in the right lane when I  
14 am in the left lane that I look at as I drive by in terms of how quickly we  
15 can get here.

16 COMMISSIONER MC GAFFIGAN: You mentioned 50.54  
17 and I thought about 50.54X. And 50.54X is a very powerful provision  
18 that allows the licensee to take reasonable action that departs from a  
19 licensed condition or technical specification, contained in the license, et  
20 cetera in order to protect public health and safety. Then 50.54Y says  
21 "licensee action permitted by paragraph X of this section shall be  
22 approved at a minimum by a licensed senior operator or the nuclear  
23 power reactor facility for which" -- that is if it is already shut.

24 But do you envision 50.54X actions in emergencies?

25 MR. REYES: Perfect example, when Hurricane Andrew  
26 went over Turkey Point, they had no choice but to use 50.54X to deal  
27 with some of the unexpected situations. And we dealt with that very --  
28 it was not a problem. We were in communications. They tell us the  
29 situation. They assess what the safety --

30 COMMISSIONER MC GAFFIGAN: What does, at a  
31 minimum, senior reactor operator mean, if you were in one of these  
32 abort situations where possibly, at least the crew that's there has not --  
33 isn't functioning at the moment? Could it be an off-site licensing  
34 operator? Or could it be somebody who is in a different building who is  
35 maybe once was a senior reactor operator, now is the VP for  
36 operations? What do those words mean?

37 MR. REYES: We have not been faced with that situation.  
38 But I think the regulations refer to knowledge, know where physically  
39 they are located.

40 What you are getting into is you have an unexpected  
41 situation not envisioned by either the tech specs or their procedures  
42 and you have to deviate for good safety reasons. You want to make  
43 sure there is a decision.

44 All the ones that I'm aware of not only do they make the  
45 decision, we were also informing parallel as they were doing it. They



1 said we have this situation, we are planning to do this. We think it is a  
2 safer thing to do. Do you have an objection or a concern?

3 We were on the line. We had our own experts. We all  
4 agree and moved forward.

5 As far as I know, typically, we have dealt with those in  
6 natural events such as hurricanes.

7 COMMISSIONER MC GAFFIGAN: You may want to  
8 think about 50.54X in security-induced events as well and make sure  
9 people understand what authority they have.

10 It sounds like it is well understood. That at least in places  
11 where hurricane induced-events occur, people understand that they  
12 really do have a flexibility to do the right thing. That there is this  
13 provision that's been there since -- it's a very old provision that -- it's  
14 post TMI?

15 SPEAKER: Yes.

16 CHAIRMAN MC GAFFIGAN: Well, it's a good provision.  
17 It's a good provision.

18 MR. REYES: One of the things that has been done  
19 recently in the upgraded security plan is that as a result of the feedback  
20 of this situation with hurricanes and security equipment, there are  
21 provisions now in the new security plans to deal with that, too, if are  
22 you talking about security

23 COMMISSIONER MC GAFFIGAN: Okay. Thank, Mr.  
24 Chairman.

25 CHAIRMAN DIAZ: Commissioner Merrifield.

26 COMMISSIONER MERRIFIELD: Thank you, Mr.  
27 Chairman.

28 We did have -- the Chairman and I had an opportunity  
29 last week to go down to the Incident Response Center. And we had a  
30 very good presentation from the staff about some of the new  
31 technological capabilities available to us as well as some of the  
32 enhancements to the reactor safety team, protective measure teams  
33 and their ability to advise the executive team on how these incidents  
34 should be managed. And I have got two questions coming out of that.

35 I think this comes from Roy's comment about the desire  
36 to have continuous improvement.

37 It strikes me that dating on the time when I first got here,  
38 much of the equipment and our efforts in the Incident Response Center  
39 did date back to the big effort that was made post TMI that enhanced  
40 our capabilities. Because of 9-11 and some monies that we had  
41 available, we made, I think, an enormous jump in terms of that  
42 capability from where we were.

43 And so, based on that, I'm wondering if we have got a  
44 plan to build in that continuous improvement so that we are looking at  
45 that down the road, not on a once every ten year, fifteen year basis, but



1 really looking at it on a yearly basis to say, are there areas where we  
2 can make improvements? I would trust it has been talked about in the  
3 visits that Susan Frant and others are making. But have we locked in a  
4 process to make sure that that is built into our reviews?

5 MR. LEEDS: Commissioner, we talked about that. We  
6 have not locked it in yet. We need to do that. We thought about it.  
7 We need to make it part of our yearly op plan and -- we need to do it,  
8 sir.

9 MR. WESSMAN: We are headed in that direction. One  
10 of the IG findings concerned a self-assessment process and are we  
11 going to assess the regions. Well, in turn, should the regions assess  
12 us? Well, yes, of course. We need to always share our best thinking.

13 So we know we are headed in that direction.

14 COMMISSIONER MERRIFIELD: I appreciate that.

15 I guess I heard a little bit today -- and I appreciate Susan  
16 leading a team to go out and take a look at what some of our Federal  
17 and State counterparts do in emergency planning in their incident  
18 response.

19 It strikes me that like utilities, I think, we need to look  
20 beyond our typical framework, recognizing that we oversee -- while we  
21 oversee 103 operating power plants, there are in excess of 330 outside  
22 of the United States that we don't.

23 I'm wondering, are we aware of any efforts either under  
24 the auspices of the Nuclear Energy Agency or the International Atomic  
25 Energy Agency to identify best practices among regulators for specific  
26 capabilities of incident response centers?

27 MS. FRANT: I don't know that this completely answers  
28 your question, Commissioner, but Malcolm Crick at IAEA has been  
29 leading an effort to look at how incident response is done in other  
30 countries. Mostly his effort is aimed at looking at doing assist visits and  
31 raising up some of the less developed programs to the standards of the  
32 more developed programs.

33 But in talking to him, a lot of the things that we are doing  
34 are advanced in terms of other countries. But there are bits and pieces  
35 and we have talked to the Japanese and to the French and to the  
36 United Kingdom. And we are going up to see the Canadian -- just for  
37 many reasons partially because they have just totally overhauled their  
38 Incident Response Center and also because we have agreements with  
39 them to share information about plants on the border.

40 CHAIRMAN DIAZ: But the answer is yes, both IAEA and  
41 NEA have a program specifically designed to look at how to improve  
42 emergency preparedness.

43 COMMISSIONER MERRIFIELD: Thank you, Mr.  
44 Chairman.

45 I guess would editorialize here under the auspices of the

1 utilities that we regulate, the Institute for Nuclear Power Operations  
2 celebrates utilities that have elements which are considered the best of  
3 the best.

4 And while we should be very good in hopefully most  
5 everything, I clearly think that from my personal standpoint, incident  
6 response and our efforts in this area should -- our goal really should be  
7 and our vision should be to be the best of the best.

8 I want to go back to slide number 29 regarding  
9 emergency preparedness licensing efforts.

10 Eric, in your slide, you talked a little bit about the activities  
11 underway in the early site permitting relative to the review of the  
12 Dominion/North Anna site, Exelon/Clinton site and the -- there is a typo  
13 here -- the Entergy/Grand Gulf site. That focuses on reactors and sites  
14 at which there are currently emergency response plans. So the  
15 framework for the review activities of your staff has a greater degree of  
16 boundaries.

17 How have we prepared or alternatively, how are we  
18 preparing to conduct our review of emergency response plans if we  
19 were to receive an application for a greenfield site? And how would our  
20 approach to that be different? And how are we ready to grapple with  
21 that?

22 MR. LEEDS: Commissioner, when we first established a  
23 framework to review any new reactor license applications, we  
24 anticipated greenfield. And that's the way we initially wrote the  
25 regulations and the guidance was for greenfield, not for what we  
26 actually received, because as you said, these new applications are  
27 collocated at existing sites.

28 So, the applications that are in now and that we are  
29 reviewing, we are getting a lot of lessons learned, even though the  
30 initial write-up or the initial framework was for greenfield, we are finding  
31 with once you try to implement anything, you are going to learn from  
32 the activity.

33 And I think what we are learning in the review of the  
34 Dominion, the Exelon, the different applications, we are going to need  
35 to go back and supplement and update some of the original guidance  
36 that we originally created to reflect what we have learned in this current  
37 review.

38 COMMISSIONER MERRIFIELD: Recognizing the end  
39 product is going to be the same and the philosophy we are going to use  
40 is going to be the same, are there any -- is there anything we would  
41 need to do -- and this is sort of thinking as a Commissioner and  
42 wanting to plan -- is there anything we need to do differently in terms of  
43 staffing, in terms of any other lessons we have learned from our views  
44 thus far that would engender some additional involvement of the  
45 Commission in making any policy decisions in this area?

1 Mr. LEEDS: We will need to come to the Commission  
2 because we are going to need to adjust some of the regulations that we  
3 have and provide additional guidance to licensees. So we are going to  
4 need to come to you. We have learned a lot.

5 MR. REYES: If you go back to when we did this in the  
6 late '70's and '80's, I was involved with that, I still remember, we are  
7 going to have to have resources and skills to be able to do that.  
8 Because although the elements are the same, off-site response,  
9 off-site notification, emergency operating facilities, procedures, et  
10 cetera, et cetera, you are really starting from scratch in that area.

11 You are talking greenfield. There is no agreement  
12 beforehand with local law enforcement. There is no agreement with  
13 the counties. There is no agreement with radio stations, et cetera, et  
14 cetera.

15 So we have those procedures from the '80's time frame.  
16 But we need to update them and then research loaded if we were to  
17 get a greenfield application to bring it up the date.

18 COMMISSIONER MERRIFIELD: Well, I think it is  
19 worthwhile now to really be thinking and working those issues, because  
20 as I said, we have been focused on these three sites for which we  
21 already have reactors. And I think it is well within the reason of  
22 plausibility that we may be confronted not too far down the road with  
23 consideration of a site for which there is no reactor currently present.

24 MR. REYES: Yes. We have a point -- as we have done it  
25 in the past. But we need to bring it to today's reality.

26 COMMISSIONER MERRIFIELD: Well, I think one of the  
27 things that in general we have tried to do is work through different  
28 elements of our licensing process to update those so that we don't  
29 have -- so we can do our -- meet our full obligation and do appropriate  
30 reviews for public health, safety and the environment. At the same  
31 time, meet our strategic goal, which is effective, efficient, transparent  
32 and timely.

33 And to the extent that some of these things we have not  
34 brushed off in a while, we may be confronted with, we need to make  
35 sure we are focused on those so that some of those other things we  
36 have not focused on as much as some of the others, we can make it  
37 happen.

38 The last question I had was relative to the interface or as  
39 the Chairman might say, connectivity between our efforts associated  
40 with security and emergency preparedness. Now, obviously, it is an  
41 under the auspices of the same organization, two elements of the  
42 organization and historically a different reflection and somewhat of a  
43 different mission.

44 Given all of the changes that we have made in plant  
45 security lately, how do we make sure that there is that connectivity

1 between what we are doing in security such that it does not encumber  
2 at all the enhancements that we wish to make on emergency  
3 preparedness?

4 MR. LEEDS: Yes, sir. Glenn Tracy and I talk about that  
5 often. We have done a number of things with our staffs to make sure  
6 that we get that connectivity.

7 We make sure -- one of the five teams that I talked about  
8 was the security emergency preparedness interface team. Well, we  
9 have that team leader who is directly connected with DNS, attends the  
10 DNS meetings when they are talking about security items, join very  
11 closely to Allen Madison, who is doing the vulnerability assessments,  
12 we have created work lists of products that each organization has in  
13 various stages of progress which we exchange so that we know what  
14 the other is working on.

15 Of course, Roy when he runs his meeting, Glenn and I  
16 are always looking for areas where there is interplay between the two  
17 organizations. When we do our outreaches, when we talk with utility  
18 groups and industry groups, State, public, when we get things that are  
19 worthwhile feeding back, we look for things each other.

20 So we have got a number of different processes that we  
21 have implemented to make sure that the communication is happening  
22 and that we are working together as a team.

23 CHAIRMAN DIAZ: I understand that several utilities are  
24 now integrated or merging their security and emergency  
25 preparedness organizations.

26 MR. REYES: I was going to say two things. We are  
27 looking into the organizations to try to improve the connectivity. And  
28 the licensees are doing that by themselves because they realize they  
29 have to develop the connectivity.

30 So you see it in all three places.

31 COMMISSIONER MERRIFIELD: I have no problem with  
32 that. I mean, I think it is a natural extension.

33 I would say, and again, this is a personal editorial  
34 comment, we have had the fortunate circumstance in the 26, 27 years  
35 that this agency -- or plus that at this point -- this agency has existed, --  
36 30, boy, time flies, doesn't it -- that we have not had a -- absent one  
37 issue at Three Mile Island -- we have not had a serious security action  
38 at plants that we oversee.

39 We have had an emergency in which our incident  
40 response activities have been called into play. We created as we  
41 needed to an organization called Nuclear Security and Incident  
42 Response. And the principal focus of that entity, as it should be over  
43 the last two years, has been on the security aspects of what we do as  
44 an agency.

45 But it is the incident response that we are going to call

1 upon more often and for individuals who live around, work in or work  
2 near a nuclear power plant, that's the part that's going to be critically  
3 called on more frequently in the activities we conduct as a regulatory  
4 body.

5 So I just -- I think it is worth noting not to diminish at all  
6 the importance of security, but to underscore the importance of incident  
7 response in the organization and to make sure that those critical efforts  
8 that we do on emergency preparedness don't get a short shrift, as I  
9 know the Chairman is very much supportive of, in our efforts to make  
10 sure we also do the right thing on security.

11 And that is all -- I would make one last little quick  
12 comment.

13 I was reflecting on that when we had the discussion of all  
14 the exercises that we all have been involved with over the years. I  
15 have been, as have all three of us, members of Commissions that  
16 comprise three, four and five members.

17 And as a result of some recent announcements, we will  
18 be, it appears, receiving two new members after the first of the year.  
19 People ask me all the time the positives and negatives of various sizes  
20 of the Commission.

21 The one positive thing I would certainly say by having five  
22 Commissioners, we will be able to spread the pleasure of some of  
23 these exercises among a larger group of people because I know  
24 speaking for myself and I know it's not any different for the other two  
25 members on this side of the table, it does add more burden for us when  
26 there are few members.

27 CHAIRMAN DIAZ: But we are better trained.

28 MR. MERRIFIELD: We are very, very well trained.

29 CHAIRMAN DIAZ: Thank you, Commissioner Merrifield.  
30 I just have one comment, I think, to summarize.

31 The meeting, the existence of the emergency  
32 preparedness and incident response organization is really a direct  
33 consequence of the interest that the Commission has in making sure  
34 that in this particular thing, which is where the rubber really meets the  
35 road or the agency's radiological protection function meets the public,  
36 that every effort is made to have the best possible organization, as  
37 Commissioner Merrifield said. I know that the regions always claim to  
38 be worthy of the rubber meets the road. I think the real rubber meets  
39 the road is in this area.

40 And that not only do we have to be good about it, but we  
41 have to communicate it. We have to make sure that the communities  
42 know that we have the proper tools, the resources, the proper  
43 emphasis.

44 So I will continue to look forward to receiving the proper  
45 feedback from the staff that efforts are being made in making the

1 organization better, having the resources that you need to make sure  
2 we can do it good and to communicate it to the public so our role is  
3 clear.

4 We are here to protect the American people, and we are  
5 going to do that. And in this particular case, this is an activity that is of  
6 tremendous importance and it occupies, it always has but now probably  
7 more than ever, a special place in the agency.

8 With that, Commissioner McGaffigan and Commissioner  
9 Merrifield, we are adjourned.

10 (Whereupon, the meeting was adjourned.)  
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