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**POLICY ISSUE**  
(Notation Vote)

January 10, 2005

SECY-05-0010

FOR: The Commissioners

FROM: Luis A. Reyes  
Executive Director for Operations /RA/

SUBJECT: RECOMMENDED ENHANCEMENTS OF EMERGENCY PREPAREDNESS AND  
RESPONSE AT NUCLEAR POWER PLANTS IN POST-9/11 ENVIRONMENT

PURPOSE:

To obtain Commission approval of the staff's recommendations for enhancing emergency preparedness and response in the post-9/11 environment.

BACKGROUND:

The basis of radiological emergency preparedness and response (EP) is to protect public health and safety through the avoidance of radiological exposure of the public due to a release from a nuclear power plant. Since the Three Mile Island (TMI) accident of 1979, the underlying premise has been that conditions and events driving an accident are typically due to equipment malfunction, component failure, or operator error. As a result, it is assumed that the event will escalate in a stepwise fashion through the event classifications (i.e., Alert to Site Area Emergency to General Emergency) based on subsequent equipment malfunctions, component failures, or operator errors. Accident progression in security-based events may not be as logical or diagnosable. However, EP is a dynamic process with flexible plans to allow for response to a wide range of events.

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Exemption Number <u>2</u>
Nuclear Regulatory Commission review required before public release.
<u>Thomas B. Blount, EPD:DPR:NSIR</u>
Name and organization of person making determination.
Date of Determination: <u>10/22/04</u>

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enhancement of onsite protective actions which ameliorate the risks associated with a security-based event. The staff is developing guidance to assist licensees in the development of such enhancements. The staff intends to issue this guidance in a safeguards advisory.

- Abbreviated Notification to the NRC

The current reporting requirements allow licensees up to 1 hour to inform the NRC Operations Center of an imminent threat to the facility. In the post 9/11 environment there is a threat of coordinated attacks. The timing of this notification would not allow the NRC to warn other nuclear facilities of the threat or initiate a Federal response to the affected site in a timely manner. The staff view is that it is appropriate for licensees to notify the NRC immediately after informing local law enforcement agencies (e.g. State/County/local Police or County Sheriff depending on site specific arrangements) of the threat and requesting assistance. This notification to the NRC is intended to be of short duration, containing basic information and minimum details. This supports NRC notification of other nuclear facilities and initiates Federal response to the affected facility. This notification may also initiate the Federal response to an "Incident of National Significance" under the National Response Plan (NRP). The staff intends to issue this guidance in a safeguards advisory.

- Security-Based EP Drill and Exercise Program

In SECY-03-165, the staff advised the Commission of a plan to implement a drill and exercise program that would have each licensee conduct site-specific enhanced security-based drills or exercises to improve emergency response organization skills. The staff intends to provide licensees the opportunity to voluntarily adopt such a program through issuance of a safeguards advisory. It is planned that a pilot drill program would be implemented to gather lessons learned before demonstration drills or exercises for each site are scheduled.

- Review of EP Planning Standard Guidance

The staff intends to review the NRC guidance in NUREG-0654/FEMA-REP-1, "Criteria for the Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants." The review would capture the guidance provided by the staff in the security advisory proposed in this SECY as well as that promulgated by the Commission's Order of February 2002. The results of the review will be issued as a supplement to the NUREG. This review will be conducted in a manner complimentary to the "top-to-bottom" review being performed by the Emergency Preparedness Directorate of EP regulations and requirements contained in 10 CFR 50.47(b) and 10 CFR 50, Appendix E. Should the review of guidance identify necessary regulatory changes, that information will be provided to the top-to-bottom review team.

The staff will seek stakeholder input and will coordinate with FEMA. The staff will provide the Commission with a schedule for completion of the planned "top-to-bottom" review and planned enhancements as directed in SRM-M041214B, "STAFF REQUIREMENTS - BRIEFING ON EMERGENCY PREPAREDNESS PROGRAMS INITIATIVES, 1:00 P.M. DECEMBER 14, 2004," dated December 20, 2004.

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- Adjustment of EP Inspection Resources

To ensure appropriate licensee implementation of program enhancements, the staff intends to modify the NRC EP inspection program. In the attachment, the staff describes an adapted inspection program that will incorporate the security event based enhancements while minimizing resource implications.

- Enhanced Offsite Protective Action Recommendations (PARs)

The staff proposes working with stakeholders on a safeguards advisory to operating nuclear power plant licensees seeking voluntary adoption of enhanced offsite PARs for security events. The enhancement would have licensees consider PARs for the general public at emergency classification levels lower than a General Emergency. One such enhanced scheme would be: in-place sheltering for the general population and evacuation of schools and parks, within a 2-mile radius at a Site Area Emergency or lower classification. The in-place sheltering PAR would direct the general public indoors to monitor the local emergency alert system (EAS) in preparation for an evacuation should plant conditions degrade. Stakeholder consultation on this enhancement will involve OROs and FEMA.

- Abbreviated Notification to Offsite Response Organizations

The staff proposes working with stakeholders on a safeguards advisory to operating nuclear power plant licensees seeking voluntary adoption of an abbreviated initial notification to State and local authorities. The current practice is for licensees to provide a detailed description of the event with supporting information in the initial notification. The timing of some security events may not allow the use of this process. Stakeholder consultation on this enhancement will involve OROs and FEMA.

RECOMMENDATIONS:

The staff recommends that the Commission approve the following staff activities:

1. Issuance of a safeguards advisory to licensees seeking voluntary adoption of:
  - Enhanced Security-Based EALs
  - Enhanced Onsite Protective Actions
  - Abbreviated Notification to the NRC
  - Security-Based EP Drill and Exercise Program
2. Review of each of the EP planning standards guidance and development of a new supplement to NUREG-0654/FEMA-REP-1 for security events.
3. Adjustment of EP inspection resources to incorporate assessment of licensee implementation of the program enhancements identified in this paper.
4. Development of a safeguards advisory to offsite stakeholders and FEMA seeking voluntary adoption of:
  - Enhanced Offsite PARs
  - Abbreviated Notification to Offsite Response Organizations

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RESOURCES:

The activities addressed in this paper were anticipated during the creation of the Emergency Preparedness Directorate (EPD). The staff intends to perform these activities with existing EPD allocated resources of 2.9 FTE in FY 05 and 3.3 FTE in FY 06, as identified in the attachment. The staff anticipates no resource impacts on the Regions or other NRC organizations.

COORDINATION:

This paper has been coordinated with the Office of the General Counsel, which has no legal objection. The Office of the Chief Financial Officer has reviewed this Commission Paper for resource impacts and has no objection.

/RA/

Luis A. Reyes  
Executive Director  
for Operations

Attachment: Background Information in Support  
of Staff Recommendations

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This paper has been coordinated with the Office of the General Counsel, which has no legal objection. The Office of the Chief Financial Officer has reviewed this Commission Paper for resource impacts and has no objection.

**/RA/**

Luis A. Reyes  
Executive Director  
for Operations

Attachment: Background Information in Support  
of Staff's Recommendations

ADAMS Accession No.:      Package: ML043090445  
   Commission Paper: ML042720354  
   Attachment ML043090281

\* See previous concurrence

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## BACKGROUND INFORMATION IN SUPPORT OF STAFF RECOMMENDATIONS

The following additional information is provided for the Commission's consideration. The staff proposes action in the following areas to enhance emergency preparedness efforts for security-based events:

1. Enhanced Security-Based Emergency Action Levels (EALs)

The staff is working with the Nuclear Energy Institute (NEI) to develop guidance that will provide an enhanced security-based EAL scheme. Consistent with the Commission direction in the staff requirements memorandum (SRM) dated September 10, 2004, "Staff Requirements - Discussion of Security Issues (Closed-EX.1), 9:30 A.M., Wednesday, August 18, 2004, Executive Conference Room, One White Flint North, Rockville, Maryland," the staff is developing guidance that will provide an enhanced security event EAL scheme. The rationale for this classification guidance will be compatible with the current radiological event-focused scheme, with due consideration of the immediate impact of security events on plant personnel safety. This classification scheme will include notification of unusual event (NOUE), alert (A), site area emergency (SAE), and general emergency (GE). The additions to the licensee's EAL scheme are expected to be adopted using the emergency plan change process and do not require prior NRC approval. The staff intends to provide this guidance to licensees in a safeguards advisory for voluntary adoption. Following the implementation period, the staff intends to inform the Commission of the status of licensee adoption of this enhancement.

A recent rule change to Appendix E, Section IV.B, "Assessment Actions," to 10 CFR Part 50 has removed the requirement that changes to the EAL scheme be discussed and agreed on with State and local governmental authorities. The rule retains the requirement that licensees review their EALs on an annual basis with State and local authorities. This change eliminates a perceived regulatory burden on licensees for implementation of this type of change. The staff has taken active steps to minimize the burden of these changes through communicating intent and providing for an agreeable period of implementation.

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2. Enhanced Onsite Protective Actions

Due to the immediate threat to life from terrorist activities, guidance is being provided to licensees either to implement onsite protective actions (site assembly/accountability, evacuation, etc.) at lower classification levels (i.e., notification of unusual event or alert), or to defer certain actions in lieu of more effective measures, such as seeking cover. While certain protective actions such as site evacuation of non-emergency response personnel may be appropriate, they must be carried out with consideration of the risk to site personnel. The staff expects licensees to consider constraints to rapid dispersal of site personnel, such as locked gates and radiation monitoring requirements, that limit protective actions. Licensees should consider pre-planned strategies regarding accountability and evacuation to aid decision-makers during outage periods, normal workdays, back shifts, etc. The staff intends to provide this guidance to licensees in a safeguards advisory for voluntary adoption. Following the implementation period, the staff intends to inform the Commission of the status of licensee adoption of this enhancement. If the Commission approves the voluntary adoption of this enhancement it will be further evaluated for rulemaking changes.

3. Abbreviated Notification to the NRC

Notification to the NRC is a significant concern during a security event. The current set of NRC regulations require notification to the NRC for safeguards events under 10 CFR 73.71. The regulation states in part, "Each licensee subject to the provisions of §§§§ 73.20, 73.37, 73.50, 73.51, 73.55, 73.60, or 73.67 shall notify the NRC Operations Center within 1 hour of discovery of the safeguards events described in paragraph I(a)(1) of appendix G to this part..." Additionally, safeguards events that warrant declaration under the site's emergency plan would be reported to the NRC as required by 10 CFR 50.72. The current regulation, 10 CFR 50.72(a)(3) states, "The licensee shall notify the NRC immediately after notification of the appropriate State or local agencies and not later than one hour after the time the licensee declares one of the Emergency Classes." It is important to note that in either case of reporting safeguards events to the NRC, the notification could be delayed up to an hour from discovery or an hour from classification. The staff views this delay as inappropriate in the post-9/11 environment where the potential for coordinated attacks on multiple facilities is a realistic possibility.

Recent interactions with licensees during force-on-force (FOF) activities have shown licensees are clearly aware of the requirements to notify NRC and have indicated that some consider the 1 hour leeway appropriate even under security event scenarios. Specifically, for safeguards events that rise to the level of an imminent threat to the facility, the staff seeks to have licensees notify the NRC on an exigent or expedited basis following notification of the appropriate local law enforcement agencies. This is intended to mean that after or concurrent with the notification to local law enforcement authorities in accordance with 10 CFR 73.55, by the licensees security organization, the NRC Operations Center is the next and immediate notification and should be done from the control room, if possible, using the emergency notification system (ENS). The notification will be abbreviated or brief due to the need for expediency by both the NRC and licensee staff during a response to a security event. The

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information needed by NRC during the initial notification will be identified through discussions with stakeholders. This notification under situations of duress is appropriate to satisfy the requirement for reporting under 10 CFR 73.71. The evaluation of the event for possible emergency classification purposes should proceed subsequent to or in parallel with the Part 73.71 exigent notification action.

The staff view is this approach implements the notification change in a manner that ensures vital security information is conveyed from the licensee's security staff to the control room and that the notification of the NRC not interfere either with the notification of local law enforcement or with the operational safety of the reactor during this time of extreme stress. A likely outcome is the implementation of the site emergency plan which will proceed with the appropriate level of concern. It is the staff view that the declaration of the emergency class and the subsequent notifications will proceed in a timely manner and in accordance with the existing site process established to meet 10 CFR 50.72 reporting requirements.

This notification initiates the alerting mechanism for other nuclear facilities in recognition that the facility under attack may be part of a larger coordinated effort. This notification is a protective measure to initiate Federal response to the affected facility and place other facilities that may be targeted on heightened awareness. In this instance, NRC notification may initiate the Federal response to an "Incident of National Significance" under the National Response Plan (NRP).

The staff intends to provide this guidance to licensees in a safeguards advisory for voluntary adoption. Following the implementation period, the staff intends to inform the Commission of the status of licensee adoption of this enhancement. Consistent with the direction provided by the Commission in SRM M041118, "Discussion of Security Issues, 1:30 P.M. Thursday, November 18, 2004 Executive Conference Room, One White Flint North, Rockville, Maryland (Closed to Public Attendance)," dated December 14, 2004 the staff is considering rulemaking changes for this issue and will pursue that effort in the longer term.

4. Security-Based EP Drill and Exercise Program

In SECY-03-165, the staff advised the Commission of its plan to implement a drill and exercise effort that would require each licensee to conduct site-specific terrorist-based drills and exercises to improve emergency response organization skills. The program endorsed by the staff would have each site conduct a federally observed terrorist-based drill or exercise. This drill effort differs from the EP response during the FOF exercises in that the focus of the FOF is approximately 95% security, and 5% EP/operations/security integrated response. The EP security-based drills will focus 95% on EP/operations mitigative actions and strategies, with about 5% security perspective. Following the demonstration of a security-based drill or exercise at a site, it is expected that licensees will include security event based scenarios in their normal drill and exercise program. The response to security events is considered a principal EP functional area and is expected to be part of the licensee's routine EP drill and exercise program, tested at least every six years, as is done for other principal functional areas.

The staff encourages a voluntary program, conducted in a phased manner, to develop initial key lessons and establish a basic framework with industry. A pilot drill program will be initiated



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and is expected to include 6 drills conducted over a 9 month period. The pilot sites will be selected to test different technologies and scenarios. Following the pilot, the staff will assess the effort and report the results to the Commission with appropriate recommendations on the conduct of future drills and exercises. It is expected that the lesson's learned will be provided to industry for dissemination, as a means to further enhance their integrated response.

After lessons learned from the pilot program are assimilated, the staff intends to implement NRC oversight through the observation of a security scenario based exercise (or drill) at each site. The implementation of this oversight is pending the success of the pilot, a resource analysis, a schedule analysis, and the Commission's approval.

The staff view with respect to requiring each site to demonstrate their response to security events in an evaluated exercise or drill will be provided to the Commission following the pilot program. Additionally, the pilot program will serve to inform the need to expand the scenario response to include offsite response organizations (ORO's) and/or mitigative strategy demonstrations. The staff believes that this level of demonstration should be observed by the agency periodically.

The regulations and the guidance for EP do not provide requirements for specific scenario content of drills and exercises. While the staff has previously reviewed licensee scenarios to ensure appropriateness to meet specified objectives, conducting such reviews is not a current practice and the reviews did not define event initiators. Under existing regulations, licensees have effectively demonstrated principal functional areas of their emergency response plans without using the security based scenarios envisioned under this proposal. Following the pilot program the staff will offer a recommendation to the Commission on whether rulemaking is needed in this area.

There is a distinction between a drill and an exercise consistent with the guidance provided in NUREG-0654 / FEMA -REP 1, Section N, "Exercises and Drills," Items 1 and 2. Specifically, the guidance states that an exercise is an event that tests integrated capability and a major portion of the basic elements within emergency preparedness plans and organizations. The exercise simulates an emergency that results in offsite radiological releases which would require response by offsite authorities. The guidance establishes the need to have a release which ensures that the offsite agencies have the opportunity to demonstrate their activities, usually during the Federal Emergency Management Agency (FEMA) graded biennial exercise. In the biennial exercise instances where a release does not occur or at least the threat of a release is not present, the offsite authorities lack a demonstration opportunity that can affect the graded exercise result. This in turn can affect the FEMA finding of "reasonable assurance" for the exercise.

The guidance indicates that a drill is a supervised instruction period aimed at testing, developing and maintaining skills in a particular operation. A drill is often a component of an exercise. Drills are commonly used as training opportunities to develop new skills, while exercises are a demonstration of abilities. Existing regulations (Appendix E to 10 CFR 50, F.2.g, "Training") requires that "all training, including exercises, shall provide for formal critiques in order to identify weak or deficient areas that need correction. Any weaknesses or deficiencies that are identified shall be corrected." This is currently the regulation used to

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assess EP exercises under the existing reactor oversight process (ROP). Application of this regulation is appropriate to security based drills as a means of oversight. It is the staff view that the goal for the drill program is the development of skills and improvement of response capabilities. The biennial exercise is required by the regulations in 10 CFR 50, Appendix E. In the same section of the regulations licensees are directed to maintain emergency response skills by conducting drills in the interval between biennial exercises. The regulations indicate licensees would have the opportunity to consider accident management strategies, allow for supervised instruction, operating staff would have the opportunity to resolve problems (success paths) rather than have controllers intervene, and the drills could focus on onsite training objectives. The staff believes drills offer the best opportunity for licensees to develop the necessary skills. However, the staff recognizes that licensees will also gain valuable insights and learning through periodic exercises.

The staff intends to provide this guidance to licensees in a safeguards advisory for voluntary adoption. The staff intends to inform the Commission of the actions taken by licensees in this area and provide recommendations on the need for rulemaking following the pilot program.

#### 5. Review of EP Planning Standard Guidance

The emergency planning standards codified in 10 CFR 50.47(b) were adopted by rule in 1980 following the Three Mile Island (TMI) accident. Evaluation criteria for the standards are given in NUREG-0654/FEMA-REP-1, "Criteria for the Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," which was also published in 1980. Since that time the guidance has not been significantly changed, and with the exception of the adoption of potassium iodide (KI) as part of the protective action regimen, the regulations in this area have not seen significant modification. The staff has identified several EP enhancements to address security events and it is appropriate that the guidance should be reviewed to ensure it reflects the current threat environment.

The staff recommends a review of each of the 16 guidance areas of NUREG-0654, considering how each is affected by security events and whether the planning standard strategy should be enhanced. The staff does not recommend undertaking rulemaking at this time, but rather enhancing the guidance to accommodate the new threat environment. While the initial reason for an in-depth review of the guidance is the impact from security events, the opportunity will be taken to improve the guidance in general. The review will be conducted in a manner complimentary to the "top-to-bottom" review being performed by the Emergency Preparedness Directorate (EPD) of EP regulations and requirements contained in 10 CFR 50.47(b) and 10 CFR 50, Appendix E. The staff will provide the Commission with a schedule for completion of the planned "top-to-bottom" review and planned enhancements as directed in SRM-M041214B, issued in response to the staff's briefing of the Commission on EP program initiatives on December 14, 2004. If the review of planning standard guidance indicates rulemaking is necessary, the information will be passed to the team performing the "top-to-bottom" review of EP regulations and requirements.

It is envisioned that the revised guidance will be provided in a supplement to NUREG-0654. In addition, the planning standards guidance will be updated to be consistent with the National Response Plan (NRP) including terminology, operational impacts (Events of National

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Significance, Joint information System, etc) and adoption of the Nuclear Annex of the NRP. This effort would be conducted in cooperation with FEMA and any insights will be shared with the other Federal agencies, State and local authorities, and the licensees through regional workshops and other outreach efforts.

### 6. Adjustment of EP Inspection Resources

The staff recommends adjusting the EP baseline inspection program to include the proposed enhancements. The staff hours currently applied to existing EP reactor oversight process (ROP) initiatives should be modified to assess implementation of the security-based EP enhancements. The inspection effort should be structured to encourage lessons learned and develop skills in this new area. The benefit of this approach is that existing resources would be applied at the current levels with no appreciable increase in staffing. Although the current level of inspection effort is structured to provide the minimum necessary oversight to maintain safety, a modification to the existing program can significantly benefit the overall EP response as the staff emphasizes EP aspects of security event response. Specifically, the inspection program would be modified to inspect the EP component of FOF exercises, the compensatory measures, the enhancements of this paper, and the EP security-based pilot drills.

EPD support to the FOF activity will be provided during the pre-exercise visit at the same time that Division of Nuclear Security conducts the strategy and timeline tabletop assessments. Conducting the EP tabletop segment during this period has the benefit of all participants performing in the same process (tabletop). This is expected to utilize approximately 0.1 full-time equivalents (FTE) of currently budgeted EPD resources. The observation of the EP segment of the FOF exercise will be provided by revising the EP inspection module for drill evaluation used by the resident inspectors to accommodate this activity. Currently there are up to 20 hours per year at each site to observe EP drill activity. The "smart sample" approach in this regard is to continue to observe the EP drill activity, including the EP portion of FOF exercise during the years that the FOF occurs at that site (triennial basis). This will not result in an increased resource burden for the Regional inspection staff.

Observation of the security event based drills will be conducted by headquarters EP specialists during the pilot phase. This effort has 1 FTE currently in the EPD budget. Regional participation would be requested on an "as available" basis to gain inspector insights, maximize experience, and encourage integration of lessons learned. The staff will inform the Commission regarding lessons learned from the pilot and provide a recommendation for program continuance.

Licensee voluntary adoption of the other EP enhancements is expected to result in EP plan and procedure changes. These will be assessed in two phases:

- Initially, EPD will engage licensees in order to perform a review of the emergency plan changes implemented as a result of the advisory. The advisory would state that implementation of the enhancements is not a decrease in effectiveness and may be implemented without prior NRC approval. Since the advisory permits the enhancements on a voluntary basis compliance issues are not expected. Additionally, workshops or other outreach activities will be

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conducted to assist licensees with proper implementation. It is planned that the review of plan changes would be performed by EPD staff with no impact on the Regional EP inspector staff. If review results indicate that licensees are not implementing the enhancements as expected, additional outreach can be conducted. If necessary, lessons learned from the plan change review process could be shared with industry to assist with effective implementation.

- Implementation of the enhancements will be assessed in an on-going manner as part of the baseline inspection program. This will be accomplished by the adjustment of the existing baseline EP inspection procedures to identify specific sample selections as a "smart sampling" technique. The EPD staff will conduct the initial inspections to determine the appropriate adjustments to the inspection procedures, but the intent is that the samples taken would include changes that impact response to security events. These initial inspections would be integrated with regularly scheduled regional EP inspections as the process matures. This is intended to be conducted in a manner that will not increase the burden on the Regional inspection staff.

These activities will require EPD staff support of approximately 1 FTE over the next year which is currently budgeted.

7. Enhanced Offsite Protective Action Recommendations (PARs)

The staff proposes that licensees revise PAR schemes for security events. Current practice is that licensees issue recommendations only at the GE level. The proposed enhancement for security events would initiate this PAR at the SAE or perhaps the Alert emergency classification level. It is the staff's current view that the recommendation be limited to in-place sheltering for the general population and evacuation of limited segments of the population such as schools and parks within a 2-mile radius of the nuclear power plant (NPP). This view is consistent with NUREG-0654/FEMA-REP-1, Appendix 1, SAE class regarding State and/or local offsite authority actions. Item 2 of this section states "If sheltering near the site is desirable, activate public notification system within at least two miles of the plant." Another consideration would be to direct the general public to go indoors and monitor the local emergency alert system for additional information and governmental authority direction.

The current PAR scheme for the GE classification level per Supplement 3 to NUREG-0654/FEMA-REP-1 would also be retained (keyhole evacuation). This approach allows for the implementation of limited protective actions (i.e., sheltering) prior to a GE classification and provides additional time for OROs to mobilize the necessary resources to expand protective actions if plant conditions degrade.

The long standing practice that the licensee recommends protective actions and the governmental authority considers and decides on protective measures would not change. This implementation of the new PAR scheme would be evaluated by licensees and OROs for applicability to each site. Additionally, there are complicating factors such as the potential for the simultaneous use of an abbreviated notification to offsite response organizations. This enhanced PAR concept would be discussed with stakeholders to gather information in

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recognition that there may be other site specific solutions that are more effective. The staff intends that this enhancement be provided in draft form to OROs, in concert with the Federal Emergency Management Agency (FEMA) and licensees, to establish dialogue on the subject. Any advisory developed thereafter would be informed by this input.

#### 8. Abbreviated notification to Offsite Response Organizations

In SECY-03-165, "Evaluation of Nuclear Power Reactor Emergency Preparedness Planning Basis adequacy in the Post -9/11 Threat Environment," the staff noted limitations with the current EP notification process to offsite officials when performed with the control-room under duress. The staff identified this issue to licensees in RIS 2004-15, "Emergency Preparedness Issues: Post-9/11," dated October 18, 2004. The staff indicated that licensees should consider modification of the more common practice of providing a detailed description of the event with supporting information in the initial notification. However, the current notification process has been in effect for over 20 years and emergency responders are very familiar with its implementation. Any change to the process will include outreach to OROs.

The concept of operations in NUREG-0654 was for the initial notification to provide basic information indicating the state of the plant and request aid if necessary. Followup notifications would provide additional details as soon as practicable. However, the NUREG allowed negotiation of the notification content with OROs and this resulted in the more complete notification in practice. Licensees are proficient in initiating the notification within the required 15 minutes and OROs are proficient in receipt, verification and implementing appropriate response thereafter. However, the process of notification itself actually takes several minutes for the licensee to fill out forms, obtain authorization and notify, as well as for OROs, to receive, repeat back and verify the notification. An abbreviated initial notification would enhance emergency response in the case of a rapidly developing security event.

The concept of an abbreviated ORO notification was discussed with stakeholders in outreach meetings and the staff concludes that additional consultation is necessary prior to implementing this change. While the staff feels this enhancement is appropriate for security events it is recognized that it will not be willingly adopted if stakeholder concerns are not adequately addressed. The staff intends that this enhancement be further discussed with licensees and OROs, in concert with FEMA. Any advisory developed thereafter would be informed by the input obtained.

#### RESOURCES:

The activities addressed in this paper were anticipated during the creation of the Emergency Preparedness Directorate and the staff intends to perform these activities with existing allocated resources of 2.9 FTE in FY 05 and 3.3 FTE in FY 06, as identified below.

- The review of licensee emergency plan changes as a result of the safeguards advisory will utilize approximately 0.5 FTE for the remainder of fiscal year (FY) 05 and 0.5 FTE in FY 06.

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- The review of the 16 planning standards guidance will be a significant undertaking and will utilize approximately two (2) FTE for the remainder of FY 05 and two (2) FTE in FY 06. This review will assess the influence of terrorism on the application of the standard. This review will require close coordination with many stakeholders including FEMA, as the co-authoring agency for the original work, as well as consideration for the impacts on Offsite authorities.
- The recommendation to realign EP inspection assets opens the inspection focus to include areas of integrated response to terrorism. Support for the EP portion of the FOF tabletop effort will utilize approximately 0.1 FTE for the remainder of FY 05 and 0.1 FTE in FY 06.
- The enhanced security based drills will be conducted by headquarters EP specialist during the pilot phase. This effort has 1 FTE currently in the EPD budget under the Emergency Preparedness Licensing Planned Activity.

Item	FY 05 Resources and Planned Activity	FY 06 Resources and Planned Activity
Safeguards Advisory Review	0.5 FTE Homeland Security Mitigating Strategies	0.5 FTE Homeland Security Mitigating Strategies
Planning Standard Review	1.7 FTE Homeland Security Threat Assessment 0.3 FTE Homeland Security Mitigating Strategies	0.8 FTE Homeland Security Threat Assessment 0.4 FTE Homeland Security Regulatory Improvements 0.8 FTE Emergency Preparedness Licensing
FOF Support	0.1 FTE Homeland Security Mitigating Strategies	0.1 FTE Homeland Security Mitigating Strategies
EP Security-based Drills	0.3 FTE Emergency Preparedness Licensing	0.7 FTE Emergency Preparedness Licensing

This utilization of resources allows the staff to assess the incorporation of the response to terrorism initiatives into the emergency preparedness and response programs in a cohesive manner. This effort will be reviewed on an ongoing basis to determine if the alignment of the EP inspection can resort to program maintenance following a determination that licensees have adopted the post-9/11 terror environment in their emergency preparedness and response programs.

## CONCLUSION:

Emergency preparedness planning is a dynamic process with flexible plans to allow for response to a wide range of events. Nuclear power plant emergency preparedness has been and continues to be based on the actual or potential health effects from the release of radiation.

While it remains vital to be prepared to respond to radiological events caused by equipment malfunctions, operator errors, or other unintentional conditions, nuclear power plant emergency preparedness must also be ready to respond to intentional acts of malevolence where plant equipment challenges may progress more rapidly and have an immediate potential for significant harm and damage. Effective planning for contingencies must address a wide spectrum of events to ensure adequate protection. The staff has determined that, while the EP basis remains valid, implementation of the enhancements identified in this paper are

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appropriate. Recognizing the need for the NRC's emergency preparedness and response program to be congruent with the National Response Plan and acknowledging the role of Federal, State and local governments in responding to security-based events, the staff will continue to engage stakeholders during development and implementation of these enhancements and will continue to keep the Commission informed of its findings.

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**POLICY ISSUE  
INFORMATION**

April 18, 2005

SECY-05-0064

FOR: The Commissioners

FROM: Luis A. Reyes  
Executive Director for Operations

SUBJECT: NRC AGENCY-WIDE EMERGENCY PREPAREDNESS AND RESPONSE  
IMPROVEMENTS

PURPOSE:

To present the plan to enhance the effectiveness of emergency preparedness and incident response, including an improved training program for NRC responders. Further to inform the Commission of a 3 year implementation of key improvement initiatives.

BACKGROUND:

In June of 2004, the Commission authorized the formation of a new Division of Preparedness and Response (DPR) in the Office of Nuclear Security and Incident Response (NSIR). The DPR was formed at a time when the U.S. Nuclear Regulatory Commission (NRC) and the Federal Government were improving the Nation's preparedness for and ability to respond to

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May be exempt from public release under the Freedom of Information Act (5 U.S.C. 552)	
Exemption number	<u>2</u>
Nuclear Regulatory Commission review required before public release.	
Name and organization of person making determination.	
<u>Susan M. Frant</u>	
Date of Determination	<u>November 18, 2004</u>

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The Commissioners

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Incidents in the post-9/11 environment. In addition, the Commission directed and the staff has integrated safety, security, and emergency preparedness within the NRC's strategic plan for fiscal years 2004-2009.

The Commission recognized that enhancement of the program would build upon the NRC incident response program, developed after the Three Mile Island accident, which had worked well for more than 25 years. The Commission noted in its December 20, 2004 Staff Requirements Memorandum (SRM) that "The staff should implement a continuous self-assessment and improvement program that addresses emergency preparedness and response issues."

Shortly after the establishment of DPR, the Office of the Inspector General (OIG) recommended specific improvements to the incident response program, based on observations and information collected during interviews with NRC staff and others. In OIG-04-A-20, "Audit of NRC's Incident Response Program," the OIG provided 17 recommendations for upgrading the agency's incident response capabilities. The staff responded to the OIG with an action plan to address the recommendations in a November 3, 2004, memorandum from the Deputy Executive Director for Homeland Protection and Preparedness (ML042960632). The specific proposed actions to address each OIG recommendation are designated under each initiative in Attachment 1 and a cross-walk is also provided.

The Homeland Security Council's post-9/11 initiatives also prompted NRC to review emergency response programs. On January 6, 2005, the U.S. Department of Homeland Security (DHS) completed a 2-year effort and issued the National Response Plan (NRP) in accordance with Homeland Security Presidential Directive 5, "Management of Domestic Incidents." This plan is an all-hazard, all-discipline plan for response to incidents that might pose a threat to public health and safety. The NRC, together with other federal agencies and State and local authorities, are updating their emergency preparedness and incident response plans to reflect the nationwide integration of the new NRP by April 14, 2005.

In response to the OIG report and the actions needed to conform to the DHS's National Response Plan, NSIR formed a task group to develop recommendations to enhance the incident response and emergency preparedness program. This group complemented actions that were already underway to enhance emergency preparedness and response in the current threat environment and to update basic documents to conform to the National Response Plan.

The task group consisted of staff from NSIR, the Regions, and the Office of the Executive Director for Operations (OEDO) and was led by a senior manager. From October 2004 through February 2005, the proposed initiatives, actions, and budget were discussed with each program office, OEDO, the Office of Public Affairs, the Office of Congressional Affairs, the Office of State and Tribal Programs and the regions. The program plan (Attachment 1) was sent to Commission offices, the Regions and Program offices for comment in early December 2004. Subsequently, the plan was reviewed and concurred in by the Offices of Nuclear Reactor Regulation, Nuclear Material Safety and Safeguards, Research, and the Regions.

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Furthermore, the members of the group visited each of the regions, nine licensees, five federal agencies, two state agencies, one local agency, and IAEA to familiarize themselves with other incident response organizations, best industry practices, and private sector programs. The group also reviewed the concept of operations of the emergency operations of several international regulators with large nuclear power programs. The regions listed their "best practices" in an August 27, 2004 memorandum from William Travers, and these were included in the plan (ML042190409).

DISCUSSION:

The staff has developed four program goals to support the agency's mission of ensuring that the agency continues and licensees remain prepared to effectively respond to incidents. The program goals are:

- Ensure that NRC personnel are capable to consistently and effectively respond to incidents
- Act as a unified response organization
- Achieve excellence in stakeholder outreach
- Continually improve NRC preparedness and response capabilities

Attachment 1 is the staff's plan for enhancing the program through implementing a series of 10 initiatives. The 10 initiatives incorporate recommendations from the OIG audit and have been categorized as improvements in the following areas:

- Incident Response Qualification Program
- Program Standardization
- Assessment of Response
- Facilities
- Post-9/11 Emergency Preparedness
- Incident Response Staffing
- Outreach
- Staff Augmentation
- Lessons-Learned and Corrective-Action Programs
- Bench Marking

It is noteworthy that the qualification improvement initiative is a 3 year effort to enhance the qualification program for the agency. The initiative will provide a more rigorous training and qualification program and more effectively document the qualifications of NRC response personnel.

Several of the initiatives deal with process improvement and best practices implementation. Therefore, improvements of this nature will be documented in an NRC incident response program manual chapter, providing the basis for a single, consistent, coherent, and effective

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program for headquarters and the regions. The effort is designed to enhance NRC response actions during and after an incident involving nuclear facilities or materials to ensure the protection of public health and safety and the security of radioactive materials.

Performance measures are being improved to support the emergency preparedness and response program goals in alignment with the NSIR Operating Plan.

ISSUES:

There are three considerations that bear on the staff's plan for enhancing the effectiveness of emergency preparedness and incident response including an improved training program for NRC responders: (1) the level of improvement appropriate for each initiative, (2) the resources to implement the initiatives, and (3) the length of time to implement the enhancements. Improvements specific to each initiative were identified, with programmatic enhancements proposed to raise the level of the agency's capabilities to prepare for and respond to incidents. Consideration was given to address agency-wide consistency, cost effectiveness, and best practices. The staff's recommendations will move the agency toward a higher level of excellence in its ability to respond to incidents. In some instances, the initiatives are phased over a 3 year period to completely implement. With respect to resources, the staff has estimated both the full-time equivalent (FTE) agency-wide effort needed and the contract and other funds needed for the 3 year effort. (Figure 1)

To address these proposed improvements, the staff placed the 10 initiatives in order recognizing the interrelationship. The staff intends to proceed in the following order:

- Qualification

Although NRC responders have consistently demonstrated their ability to respond to incidents, the qualification program is not formal nor well documented. Further, qualification of responders is not consistent across the agency nor are qualifications consistently documented.

Some actions have already been initiated with FY 05 resources to address this initiative as indicated in the Program Plan (Attachment 1). In addition, improvements here will apply to other initiatives (such as Lessons Learned, Assessment, Staffing, and Program Standardization). Actions to complete this initiative also address eight of the seventeen recommendations in the OIG report.

- Program Standardization

Incident response program elements are not consistently performed in the same manner at headquarters and at the regions. This initiative provides an agency-wide opportunity to make programs more cost effective and efficient, as well as a method to reinforce, through demonstration, a consistent understanding of NRC's incident response program by stakeholders.

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This initiative will also affect improvement under other initiatives, such as Assessment, Staffing, Staff Augmentation, and Lessons Learned through the adoption of consistent practices throughout the agency. This initiative addresses nine of the 17 OIG recommendations.

- **Assessment of Response**

The OIG recommended enhancing the incident response assessment program. This initiative will enhance the agency's capability to self-evaluate and continually improve incident response capabilities.

Lessons Learned and Qualification initiatives rely on a sound assessment program.

- **Facilities**

Recent improvements have been made to the headquarters and region incident response centers and have provided an improved incident response capability for the agency. This initiative consolidates additional upgrade and replacement recommendations necessary to maintain the agency at a high level of incident response capability.

Several significant equipment upgrades and improvements have been identified under this initiative, such as improvements in communication equipment at headquarters and the regions, and replacement of obsolete equipment.

- **Post 9/11 Emergency Preparedness**

The Commission has re-emphasized the importance of an effective emergency preparedness program following the events of September 11, 2001. SECY-05-0010 "Recommended Enhancements of Emergency Preparedness and Response at Nuclear Power Plants in Post-9/11," dated January 10, 2005, discussed a number of initiatives undertaken by the agency to raise the level of licensee preparedness. This initiative serves to maintain an agency-wide focus on this aspect of incident preparedness and response.

- **Incident Response Staffing**

A top-down review of incident response organization staffing was performed by the staff as part of addressing the enhancements to the qualification program, in addition to executive management recommendations to consider a team based approach to the organization. It was found that more efficient use of personnel resources, better coordination among responders, and more effective communication and response practices would result from modifications in staffing. This initiative addresses those improvements.

The EDO has initiated the incident response team concept through the solicitation of individuals to fill three-team complements for positions in the Reactor Safety Team, Protective Measures Team, Safeguards Team, and Operations Support Team. Executive Team members have recommended improvements to headquarters Incident Response Center activation and more effective information transfer to the Executive Team during an incident.

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- Outreach

Enhancements in strengthening NRC links with stakeholders have been initiated through the establishment of an Outreach Team within NSIR's Division of Preparedness and Response. In part, this was in response to observations in recent licensee emergency preparedness exercises where offsite (state, local, tribal) response organizations were not fully prepared to interface with the NRC in a realistic manner. This initiative defines specific improvements to ensure that stakeholders receive effective and consistently accurate information, including information which serves to coordinate the combined response capability of the agency, licensee, state, local, and tribal government officials, and federal incident responders.

Improvements to Outreach are focused on providing better coordination, direction, and effectiveness (efficiency, consistency, cost effectiveness) to agency resources. Program Standardization, Lessons Learned, and Assessment initiatives also provide elements to improve Outreach initiative elements.

- Staff Augmentation

An effective staff augmentation process ensures that appropriate numbers of pre-identified and qualified responders are available and capable to promptly respond to an incident. While the current processes in use by the agency are functional, headquarters and region practices are not consistent in application, testing and drill frequency, and have some inefficiencies. This initiative will standardize processes, establish specific criteria to further ensure responders are available, and test and evaluate staff augmentation practices to ensure timely response capabilities are maintained.

Actions are already in progress to address staff augmentation improvements at headquarters. Program Standardization and Facilities initiatives provide elements to also address continued improvement in this area.

- Lessons Learned

Establishing additional practices to evaluate lessons learned and provide methods to continually improve the agency's incident response program builds on the current headquarters exercise lessons learned program. This initiative would expand those practices which would be included in current efforts to establish a formal agencywide program.

Actions to this initiative are already in progress and will also be addressed by several other initiatives, including Qualification, Program Standardization, Assessment, and Outreach.

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- Bench Marking

An effective benchmarking process allows the agency to review the attributes of other existing programs for incorporation into the NRC incident response program as well as provides for a mechanism to determine if the existing NRC response functions are adequate in light of a changing environment. To monitor for change, benchmarking is a process that is periodically repeated.

Benchmarking results from a recent regional initiative to capture best practices as well as visits to other programs were incorporated into the Program Plan, with this initiative developed to continue benchmarking efforts as part of an agency-wide process. In regard to future benchmarking actions, this initiative will establish a methodology and schedule.

RESOURCES:

The following table shows the incident response program baseline for the FY 2006 budget, and the resources required to fund the 10 improvement initiatives over a 3-year implementation period beginning in FY 2006. The FY 2006 President's Budget column shows resources budgeted for emergency preparedness and incident response activities for the key initiatives discussed in this paper. For the resources in 2006 above the President's Budget, the staff has provided the Enhancements resources as above guidance for consideration during the review of the FY 2006 current estimate within the budget review process. The 2007 resources are consistent with the budget submissions provided to the Office of the Chief Financial Officer and will be considered by the Planning Review Committee during the forthcoming FY 2006/2007 budget review process. FY 2008 reflects planned resources for completing the 3-year implementation. Resources would be distributed among the Regions, Office of Human Resources and the Office of Nuclear Security and Incident Response as determined by the Planning, Budgeting, and Management Review process.

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Figure 1

Initiative	FY 2006 President's Budget		Enhancements		Total FY 2006		Total FY 2007		Total FY 2008	
	\$K	FTE	\$K	FTE	\$K	FTE	\$K	FTE	\$K	FTE
Incident Response Qualification Program	0	3	100	3.25	100	6.25	250	7.75	250	7.75
Program Standardization	0	0.5	100	.25	100	0.75	60	0.5	50	0.5
Assessment of Response	0	0.7	0	0	0	0.7	200	0	100	0
Facilities*	2400	1	800	0	3200	1	1200	1	1100	1
Post 9-11 Emergency Preparedness	0	0	0	0	0	0	100	0	0	0
Incident Response Staffing	0	0.2	0	0	0	0.2	0	0.5	0	.5
Outreach	0	4	0	2	0	6	200	7	200	7
Staff Augmentation	0	0	0	0	0	0	0	0.05	0	0.05
Lessons-learned and corrective-action programs	0	0	0	0	0	0.1	0	0.15	0	0.15
Benchmarking	0	0	0	0	0	0.1	0	0	0	0
Total	2,400	9.5	1,000	5.5	3,400	15.0	2,010	17	1,700	17

\*Additional resources for FY 2005 requirements for Facilities are being addressed in a separate forthcoming significant reallocation memo.

The qualification program initiative will require additional agency training hours not included in the estimates above which offices will need to accommodate. The staff has estimated that training for non-dedicated incident response personnel will increase by approximately 15 hours annually per responder. This estimate is based on the current vision of an enhanced and more consistent program using web-based training, team and position specific training, and tabletop drills. Approximately half of the agency-wide responder positions are filled by NRC managers.

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**COORDINATION:**

The Office of the General Counsel has no legal objections to the recommendations in this paper. The Office of the Chief Financial Officer has reviewed this paper for resource implications and has no objections.

**/RA/**

Luis A. Reyes  
Executive Director  
for Operations

**Attachments:**

1. Program Plan for Enhancing Emergency Preparedness and Response



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**COORDINATION:**

The Office of the General Counsel has no legal objections to the recommendations in this paper. The Office of the Chief Financial Officer has reviewed this paper for resource implications and has no objections.

**/RA/**

Luis A. Reyes  
Executive Director  
for Operations

**Attachments:**

1. Program Plan for Enhancing Emergency Preparedness and Response

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(Att. 2) ML042960632, (Att. 3) ML042190409

\* See previous concurrence

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**United States Nuclear Regulatory Commission**

**Program Plan for Enhancing Emergency  
Preparedness and Response  
March 2005**

**Attachment 1**

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**Plan for Enhancing Emergency  
Preparedness and Response**

**Executive Summary:**

The plan for enhancing emergency preparedness and response (Plan) has been developed in accordance with management expectations and is aligned with the U. S. Nuclear Regulatory Commission (NRC) FY 2004 - FY 2009 Strategic Plan. The Plan guides the agency toward fulfilling the Commission's vision of achieving "excellence in regulating the safe and secure use and management of radioactive materials for the public good."

The Plan includes four high level program goals that support NRC's strategic goals; 10 key initiatives to meet program goals; and staff initiatives to enhance the program and respond to Office of Inspector General (OIG) recommendations.

The initiatives are:

1. Incident Response Qualification Program
2. Program Standardization
3. Assessment of Response
4. Facilities
5. Post-9/11 Emergency Preparedness
6. Incident Response Staffing
7. Outreach
8. Staff Augmentation
9. Lessons-Learned and Corrective-Action Programs
10. Bench marking

Each initiative is described, current status is noted, and actions or activities to move toward excellence are listed.

**1. Purpose**

The purpose of this document is to provide a description of program goals and key initiatives to enhance the effectiveness of emergency preparedness and incident response.

**2. Program Goals and Key Initiatives**

The program goals address the organizational and technical areas where enhancements can be incorporated into the current program. These goals are linked to the NRC strategic goals of Safety, Security, Effectiveness and Management, as described in the following paragraphs. Performance measures are currently being developed to support the program goals and will tie into the NSIR Operating Plan. The organizational efficiencies achieved from implementing the program goals will help execute daily activities in the operating plan.

This document describes 10 key initiatives to enhance execution of program goals. The initiatives represent an agency-wide approach to address NRC incident response issues including the recommendations from the recent OIG Report on NRC incident response. Specifically, the staff mapped and integrated OIG's recommendations into 10 key initiatives which directly support the four program goals. A cross walk to show the relationship to the program goals, initiatives, and OIG recommendations is included in Section 3.

## **2.1 Program Goals**

The Emergency Preparedness and Response program goals and corresponding actions are as follows:

1. Ensure that NRC personnel remain capable to consistently and effectively respond to incidents (supports NRC strategic goals of Safety, Security, Effectiveness)
  - Enhance the Incident Response Organization (IRO) training and qualification database
  - Effectively staff the NRC IRO
  - Effectively implement the National Response Plan (NRP) and National Incident Management System (NIMS)
2. Act as a unified response organization (supports NRC strategic goals of Effectiveness, Management)
  - More effectively align NRC headquarters, NRC regions, and Federal agency coordination processes.
3. Achieve excellence in stakeholder outreach (supports NRC strategic goals of Safety, Security, Effectiveness, Management)
  - Improve internal and external communications
  - Enhance outreach to Federal agencies, State, Local and Tribal officials, and licensees.
4. Continually improve NRC preparedness and response capabilities (supports NRC strategic goals of Safety, Effectiveness, Management)
  - Develop an assessment program for consistent performance measurement
  - Bench mark with the regions and other response organizations.

## 2.2. Agency-Wide Incident Response Program Improvement Initiatives

The 10 initiatives to support the four program goals are:

1. Incident Response Qualification Program
2. Program Standardization
3. Assessment of Response
4. Facilities
5. Post-9/11 Emergency Preparedness
6. Incident Response Staffing
7. Outreach
8. Staff Augmentation
9. Lessons-Learned and Corrective-Action Programs
10. Bench marking

Table 1 in Section 3 illustrates the crosswalk of 17 OIG recommendations and the 10 initiatives in support of the high level program goals. The 17 recommendations made by OIG are listed in a November 3, 2004, memorandum from the Deputy Executive Director for Homeland Protection and Preparedness (ML042960623).

Several of the initiatives deal with process improvement and best practices implementation. Therefore, improvements of this nature will be documented in an NRC incident response program manual chapter, providing the basis for a single, consistent, and effective program for headquarters and the regions. This will meet the Commission's requirement that NRC responders perform effectively during an incident involving an NRC licensee or with NRC licensed materials.

### Base Documents

Beyond the statutory requirements, the fundamental bases for the NRC agency-wide incident response program are contained in two documents. These documents are Management Directive (MD) 8.2, "NRC Incident Response Program," and NUREG 0728, "*NRC Incident Response Plan*." MD 8.2 describes the basic authorities and organization of the Incident Response Program. NUREG-0728 is the core document that describes NRC roles and responsibilities in response to radiological incidents and emergency events involving licensees and certificate holders. By April 14, 2005, these documents will be in conformance with the NRP, issued by the U.S. Department of Homeland Security (DHS) in January 2005.

In the following sections, each initiative is described with its current status and planned improvements. The assessment of each area included a review of data from past exercises and incidents, feedback from NRC stakeholders, OIG audit recommendations, and assessment of bench marking information from U.S. and foreign emergency response programs. For those areas, a series of activities was developed to enhance each area. The staff's goal is to achieve excellence, where excellence is defined as being among the top echelons of federal response organizations, among the most respected and emulated internationally, and one in which consistently very high quality response is achieved.

### **2.2.1 NRC Incident Response Qualification Program**

#### **Program Goal Supported:**

- Ensure that NRC personnel are capable to consistently and effectively respond to incidents

#### **Description:**

An agency-wide qualification program provides a consistent standard to give confidence that NRC responders will perform effectively. Qualification standards also provide consistency between headquarters and the regions. Further, a well defined, well documented program provides a mechanism to continually improve the qualification of incident responders.

The agency's incident response program was originally developed following the TMI-2 accident in 1979. Initially, NRC relied on experienced staff and did not prioritize development of a formalized responder training program. In 1995, a revised training program with minimum requirements was introduced as guidance; however, these requirements were not formally implemented.

#### **Status:**

The minimum requirements of the training program for NRC incident responders are:

##### **For initial qualification**

- General Response Training (as an introduction to the program)
- Position-specific training, (familiarization with the individual's duties), including specialized computer and technical tools training (as applicable)
- Successful participation in a drill or exercise

##### **For maintaining qualification**

- (Updated) General Response Training (and refresher training)
- Periodic-specific re-training, (to maintain familiarity with the individual's duties, procedures, and to benefit from recent lessons learned experience)
- Periodic participation in drills, exercises, table tops, or walkthroughs, as appropriate to demonstrate proficiency

There is no agency-wide documentation of incident response qualifications. Several training courses (such as NSIR's Response Technical Manual training and Radiological Assessment System for Consequence Analysis [RASCAL] dose assessment training courses) are presently being conducted. Exercise participation is documented and training records are maintained separately by headquarters and regional response coordinators.

**Summary of Improvement Initiatives:**

- 1) Develop and implement a formal qualification program to support the agency's incident response function. (OIG #16) - IN PROGRESS
- 2) Perform functional analyses in cooperation with response team directors and senior agency managers to ensure that the incident response training program is fully aligned with and supports the agency's safety, security and emergency preparedness missions. (OIG #4) - IN PROGRESS
- 3) Develop qualification criteria based upon the knowledge, skills and abilities identified as essential for each response team position. - IN PROGRESS
- 4) Leverage technology to track qualification requirements, individuals delinquent in re-qualification, and response availability.
- 5) Convert applicable response training modules to a web-based training format.
- 6) Request support and expertise from NRC offices in computer based training material development and subject matter experts for training classes.
- 7) Develop qualification manuals or "qual cards" for each IRO position. These manuals will set a minimum prerequisite standard of training and experience for entering the incident response training program. - IN PROGRESS
- 8) Document completion of the qualification manuals for IRO members in the agency's learning management system maintained by the Office of Human Resources (HR).
- 9) Develop drill scenarios that can simulate various terrorist-initiated events, severe core damage, and severe accident mitigation strategies at reactors, fuel facilities, gaseous diffusion plants, and materials licenses. Additionally, develop intermediate phase and recovery phase drills and tabletop performance-based training scenarios to more realistically test the IRO, including response to multiple incidents and turnover practices for protracted incidents. (OIG #6, #7, #8, #9, #10, #12)
- 10) Perform unannounced drills (which include tabletops and walkthroughs) or exercises as necessary to test overall response readiness.

**2.2.2 Program Standardization**

**Program Goal(s) Supported:**

- Ensure that NRC personnel are capable to consistently and effectively respond to incidents
- Act as a unified response organization

**Description:**

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Standardization of incident preparedness and response programs provides fundamental elements necessary for continual improvement and the achievement of excellence. Each program benefits from appropriately detailed policies, implementing procedures, a performance based qualification program, performance evaluation methods, and agency-wide management level commitment. For continual improvement to occur, policies should direct consistent conduct of incident response actions, which are evaluated in a self-critical environment, and enhanced where necessary to address lessons learned.

**Status:**

Incident preparedness and response processes are not consistently maintained or standardized. Documents in some cases, contradict each other. Implementing procedures are not consistently formatted agency-wide, nor written to a level of detail to ensure consistent response actions. The qualification program for incident response organization members is not well documented, not arranged in a performance-based format (which is the standard practice of industry programs), and not consistent agency-wide. The establishment of an oversight process for the agency incident response function is not well defined or coordinated agency-wide.

**Summary of Improvement Initiatives:**

- 1) Revision of NUREG-0728 and Management Directive 8.2 to outline programmatic organization of the incident preparedness and response program, and to clarify agency policy in regard to the program. (OIG #1, #2) - COMPLETE BY APRIL 14, 2005
- 2) Re-alignment of other NRC documents to NUREG-0728 and Management Directive 8.2, such as NUREG-0845, and NUREG/BR-0230. Where appropriate, consolidation into other documents and/or cancellation of documents will be performed. (OIG #3)
- 3) Formation of an agency-wide incident preparedness and response oversight committee to ensure consistency and adherence to established policies. (OIG #2, #4, #5)
- 4) Establishment of an agency-wide manual chapter format for incident preparedness and response implementing procedures including:
  - Implementation of a standardized procedures writer's guide
  - Establishment of qualification standards for incident responders,
  - Instruction for performance of periodic program assessments
  - Documentation of corrective actions and issue of lessons learned to incident responders as part of a continuing training process
  - Implementation of standards for incident response member performance in training, performance-based drills, and exercise opportunities

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- Establishment of procedural instructions for addressing protracted incidents, simultaneous incidents at more than one licensee or certificate holder, and incident response at regulated fuel cycle and gaseous diffusion facilities and nuclear materials holders (OIG #1, #4, #7, #8, #9, #10, #11, #13, #15)
- Development of proceduralized documents that define the policies, procedures, and programs within the agency's incident response organization.

### 2.2.3 Assessment of Response

#### Program Goal Supported:

- Continually improve NRC preparedness and response capabilities

#### Description:

The establishment and implementation of high-quality assessment processes promote continual improvement and maintenance of the agency's incident response program. Drills, exercises, and actual event response should be assessed promptly and in a consistent manner to identify areas for improvement. Determining and tracking corrective actions are important for program improvement. A method to track corrective actions to completion, including the authority to assign tasks to individuals to ensure completion, should be in place.

#### Status:

The OIG recommended enhancement of the incident response assessment program. An exercise assessment process was recently piloted, which developed pre-determined performance standards identified in established regulations, plans, procedures and exercise objectives, and standardized questions for the following areas: staffing, facilities, procedures, operations, essential functions, notifications and communications, transfer of responsibilities, exercise objectives, and individual observations. Region IV, also participated in the pilot program. Additional process improvements are necessary, including formalization of the post-drill, exercise, or incident critique process, and consistent documentation and tracking of lessons learned. Coincident with development of the qualification program, assessment information should be included as part of periodic IRO training.

#### Summary of Improvement Initiatives:

- 1) Revise the handbook for MD 8.2, *NRC Incident Response Program* to establish evaluation expectations for NRC IRO performance in drills and exercises. (OIG #2) - IN PROGRESS
- 2) Develop assessment procedures to ensure consistent assessment performance, including periodic reviews of headquarters and regions' response capabilities, to ensure standardization and a mechanism to periodically share and implement lessons learned with regions. (OIG #5)

#### **2.2.4 Facilities**

**Program Goal(s) Supported:**

- Ensure that NRC personnel are capable to consistently and effectively respond to incidents
- Act as a unified response organization

**Description:**

The incident response centers (IRCs) at NRC headquarters and at each of the four NRC regional offices support IRO response functions during an incident. The headquarters IRC serves as the primary response center, with continuity of operations capability at an alternative center. Regional IRCs serve as the agency's lead facilities during the "monitoring" response mode and as coordinating and support facilities for the responding Site Team(s), which may report to the licensee(s) involved with an incident. The NRC operations center (NRCOC) serves a 24/7 communication and coordination function with licensees and federal stakeholders. Information technology (IT), such as databases, software programs, hardware systems, communications, and document management applications, provides an element in the capability of the IRCs to effectively assist and assess licensee actions during an incident. Communications hardware and software systems are tools necessary for the function of the IRCs.

**Status:**

While improvements to information transfer have been recently implemented in the headquarters IRC, some supporting information technology infrastructure, communication systems, facility furniture, and human factors design issues remain for the NRCOC and all IRCs. Many of these systems date back to 1994 and have exceeded the growth capacity planned for at that time. Items that are in need of augmentation, upgrade, or replacement include:

- Power, local area network (LAN) display and fax capacity
- NRC equipment recommendations for licensee emergency operations Facilities (EOFs), including development of equipment and NRC site team resource standards for fuel facilities and material licenses
- Heating, ventilation, and air conditioning (HVAC) duct noise problems and system inadequacies
- Upgrade of regional IRC communication equipment and computer software
- System furniture and space usage
- Automatic notification system (ANS)
- Phone system (private branch exchange - PBX)
- Uninterruptible power supplies (UPS)
- Audio conferencing/bridging system
- ET briefing system
- Voice recorder
- Access to critical documentation (e.g. "e-library")

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**Summary of Improvement Initiatives:**

- 1) Upgrade and replace the PBX for the headquarters IRC, NRCOC, and regions IRCs. Address the use of greater integration of the voice conferencing system, upgrade or replacement of the ET briefing system, a networked replacement for the ANS, and a replacement for the voice recorder, and addition of caller identification features.
- 2) Upgrade and improve capability for LAN, display, fax, and power shortage issues in the headquarters IRC.
- 3) Upgrade communications equipment for regional responders and standardized/upgraded computer software.
- 4) Reduce elevated noise level in the headquarters IRC due to the ventilation system fan "white" noise and provide adequate cooling to computer systems.
- 5) Improve information storage, transfer, and retrieval systems. Improvements include establishing an agency-wide capability to collect store, update, and retrieve applicable licensee and certificate holder documents (such as procedures, technical specifications, drawings, design basis documents, safety analysis reports), agency incident response procedures, and other documents in a single and maintainable electronic format.
- 6) Ensure that the headquarters ANS is maintained and reliable to notify and augment IRO members. Include periodic performance testing and drills. (Also see Staff Augmentation) (OIG #6) - IN PROGRESS
- 7) Re-evaluate licensee and certificate holder emergency response facilities for NRC resource accommodations and initiate appropriate information emphasizing adherence to existing guidance or enhanced guidance. (OIG #11)
- 8) Remodel headquarters IRC, region IRCs, and NRCOC to support human factors related improvements.

**2.2.5 Post - 9/11 Emergency Preparedness**

**Program Goal Supported:**

- Ensure that NRC personnel are consistently and effectively ready to respond to incidents

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**Description:**

Commercial nuclear emergency preparedness has previously been based on the actual or potential health effects from the release of radiation that results from an escalation of events, which generally occur in a step-wise fashion based on equipment malfunctions, operator errors, or other unintentional conditions. The post-9/11 environment has resulted in program enhancement which considers acts of aggression that have the intent of inflicting the maximum damage and harm. This is sufficient reason to embrace a more proactive posture in response readiness.

**Status:**

A number of initiatives within the agency have raised the level of preparedness among licensees. These initiatives have been jointly undertaken by NSIR staff and include the issuance of orders and advisories to licensees, the use of Force On Force (FOF) exercises to evaluate licensee performance against upgraded design basis threats, and changes to licensee emergency action levels (EALs) associated with security related activities. In response to this program enhancement, the staff continues to assess the adequacy of existing emergency planning basis requirements and guidance. Where the staff has found weaknesses in current requirements and guidance, prompt focus to address those issues has been initiated. As an example, immediately following the events of 9/11, the staff performed an initial assessment of the existing planning basis for emergency preparedness in the commercial nuclear industry and identified five implementation issues:

- 1) Need for a control room contingency for notifications under duress
- 2) Need for review of NRC protective action guidance
- 3) Need to plan for the increased demand on local law enforcement agencies
- 4) Removal of procedural barriers to rapid notification of local law enforcement agencies
- 5) Development and implementation of security-event-based drill program

NRC resolved issues 1, 3, and 4 through discussions with industry and issuance of Regulatory Issue Summary (RIS) 2004-15, "Emergency Preparedness Issues: Post-9/11," on October 20, 2004. To resolve issue 2, the staff has contracted Sandia National Laboratories to perform a review which is to be completed in 2006. To resolve issue 5, the staff intends to dedicate one full time employee (FTE) to develop detailed scenario standards and oversight processes to ensure nuclear power plant licensees implement a drill and exercise program that improves the emergency preparedness/operations security interface.

The staff participated in pilot and transitional FOF exercises. Several emergency preparedness program enhancements were identified through these FOF processes. Lessons learned and other observations were summarized in RIS 2004-15. For lessons learned identified after the RIS was issued, the staff transmitted lessons learned to NEI for dissemination to the industry. Inspection procedures for the FOF are developed and the significance of any EP findings is being determined in accordance with the EP cornerstone of the Reactor Oversight Process. Twenty FOF exercise evaluations are anticipated in 2005.

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**Summary of Improvement Initiatives:**

- 1) Develop an overall plan for emergency preparedness and response of nuclear power plant licensees in post-9/11 environment, including review of the 10 CFR 50.47 emergency preparedness planning standards guidance. This plan will assess potential improvements in the following areas for responding to security-initiated events:

- Emergency action levels
- Onsite protective actions
- Offsite notifications

This improvement initiative is IN PROGRESS.

- 2) Periodically perform inspections and emergency exercise evaluations to ensure licensees take adequate protective measures in the event of a terrorist-initiated radiological emergency. - ONGOING
- 3) Develop and promulgate, with appropriate stakeholder involvement, new requirements and guidance utilizing objective performance standards where appropriate. - ONGOING
- 4) Perform appropriate reviews of licensee-submitted changes to emergency preparedness licensing documents to ensure compliance with promulgated requirements and guidance. - ONGOING
- 5) Evaluate enhancements to the emergency notification process, including the potential for simultaneous notification of state/local officials and the NRC.

**2.2.6 Incident Response Staffing**

**Program Goal Supported:**

- Ensure that NRC personnel are capable to consistently and effectively respond to incidents

**Description:**

The methodology for staffing incident response positions has remained essentially unchanged since the establishment of the incident response function. Most response positions are staffed with three or four subject matter experts. These individuals then received additional training on response team structure and agency expectations.

**Status:**

Response personnel are selected based upon knowledge and abilities they had demonstrated in other venues. Most individuals are in demand for other, more routine, activities, resulting in conflicting priorities and assignments. The incident response function at headquarters sometimes competes for the services of these staff members for drills or training activities.

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When a scheduled response participant finds that he or she will not be available, other qualified replacement (also highly valued staff members) may not be available. In those cases, compensatory measures must be taken to reassign duties and functional responsibilities among other response team members, typically resulting in delayed or absent positions in training classes and exercises. Although there is some variation among regional IRO staffing, base and site team functions parallel headquarters IRC staff functions. Regions did not express issues with IRO staff support of training activities. Discussion to more consistently staff IRO teams has been initiated among the regions.

**Summary of Improvement Initiatives:**

- 1) Establish a methodology to address prompt activation of the IRO. Include consideration for IRO member residence locations and response time, as applicable to the importance of the position held and IRC activation time expectations. Include provisions for additional staffing, as necessary, to support multiple licensee/event response and protracted staffing (greater than one shift). (OIG #8, #9, #10)
- 2) Establish a team approach (Red, White, and Blue) for headquarters IRO staff training and drill/exercise scheduling for headquarters IRO. Staffing practices will be established for the regions, materials, and fuel facility incident responders such that staffing arrangements are consistently applied among those organizations. These teams will be populated in such a manner that any team compliment will be prepared and capable to respond to an emergency. (OIG #10, #17) - IN PROGRESS
- 3) Develop strategy for identification of key minimum staffing necessary for incident response at headquarters and region IRCs. - IN PROGRESS
- 4) Assign individuals to NRC response positions and obtain approval by the Executive Director for Operations (EDO) for headquarters positions, and the Regional Administrators (RAs) for region positions. (OIG #16) - IN PROGRESS
- 5) Ensure management is aware of the commitment for assigned individuals to attend mandatory training and to participate in drills and exercises. (OIG #16) - COMPLETE
- 6) Identify IRO participation for each member. Participation will be recognized in the annual performance appraisal process. (OIG #16) - IN PROGRESS
- 7) Designate additional personnel as "in training," thereby creating a pool of trained individuals who will be available to supplement team resources or to assume the duties of a departing staff member.
- 8) Assign a "position lead" (or mentor) responsible for assisting NSIR team coordinators in staff training, technical tool development, peer evaluation, and procedural support.

The enhancements to response team staffing described above will be phased in to allow for development of necessary training modules and procedures.

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- Phase 1 will address the Reactor Safety Team, Protective Measures Team, Operations Support Team, and the Executive Team.
- Phase 2 will address the Liaison Team, Safeguards Team, Fuel Cycle Safety Team, Regional Base Team, and the Site Team.
- Phase 3 will address response communications and other recommended enhancements.

### **2.2.7 Outreach**

#### **Program Goal(s) Supported:**

- Achieve excellence in stakeholder outreach
- Act as a unified response organization

#### **Description:**

NSIR is responsible for outreach activities regarding emergency preparedness and NRC incident response. Examples of outreach activities include: presentations with external stakeholders; participation in regional scheduling conferences; presentations at industry conferences, (such as the Nuclear Energy Institute (NEI) Communications Forum, NEI EP Forum, National Radiological Emergency Preparedness Annual Meeting, American Nuclear Society (ANS) Mid-Year Meeting Health Physics Society Annual Meeting), participation in selected public meetings to address current emergency preparedness concerns, development of written and verbal correspondence used for agency presentation, (such as Congressional hearings, public presentations by NRC officials), preparation of licensee guidance for emergency public information news centers, and continued close communication and coordination with DHS/FEMA officials on emergency preparedness issues.

#### **Status:**

The Outreach Team was recently established as a joint Emergency Preparedness Directorate/Incident Response Directorate (EPD/IRD) staff organization. The regions, who engage in outreach activities with licensees and states, are also represented on this team. Currently, the Outreach Team is taking a primary role in coordinating various agency outreach functions, including FEMA Regional planning meetings, NRP rollout presentations, and other related activities. The staff has initiated coordination with the regions to standardize outreach activities with states and licensees. The staff's activities will correlate with the DHS's 3-phase implementation process for the NRP. Outreach Team members will assist other NRC staff in the delivery of information concerning the NRP implementation.

**Summary of Improvement Initiatives:**

- 1) Review and improve the present practices and materials used for outreach presentations related to NRC incident response activities at headquarters and the regions. The Outreach Team will take a pro-active approach to providing high quality training and presentations to Licensee/State/Local/Tribal government stakeholders responsible for interacting with NRC incident responders during an incident, with a focus on providing information to applicable organizations periodically. (OIG #14) - IN PROGRESS
- 2) Develop a question/answer database to assist in the consistent use of prior approved NRC statements in the delivery of EP related positions. This database will be controlled by DPR and use prior developed and newly generated materials compiled in an easily accessible and searchable tool which will be available for generation of official positions for NRC public spokespersons (such as EDO staff, Office of Public Affairs, Office of Congressional Affairs. - IN PROGRESS

**2.2.8 Staff Augmentation**

**Program Goal Supported:**

- Ensure that NRC personnel are capable to consistently and effectively respond to incidents

**Description:**

Staff augmentation is the process of notifying IRO members of an incident and to assemble at the NRC headquarters IRC and region IRCs. This process includes a standardized mechanism to call out IRO, maintenance of phone lists and/or computer databases used in the callout process, identification of available personnel to initiate IRC staffing, and periodic performance of tests and drills to ensure that the process can be consistently implemented. NRC headquarters and regions rely on staff augmentation capabilities to activate IRO members.

**Status:**

Staff augmentation of the NRC headquarters IRO can be performed using either a personal computer based automated notification system (ANS), a voice conferencing "blast dial," or a manual callout using a published incident response call list. The databases for the ANS and manual call lists are separately maintained. The most rapid callout means is the ANS. Maintaining multiple phone lists is not resource effective or reliable as phone lists have been found to be in disagreement. Because callout mechanisms are not routinely tested or used in drills, there are missed opportunities for training personnel to initiate call out and for detecting system database problems. Regions do not consistently implement the same staff augmentation practices from region to region but, as a whole, maintain staff augmentation capabilities more proficiently and test those capabilities more frequently than headquarters. While the staff augmentation process as a whole may be considered "functional," (i.e. capable of notifying IRO members to initiate response to the IRC), enhancements to ensure



programmatic consistency, training, and testing, would improve overall assurance of performance. Additionally, methodology for addressing staff augmentation for multiple events or establishing provisions for protracted (greater than 1 shift) events is not currently considered as part of current staff augmentation practices.

**Summary of Improvement Initiatives:**

- 1) Update the headquarters ANS responder and phone list database. Ensure that a process is in place to maintain the database accurate and current. - IN PROGRESS
- 2) Perform testing of the headquarters ANS callout program following completion of the database phone list review.
- 3) Develop and implement a schedule for periodic testing of headquarters callout mechanisms. (OIG #6)
- 4) Perform an evaluation for replacing the existing callout mechanisms with a single networked replacement and including access and use by the regions. If selected, this system will provide an efficient means to maintain callout databases and callout both headquarters and regional IRO members. (also see 2.2.4 Facilities)
- 5) Develop consistent instructions and implement staff augmentation processes to address a protracted event and staffing for multiple licensee incidents, for headquarters and region IRCs. (OIG #7, #9, #10) - IN PROGRESS

**2.2.9 Lessons Learned and Corrective Action Program for Shared Learning**

**Program Goal Supported:**

- Continually improve NRC preparedness and response capabilities

**Description:**

A program that identifies lessons learned from assessments, drills and exercises, actual events, and occurrences elsewhere provides methods to continually improve emergency preparedness capabilities. These programs have evolved among licensees and represent a primary factor in positive improvement trends. Program excellence can be achieved when the program becomes cultural, rather than procedural. The way to achieve this is to incorporate lessons learned into training, exercises, and daily work. This can be accomplished through setting the expectations for the program, assessment and enhancement of the program, and providing incentives to use the program.

**Status:**

A "lessons learned" Microsoft Access™ database exists that contains corrective actions identified during post-exercise and red event "hot-wash" sessions. Other than lessons learned

data bases used by the regions, NSIR has not established a lessons learned program in terms of having the capability to consistently identify issues, learn from them, document corrective actions, share that information with others, and reassess progress to prevent past problems from recurring. This database is maintained by NSIR and has not been made available to the regions or headquarters personnel outside NSIR.

In August 2004, NRC regions compiled a list of best practices (ML042190409). The list was initially proposed for implementation by the regions, but was reviewed by the staff consideration for agency-wide improvements. Eighteen specific best practices were identified for regional implementation. Most of the region best practices list were also incorporated into the improvement initiatives, and shown below:

Initiatives	Facilities	Program Standardization *	Qualification	Outreach	Assessment of Response
Region List of Best Practices	2	1, 3	4, 5, 6, 8, 9, 12, 14, 16, 17	7, 13	15, 18

\*Best practices #10. (backup resident inspector) and #11 (weekly region availability roster) were not categorized under a specific improvement initiative, but would be subject to review and agency-wide consideration under Program Standardization.

**Summary of Improvement Initiatives:**

- 1) Modify/upgrade the existing database to be usable as a corrective action tracking tool. Some programming will be required to enable users to input new corrective action data as well as generate reports useful for management. (OIG #5)
- 2) Develop an agency-wide lessons learned program using established industry/government models for guidance. This will include creating a model program, management acceptance of the program, development of administrative controls for the program, and implementation of the program. Implementation will include creation of a web-based database accessible to all regions. (OIG #5)
- 3) Periodically review regional incident response programs for best practices and lessons learned to ensure coordinated response capabilities are maintained. (OIG #4) - IN PROGRESS
- 4) Provide intra-agency web-based access to the corrective action database so that outstanding regional corrective actions can be added. This will minimize duplicity and maximize use of resources. Develop procedure to standardize input and ensure consistent usage. (OIG #4)

### **2.2.10 Bench marking with Regions, Other Agencies, State Partners, and International Agencies**

#### **Program Goal Supported:**

- Continually improve NRC preparedness and response capabilities

#### **Description:**

Bench marking is the process of reviewing the attributes of existing programs that perform emergency response to determine if their concept of operations, policies and procedures can improve NRC incident response functions. Bench marking also allows the NRC to determine if the existing NRC response function is adequate among federal agencies and in support of licensee activities.

Bench marking is not a static, one time activity. By determining the "best practices," as they exist in the NRC regions, other federal agencies, state partners, and international regulatory agencies, the agency can implement continuous improvement to the NRC incident response function.

#### **Status:**

NRC staff and managers have visited a number of agencies to familiarize themselves with other federal agency programs, best industry examples, and private sector programs in consideration for continually improving the NRC incident response program. The list of visits include nine licensees, five federal agencies, two state agencies, one local agency, one nuclear industry advisory organization, and one international nuclear materials oversight agency. The staff has also reviewed the conduct of the emergency response functions by the Governments of Canada, United Kingdom and Japan. A recent bench marking study by the regions was incorporated into these improvement initiatives, as discussed in Section 2.2.9.

#### **Summary of Improvement Initiatives:**

- 1) Periodically review regional and headquarters incident response functions for best practices and lessons learned to ensure coordinated response capabilities are maintained. The reviews will be performed by peer teams. (OIG #4)
- 2) Periodically review other agencies' incident response programs for lessons learned and to ensure coordinated response capabilities are maintained. (OIG#5) - ONGOING

### **3. Crosswalk of OIG Recommendations**

Table 1 below illustrates how the OIG report recommendations were included into the 10 emergency preparedness and response initiatives. Additionally, the program plan goals are shown in relationship to the initiatives and the OIG recommendations. All 10 initiatives and all 17 OIG recommendations are addressed under the program plan goals.

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<b>Program Goals</b>	<b>Ensure that NRC personnel are capable to consistently and effectively respond to incidents</b>	<b>Act as a unified response organization</b>	<b>Achieve excellence in stakeholder outreach</b>	<b>Continually improve NRC preparedness and response capabilities</b>
<b>Initiatives</b>	Facilities, IR Staffing, Staff Augmentation, Qualification Program, Post 9/11 Emergency Preparedness, Program Standardization	Outreach, Facilities, Program Standardization	Outreach	Assessment of Response, Lessons Learned and Corrective Actions, Benchmarking with Regions and other agencies, Post 9/11 Emergency Preparedness
<b>OIG Recommendations</b>	1, 4, 5, 6, 7, 8, 9, 10, 16, 17	1, 3, 10, 11, 12, 13, 14, 15	14	2, 4, 5

Table 1. How OIG recommendations support program plan goals and initiatives

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**ADJUDICATORY ISSUE**  
(Information)

January 13, 2005

SECY-05-0012

FOR: The Commissioners

FROM: Karen D. Cyr  
General Counsel /RA/

SUBJECT: PROPOSED ORDER RESOLVING PUBLIC CITIZEN'S  
REQUEST FOR HEARING ON THE COMMISSION'S  
JULY 2, 2004, SPENT FUEL SECURITY ORDER

PURPOSE:

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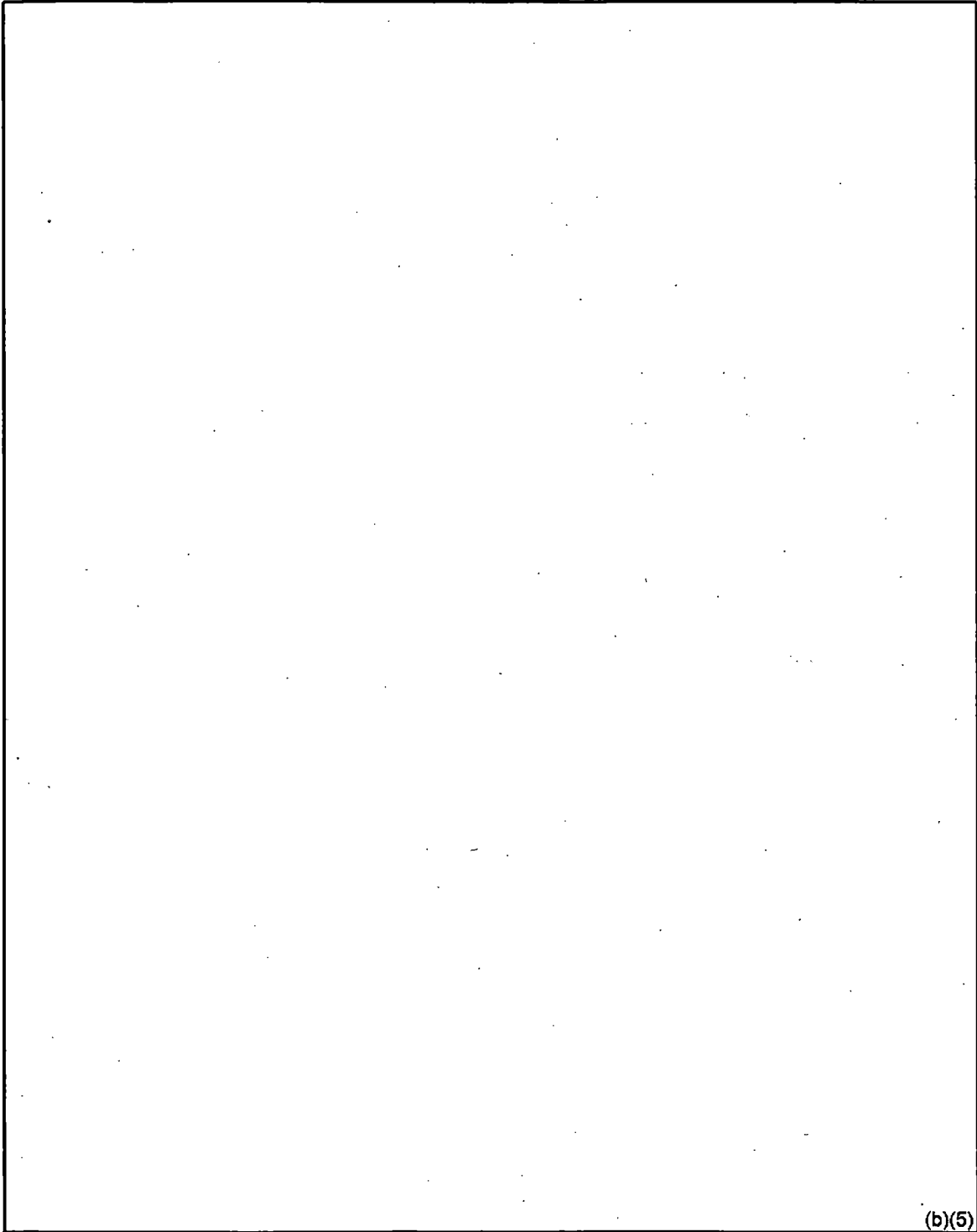
DISCUSSION:

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CONTACT: Jared K. Heck  
(301) 415-1623

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RECOMMENDATION

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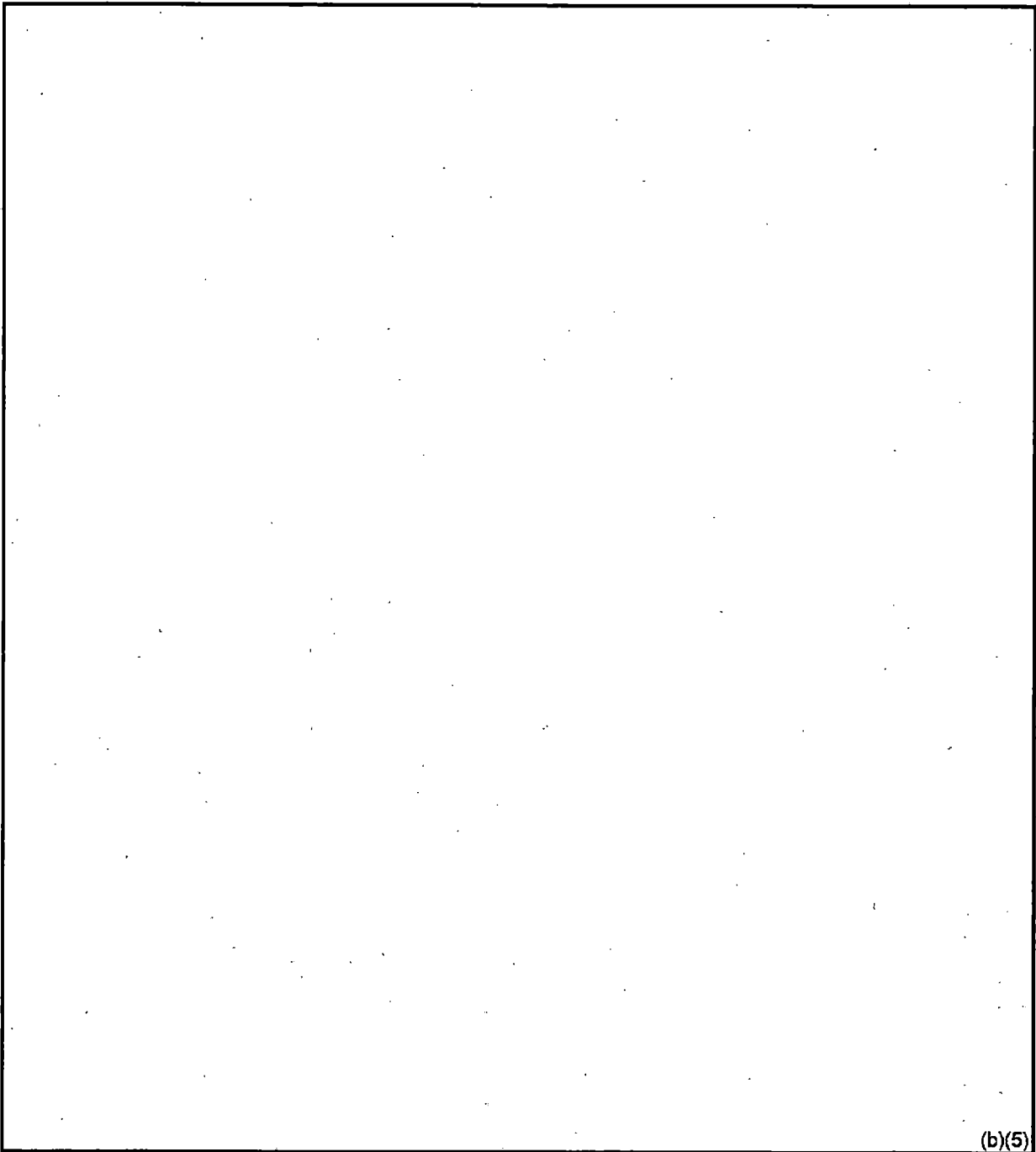
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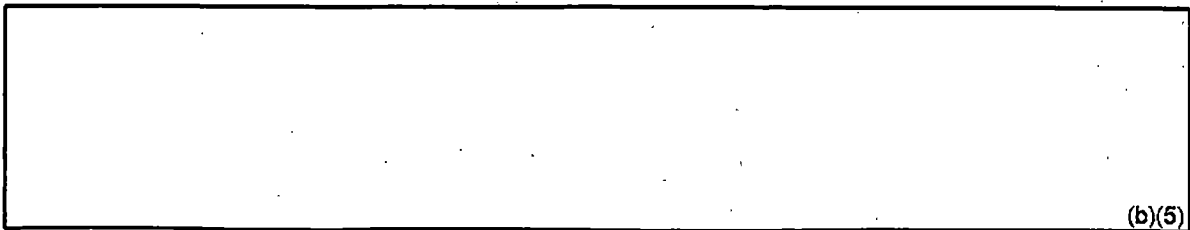
Karen D. Cyr  
General Counsel

Attachment: As stated

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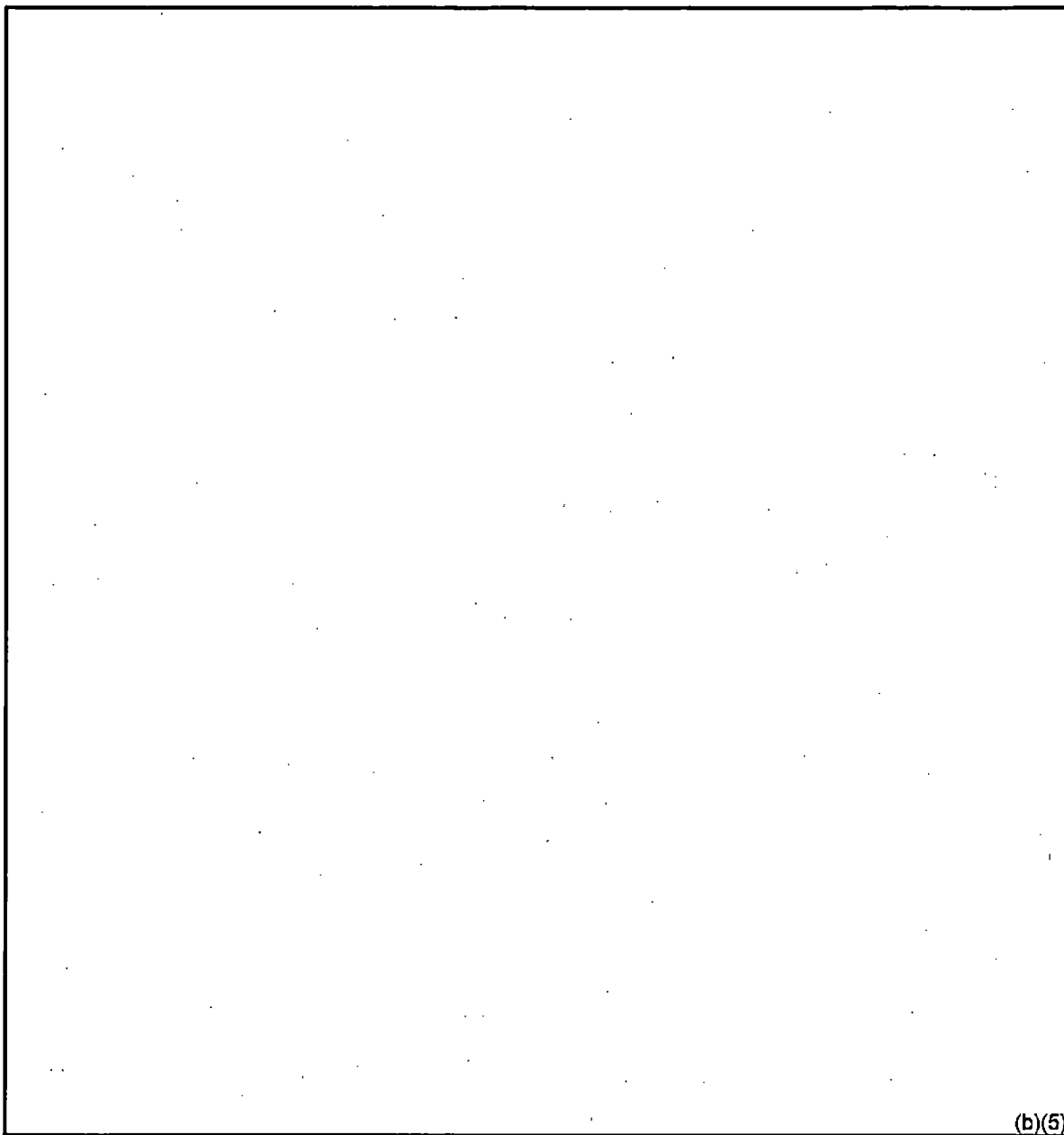


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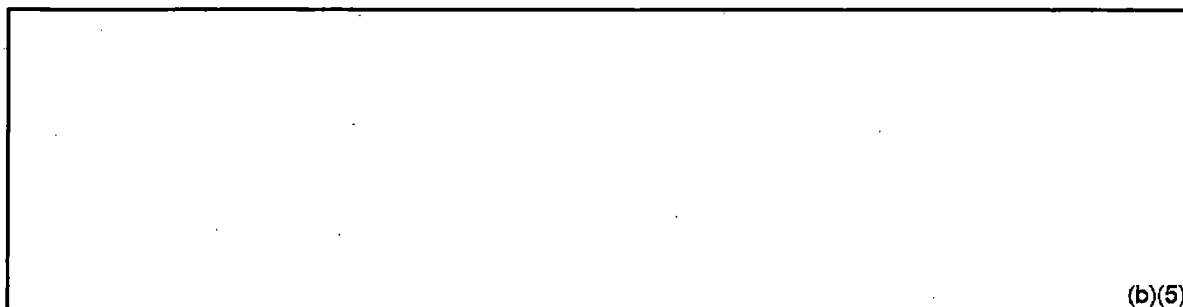


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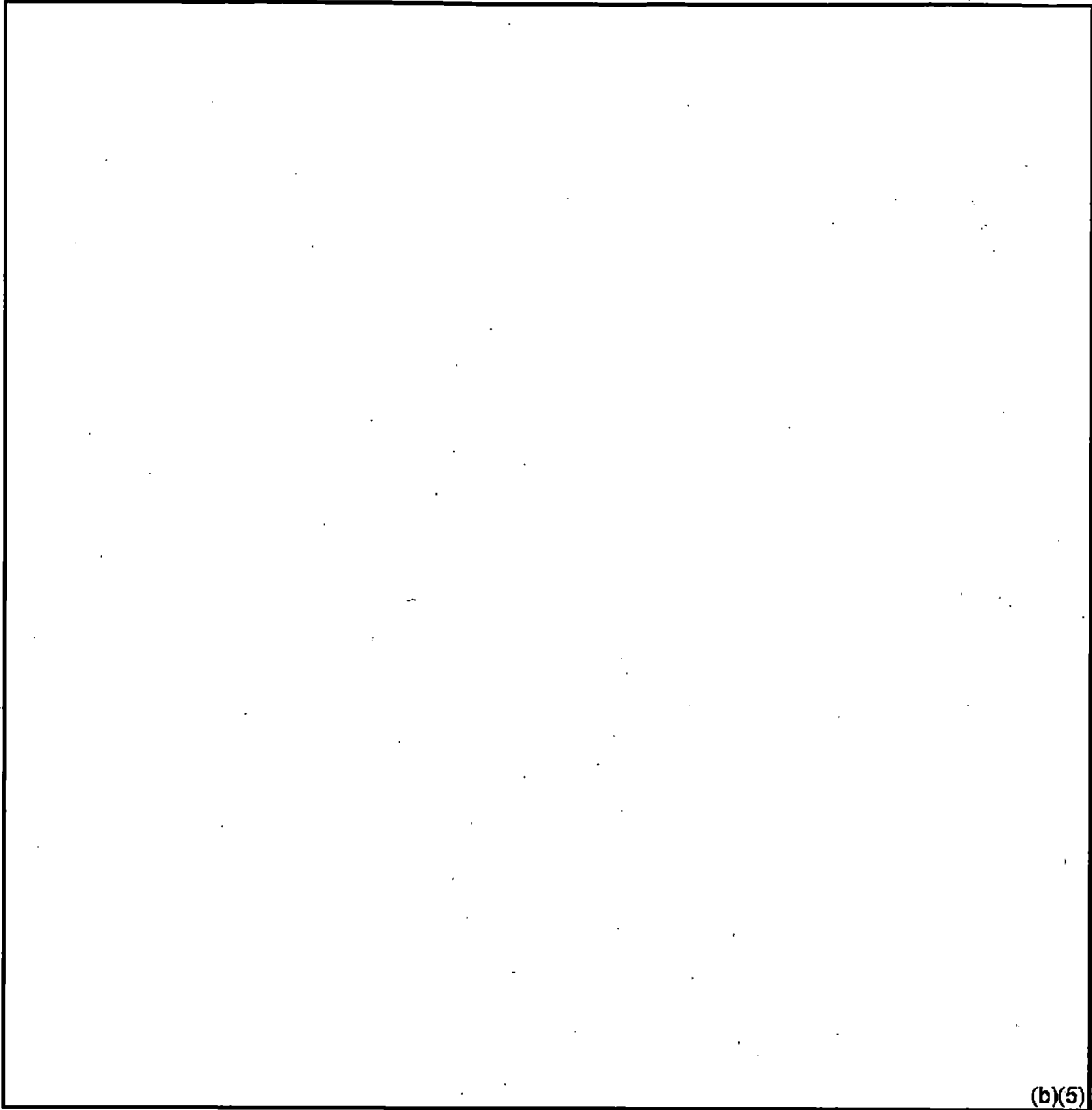




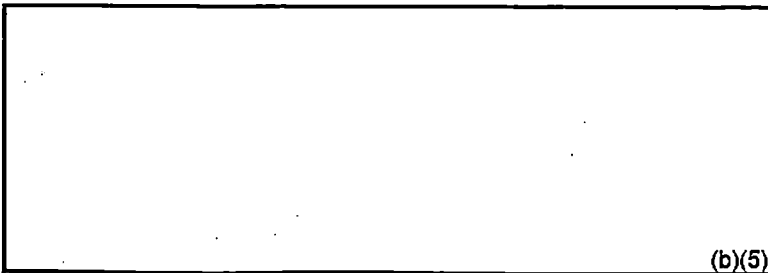
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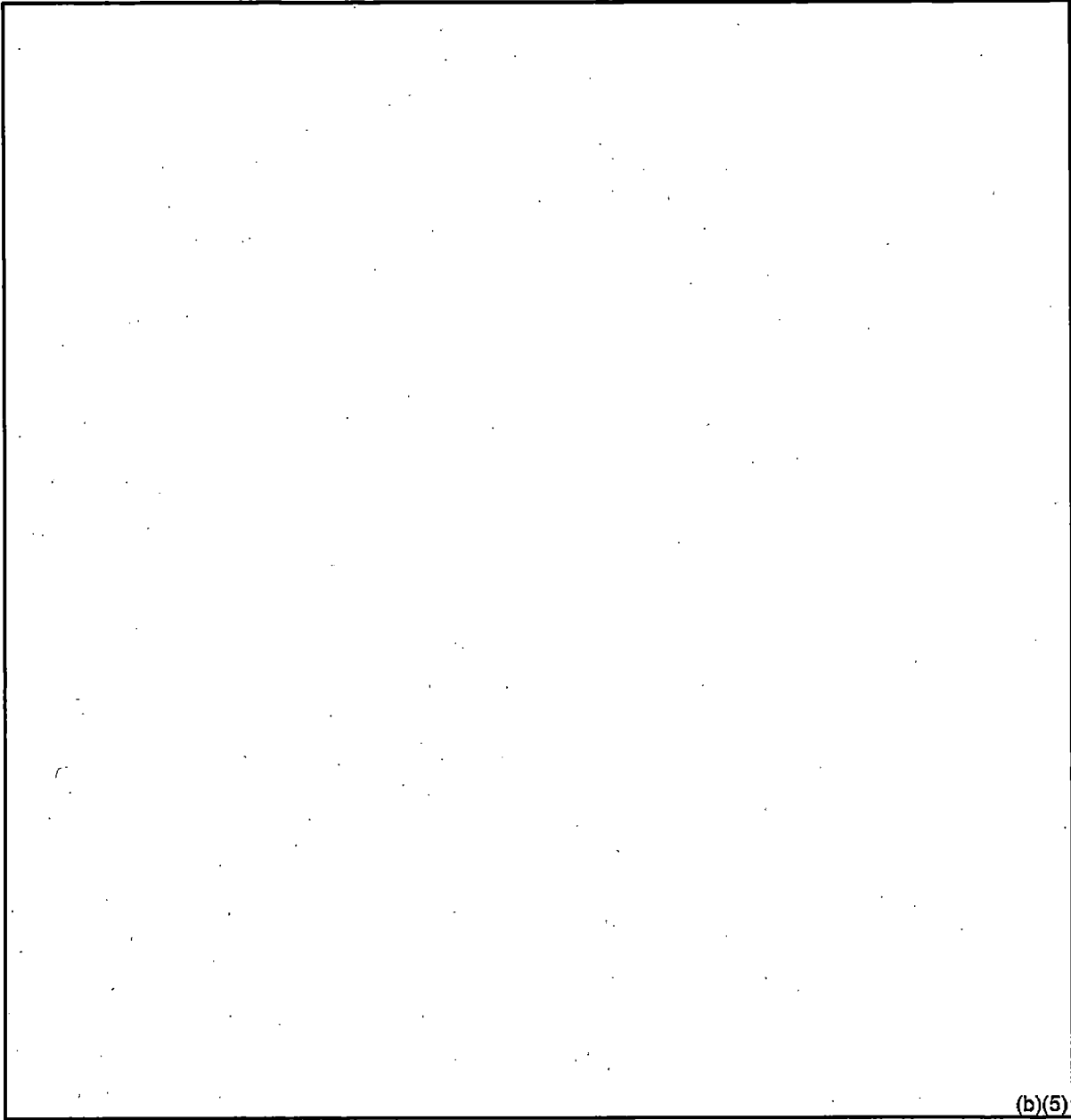
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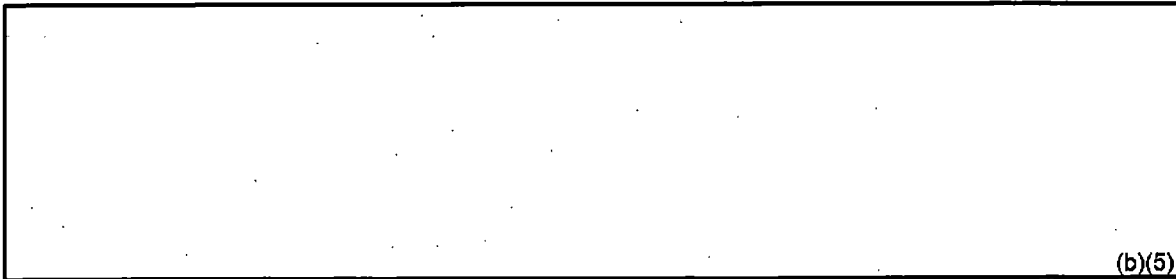
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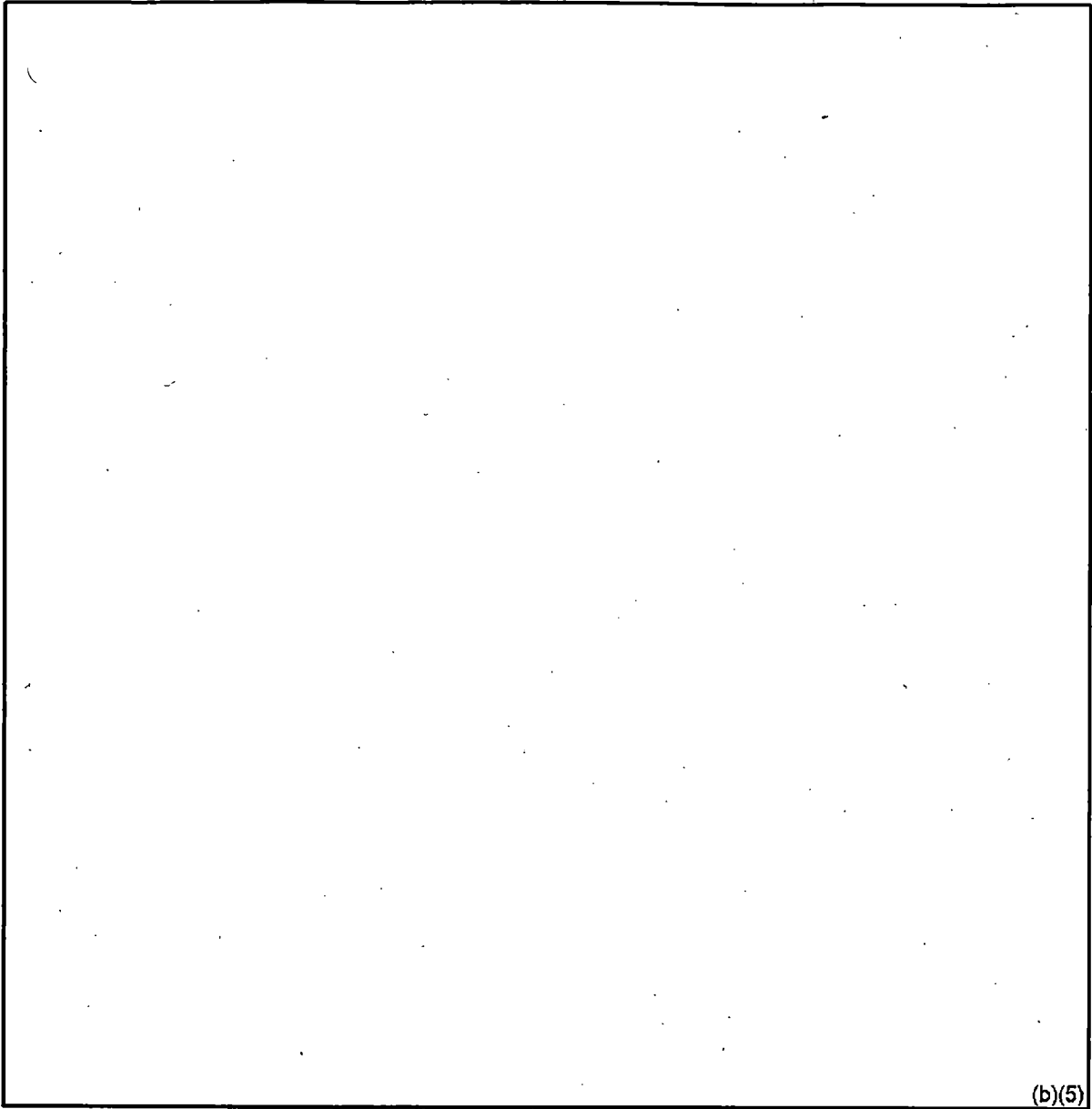
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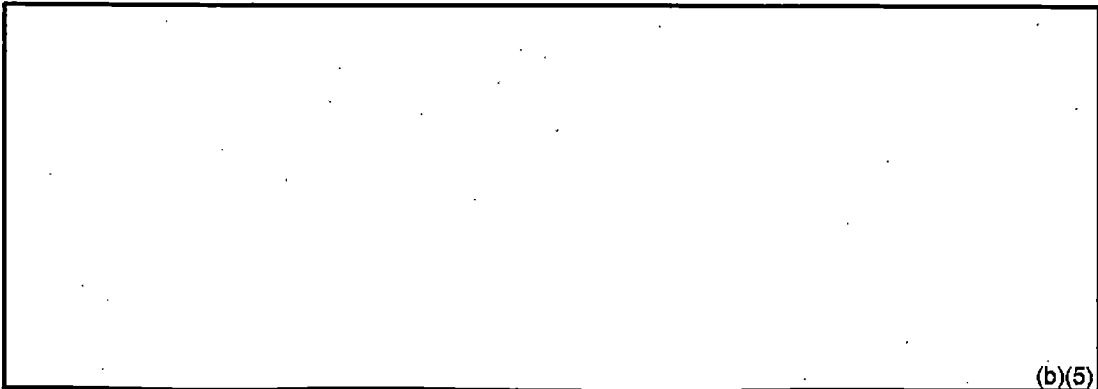
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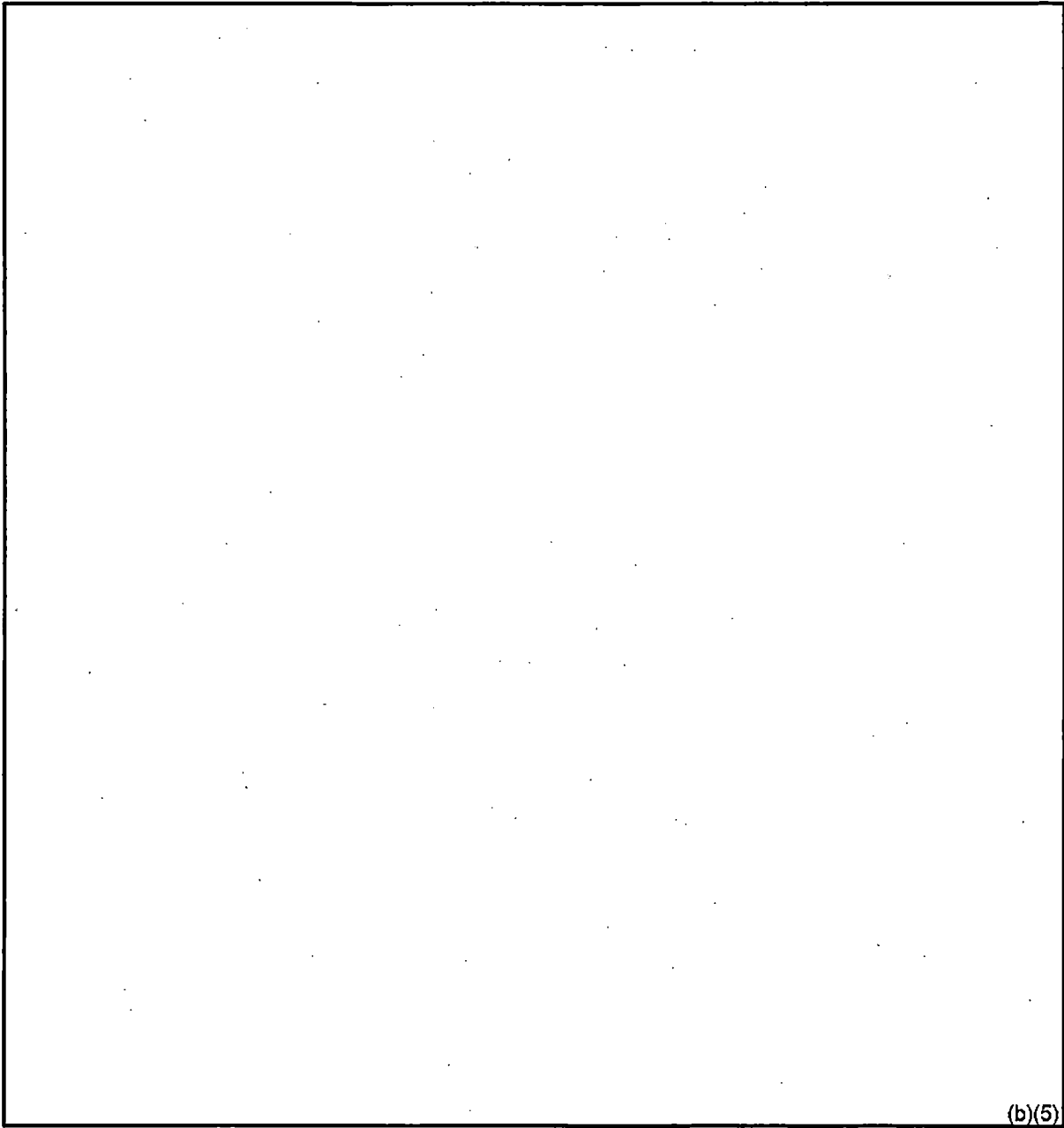
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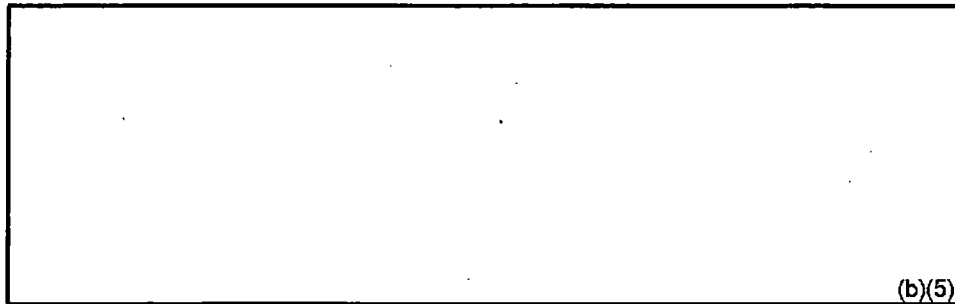
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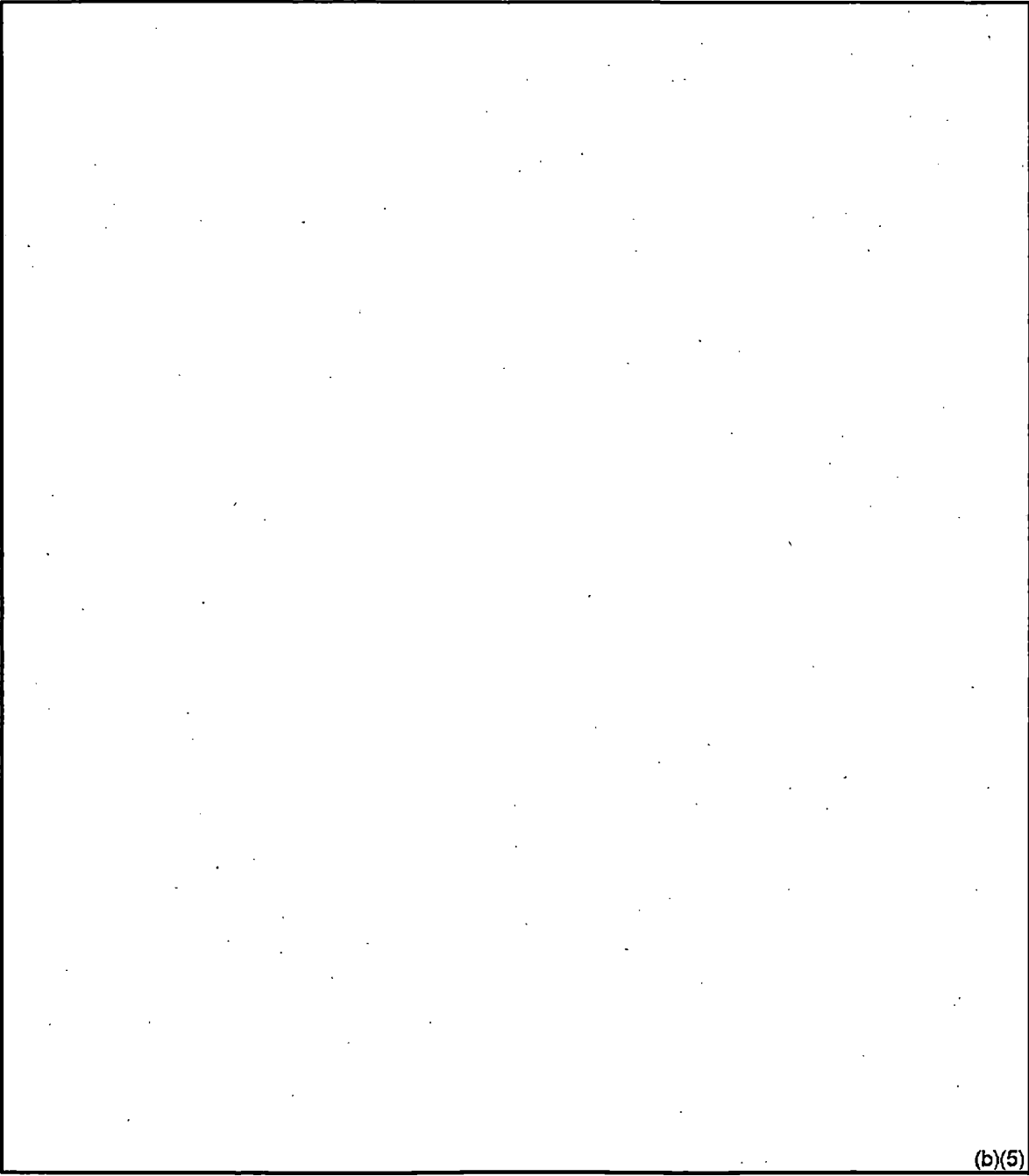
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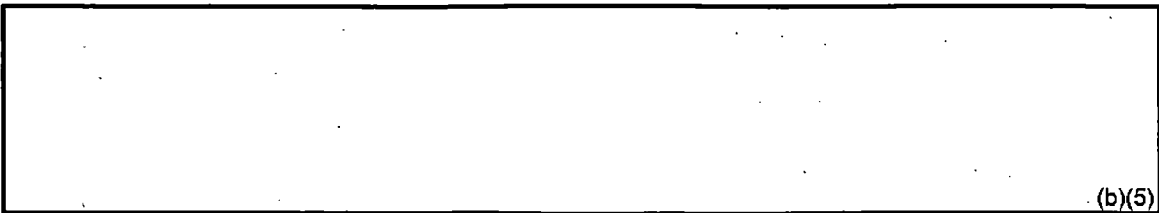
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RECOMMENDATION

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/RA/

Karen D. Cyr  
General Counsel

Attachment: As stated

DOCUMENT NAME: G:\LC\Heck\Public Citizen Hearing Request\Commission Paper re Final Order.wpd

\*see previous concurrence

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OFFICE	OGC		OGC		OGC*		OGC			
NAME	J. Heck		T. Rothschild		J. Gray		K. Cyr			
DATE	01/ /05		01/ /05		01/ /05		01/ /05			01/ /05

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## **POLICY ISSUE INFORMATION**

January 11, 2005

SECY-05-0009

FOR: The Commissioners

FROM: Karen D. Cyr  
General Counsel

SUBJECT: IDENTIFICATION OF ADJUDICATORY EMPLOYEES TO SUPPORT THE  
COMMISSION AND THE OFFICE OF COMMISSION APPELLATE  
ADJUDICATION IN THE ADJUDICATION OF A YUCCA MOUNTAIN  
APPLICATION

### PURPOSE:

This paper provides a status update on the Commission Adjudicatory Technical Support (CATS) program. Specifically, the results of efforts to identify part-time Adjudicatory Employees (AEs) to assist the Commission and the Office of Commission Appellate Adjudication (OCAA) during the licensing of a high-level waste (HLW) repository are provided. In addition, this update informs the Commission of changes to the CATS program plan in response to the schedule uncertainty in the HLW program and the direction provided in the Staff Requirements Memorandum (SRM) for SECY-04-0119.

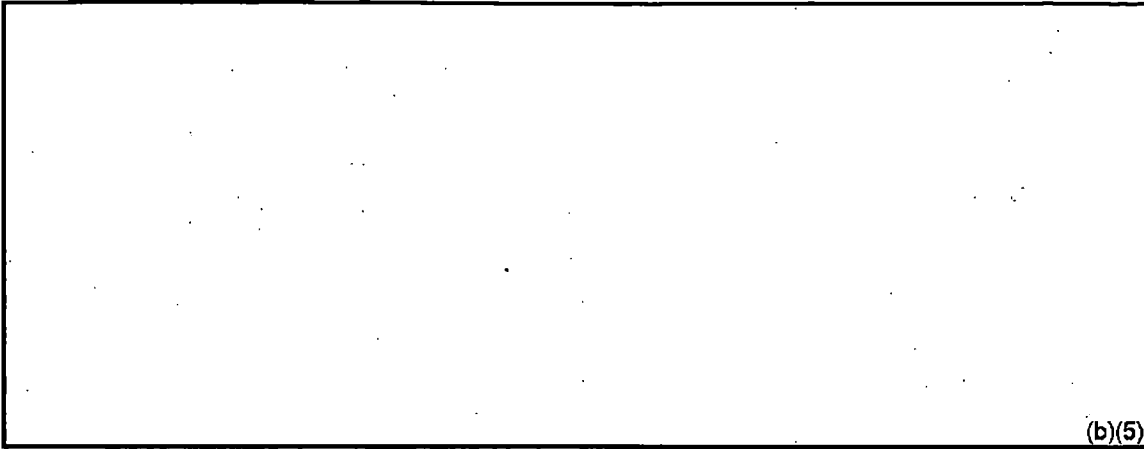
### SUMMARY:

As defined in the program plan in SECY-04-0119, CATS has proceeded with identifying individuals to serve as part-time AEs. Working with the Offices of Nuclear Material Safety and Safeguards (NMSS), Nuclear Security and Incident Response (NSIR), Nuclear Regulatory Research (RES), Nuclear Reactor Regulation (NRR), and OCAA, potential part-time AEs were identified, interviewed, and evaluated. These efforts led to the development of a coordinated list of part-time AEs (Attachment 1) that would provide the Commission with high-quality adjudicatory technical support on an as-needed basis. Staff identified on the list are some of the most experienced and technically qualified individuals at the NRC and provide a level of support and expertise equivalent to that available to conduct the licensing review. This meets the overall goal of the effort to identify part-time AEs.

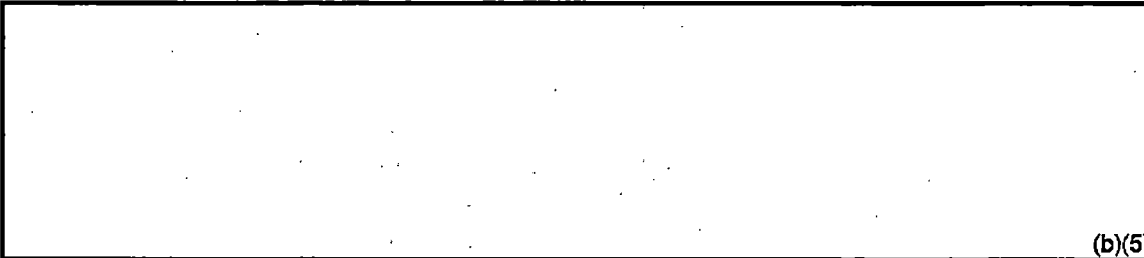
Contact: Keith I. McConnell, OGC/CATS  
(301) 415-1743

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— DETERMINES OTHERWISE —~~





(b)(5) CATS, in cooperation with the Offices, has developed and put in place management strategies to minimize adverse impacts to other programs.



BACKGROUND:

The CATS program was established by the SRM for SECY-03-0120 of November 25, 2003, as a separate AE organization, independent of the EDO, that reports to the Commission through the General Counsel. The responsibilities of the CATS program include the identification/assignment and/or hiring of AEs to make them available to the Commission and the monitoring of the implementation of 10 CFR Part 2, Subpart J.<sup>2</sup> The overall objective of the program is to provide the Commission with technical adjudicatory capability which:

- is independent of the EDO,
- is of equal caliber to that available to the Division of High Level Waste Repository Safety, and



<sup>2</sup> This monitoring was to include interpretation, but exclude compliance by parties/potential parties or strictly technical IT issues.

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- maximizes in-house expertise and ACNW members and staff.

A formal staffing plan and formal plan for achieving this objective was completed in June 2004 and transmitted to the Commission in SECY-04-0119.

In the SRM to SECY-04-0119, the Commission approved the plan for ensuring the Commission has suitable technical experts available to support its adjudicatory responsibilities subject to several constraints. First, CATS was to modify the timing for staffing the full-time positions to reflect impacts from the Continuing Resolution budget and ongoing litigation surrounding the Yucca Mountain repository. Second, the Commission directed that the CATS plan be modified to focus on providing support for a legal proceeding rather than on a duplicative technical review of the license application.

#### DISCUSSION:

This paper describes CATS program activities for the period July 1 thru December 31, 2004. Activities are described in the context of the organizational structure of CATS.

#### CATS Organization:

The SRM to SECY-04-0119 approved a staffing plan of full-time employees for CATS consisting of: a manager, a management analyst, and three full-time technical team leaders - engineering, geosciences, and risk assessment. The Management Analyst position was filled in September 2005, and is responsible for all administrative, personnel, and contracting duties required to support the identification and assignment of AEs. In addition, the Management Analyst is responsible for tracking all HLW expenditures within the Office of the General Counsel and has other non-HLW responsibilities as assigned by the General Counsel. (b)(5)

(b)(5)

The CATS Office Manual was revised to reflect the direction in the SRM for SECY-04-0119 concerning the roles and responsibilities of AEs. (b)(5)

(b)(5) Full-time

CATS staff will be responsible for ensuring that part-time and consulting staff are fully cognizant of these responsibilities. To further respond to the direction in the SRM to SECY-04-0119,

(b)(5)

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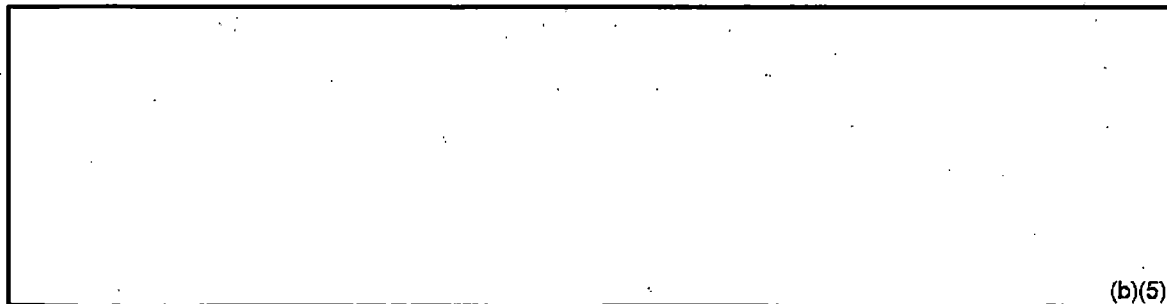
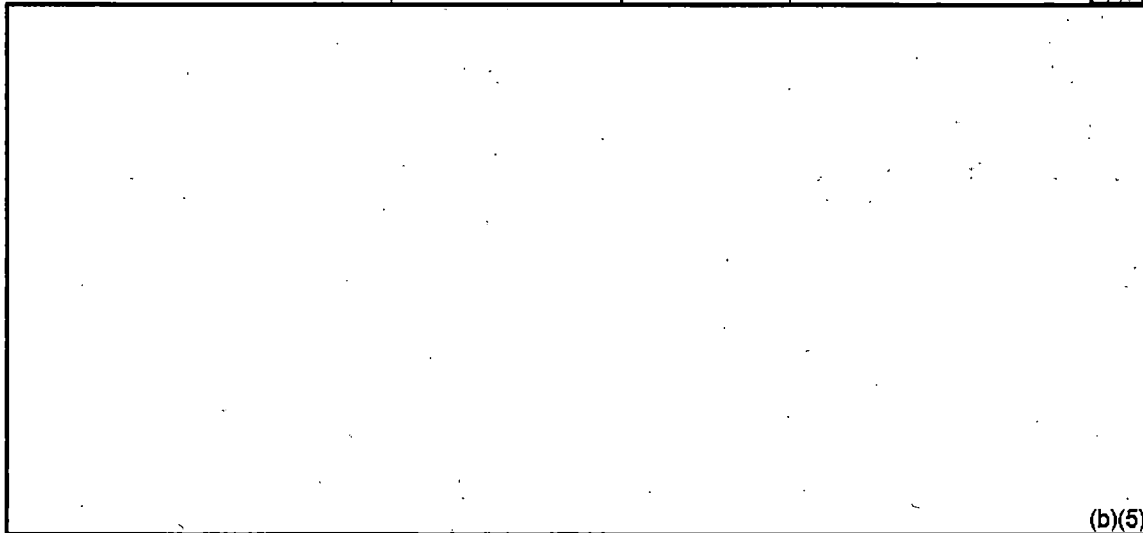
CATS staff will conduct a, formal, one-day training session on the roles and responsibilities of AEs. This training will occur when AEs are formally designated as HLW AEs.

Part-time AEs to be recruited from the NRC staff:

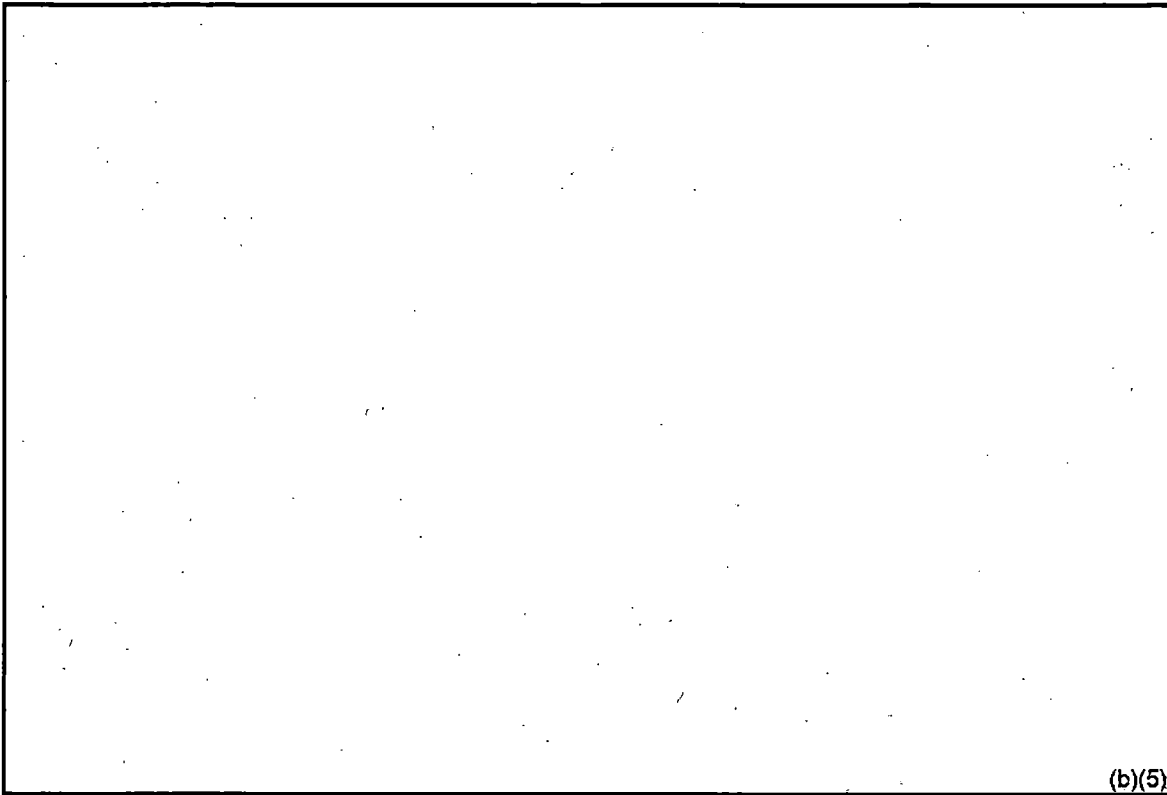
As discussed in SECY-04-0119 and approved in the August 2004 SRM, the CATS program was to interview members of the NRC staff to identify part-time AEs. To ensure that the effort was effectively coordinated within NRC, the process was to follow the protocol between CATS and the EDO established in SECY-04-0119.

CATS, with the assistance of the EDO, identified approximately 100 NRC staff for interview. Interviews took place between June and December of 2005, with the active participation of OCAA management and staff. The interviews were structured to ascertain a candidate's technical skills within a particular technical discipline, the breadth and depth of regulatory experience, and the ability to communicate complex technical matters. Also, potential conflicts-of-interest related to past HLW experience were explored.

The interviews led to the development of the list of part-time AEs provided in Attachment 1. (b)(5)



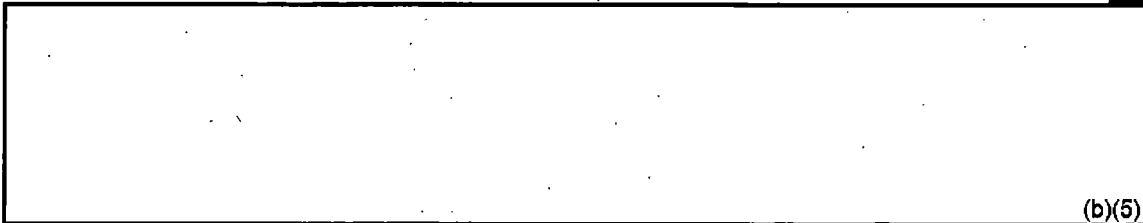
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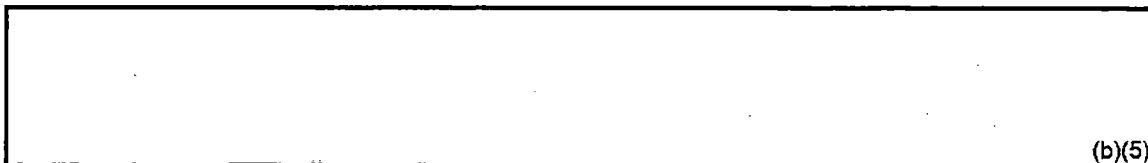
(b)(5) Revised versions of the list will be provided to the Commission in subsequent status updates.

Use of ACNW Members and Staff:

ACNW members, staff, and consultants are incorporated into the list of AEs in Attachment 1. (b)(5)



External Consultants:



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(b)(5)

(b)(5) CATS will monitor the HLW program and will take timely steps when necessary to enlist external consultants.

COORDINATION:

The identification of potential Commission HLW AEs was coordinated with the EDO. The list of Commission Adjudicatory Technical Employees in Attachment 1 was coordinated with OCAA, the Executive Director of the ACNW, the EDO, NMSS, RES, NSIR, and NRR,

/RA/

Karen D. Cyr  
General Counsel

Attachment:  
List of Staff for the  
Commission Adjudicatory Technical Support Program

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(b)(5)

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/RA/

Karen D. Cyr  
General Counsel

Attachment:  
List of Staff for the  
Commission Adjudicatory Technical Support Program

Note: The 4-page attachment has been withheld in its entirety under FOIA exemption 5.

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DATE	01/06/05		01/06/05		01/07/06		03/ /05		03/ /05

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