

STATEMENT SUBMITTED  
BY THE  
UNITED STATES NUCLEAR REGULATORY COMMISSION

TO THE  
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS  
UNITED STATES SENATE

FOR THE  
HURRICANE KATRINA HEARING

PRESENTED BY  
DR. NILS J. DIAZ  
CHAIRMAN

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## **Introduction**

Mr. Chairman and members of the Subcommittee, it is a privilege to appear before you today to discuss the U.S. Nuclear Regulatory Commission's preparations and response to Hurricane Katrina. To summarize NRC's actions, I have attached a factual NRC timeline for the Hurricane Katrina activities.

## **Overview of Nuclear Emergency Preparedness and Response**

The NRC's mission is to ensure adequate protection of public health and safety, promote the common defense and security, and protect the environment at nuclear power plants and materials facilities – during routine operations and during abnormal or emergency conditions, including natural emergencies, such as Hurricane Katrina. The NRC takes an integrated approach to safety, security, and emergency preparedness in carrying out this mission. This approach, combined with the defense-in-depth strategy we use for licensing the design, construction, and operation of nuclear power plants, provides substantial protection against severe natural phenomena, such as hurricanes and tornados.

The well-established capabilities and procedures of the NRC, our Federal and Agreement States partners, and our licensees proved to be effective during Hurricane Katrina for NRC areas of responsibility. The nuclear power plants affected by this hurricane were essentially undamaged. Concurrently with the disciplined approach to preparation by our nuclear reactor licensees, the NRC initiated pertinent command and control of emergency response activities early and activated the NRC Region IV Operations Center in Arlington, Texas, and the NRC Headquarters Operations Center in Rockville, Maryland, as the hurricane approached the Gulf Coast, with substantial participation from all regions and senior management, including the Chairman. My fellow commissioners were kept fully and currently informed. In addition, the

NRC and State regulatory agencies initiated and implemented emergency preparedness and response activities to account for, and ensure the safety and security of radioactive materials located in the States of Louisiana, Alabama, and Mississippi. These States are Agreement States, through formal agreements with the NRC, have regulatory authority over certain sources of radioactive materials within their States. This authority does not include reactors, large quantities of special nuclear material, or materials licensed to Federal government agencies. The NRC coordinated extensively with the Agreement States and our Federal licensees to ensure that the safety and security of radioactive sources were maintained.

For nuclear power plants, emergency planning begins with robust facility designs. NRC regulations require each nuclear power plant to be designed and constructed to withstand the effects of severe natural phenomena pertinent to the surrounding area, along with added margins of safety for even more extreme postulated events. The design of these facilities considers the combination of the effects of natural phenomena with the effects of normal and accident conditions at the plant. For example, nuclear power plants in Florida and along the Gulf Coast are designed with capabilities to mitigate plant accidents even with the effects of hurricanes, flooding, and loss of offsite power from the electrical grid, while nuclear power plants in California include capabilities to mitigate plant accidents even with the effects of a severe earthquake and loss of off-site power from the electrical grid. Waterford 3, the nuclear power plant closest to New Orleans, is equipped with protective features against flooding, including a thirty-foot levee and water-tight compartment doors for safety-related equipment.

Over the years, U.S. nuclear power plants have experienced direct impacts of severe natural phenomena, and their robust design and construction have enabled them to successfully withstand such events. Some of the events experienced within the past 15 years include:

Hurricane Andrew, a Category 4 hurricane, which passed directly over the Turkey Point nuclear power plant with sustained wind speeds of 145 miles per hour and gusts up to 175 miles per hour (August 1992); the Cooper Nuclear Station, which experienced flooding onsite from the Missouri River (July 1993); a Fujita Tornado Damage Scale F2 tornado, which directly hit the Davis Besse Nuclear Power Station, with winds of 113 to 157 miles per hour (June 1998); and, the Diablo Canyon Power Plant, which felt the shock from a Magnitude 6.5 San Simeon earthquake in Paso Robles, California (December 2003). In all these cases, the nuclear power plant functioned as they were designed, and adequate protection was maintained during and after the event.

NRC regulations also require all nuclear power plant licensees to have in place comprehensive emergency preparedness programs (e.g., dedicated emergency response facilities, systems, equipment, and staffing). Detailed site-specific emergency plans and implementing procedures provide instructions and guidelines for dealing with or responding to a variety of emergency situations, including natural phenomena such as hurricanes. These integrated emergency plans are developed in a coordinated manner between the facility licensee and State and local authorities, with oversight of the NRC and the Department of Homeland Security (DHS)/Federal Emergency Management Agency (FEMA). Emergency response for the sites is periodically evaluated by the NRC, and additional training and drills are conducted between these evaluated exercises to help further prepare for a wide spectrum of emergencies, including hurricanes. During these exercises, the NRC works closely with DHS/FEMA in evaluating the acceptability of the emergency plans. The NRC evaluates onsite response capabilities and integration of onsite and offsite preparedness, and then reviews the findings that DHS/FEMA makes regarding offsite emergency planning.

The NRC has exercised its key responsibilities in coordination with DHS and other Federal agencies under the National Response Plan (NRP). In accordance with the NRP, the NRC is the coordinating agency for incidents involving facilities and/or materials licensed by the NRC or an Agreement State. Accordingly, the NRC leads the Federal-level response functions identified in the Nuclear/Radiological Incident Annex with support provided by the cooperating agencies, such as the U.S. Department of Energy (DOE) and the U.S. Environmental Protection Agency (EPA). In cooperation with its Federal partners, the NRC implemented the NRP for Hurricane Katrina.

### **NRC Incident Response Program**

The NRC Operations Center, located at its Headquarters Office in Rockville, Maryland, is continually staffed with qualified personnel, who have the expertise and ability to evaluate events and alert NRC management, other Federal partners, and licensees, as necessary, to properly respond to unfolding events. Over the years, the NRC has taken several steps to enhance its emergency preparedness and response capabilities. These include increased staffing and modernization of facilities and equipment, more frequent exercises with other Federal agencies, and increased interaction with our international partners to gain knowledge of incident response activities in other countries. The NRC is also playing an active role in enhancing incident response capabilities for radiological emergencies and incidents by conducting tabletop exercises with Federal and State emergency response organizations and outreach activities with local stakeholders. During preparation and response to emergencies, the agency also discharges its responsibility to communicate developments to Congressional delegations and State executives, as appropriate.

The NRC is capable of responding to multiple events, affecting multiple plants at the same time. This was demonstrated when the NRC was responding effectively to Hurricane Katrina while simultaneously participating in a biennial emergency exercise at the Monticello Nuclear Plant in Minnesota on August 30, 2005. The NRC also responded successfully to multiple events during the August 2003 electrical grid collapse in the northeast and Midwest, which resulted in automatic reactor shutdowns at nine U.S. nuclear power plants and the loss of offsite power at eight plants.

### **Preparedness for Hurricane Season**

The NRC and its licensees routinely monitor, prepare for, and respond to hurricanes using well-established procedures. The NRC requires that each nuclear power plant shut down under weather conditions specific to each site. For example, the Waterford 3 plant began to shut down the day before Hurricane Katrina made landfall in Louisiana, based on projected sustained wind speeds exceeding 74 miles per hour.

The NRC has an established hurricane response program that is implemented each year during hurricane season, from June 1 through November 30. The NRC has responded to hurricanes with nuclear power plants in their direct paths. Throughout the hurricane season, the NRC monitors potentially hazardous weather conditions in the Atlantic and Pacific Oceans, the Caribbean Sea, and the Gulf of Mexico. For the Atlantic basin, the NRC monitors tropical storm formations developing as far away as the African coast. The NRC relies on hurricane tracking computer programs and data provided by the National Oceanic and Atmospheric Administration that provides current and projected information about developing storms and their proximity to the U.S. coastline.

At the beginning of each hurricane season, nuclear power plant licensees prepare well in advance by updating procedures and assessing their sites for readiness. For an approaching hurricane, a licensee's response would typically include identification of emergency staffing, plans for activation of emergency support facilities, testing of routine and emergency communications, equipment readiness checks, and updating of contact information with Federal, State, and local agencies.

### **Response to Hurricane Katrina**

For Hurricane Katrina, the NRC and its licensees took aggressive and prudent steps to prepare for its impact. The NRC and nuclear power plant licensees began preparations before Katrina first made landfall in Florida on August 25, 2005. The NRC tracked the hurricane's status carefully from its inception as Tropical Depression 12 on August 24, 2005, when it was located well off the coast of Florida. The NRC's Region II office in Atlanta, Georgia, initially tracked the storm and issued daily weather updates to alert the Commission, NRC Headquarters, and regional personnel of this storm. The NRC Region II office coordinated with DHS/FEMA's Atlanta regional office, the State of Florida, and NRC licensees prior to the storm becoming a hurricane, and maintained communications throughout the passage of the hurricane over Florida.

Two nuclear power plants in Florida had the potential to be affected by the hurricane, but were never in its direct path. The Turkey Point plant in Florida City and the Saint Lucie plant on Hutchinson Island implemented emergency preparations to ensure the facilities were fully prepared. The NRC issued status reports for these plants to keep stakeholders informed and NRC's site resident inspectors monitored site conditions and implementation of the licensee's established procedures for hurricane preparations.

When the storm passed west of longitude W87 on August 27, 2005, NRC's Region IV office in Arlington, Texas, monitored Hurricane Katrina as it moved into the Gulf of Mexico. The NRC Region IV Operations Center coordinated with Louisiana and Mississippi State officials and, on August 28, 2005, an NRC State/Federal Liaison Officer was dispatched to FEMA's regional office in Denton, Texas. In accordance with the NRC's incident response program, the Chairman of the NRC and NRC senior staff led the agency's response to Hurricane Katrina in both Headquarters and Region IV. Before Hurricane Katrina's arrival along the Gulf Coast States, the NRC staffed its Headquarters and Region IV Operations Centers with experts to prepare for any unforeseen circumstances, and NRC Region IV dispatched additional inspection staff to augment the permanently assigned resident inspectors at nuclear power plants in Louisiana and Mississippi.

The Grand Gulf plant in Port Gibson, Mississippi, the River Bend plant in Saint Francisville, Louisiana, and the Waterford 3 plant were more impacted by Hurricane Katrina than the plants located in Florida. Before, during, and after the storm's passage, the NRC closely monitored onsite and offsite activities at each of these sites by maintaining staff in NRC's Headquarters and Region IV Operations Centers and at the sites. The NRC held routine conference calls with the State of Louisiana and the parishes surrounding the Waterford 3 site and supported the State of Louisiana's Emergency Operations Center in Baton Rouge. The NRC provided status information on the conditions and the operational status of nuclear power plants and materials facilities in the States of Louisiana and Mississippi for the Federal Joint Field Office, which was established following DHS' declaration of an incident of national significance for Hurricane Katrina on August 30, 2005.

All three nuclear power plants were essentially undamaged by the hurricane. However, land-line communications with the Waterford 3 site were lost because of flooding in the New Orleans area. In addition, offsite power was lost because of instability in the regional electrical grid. Following the loss of offsite power, electrical power for key safety systems for the Waterford 3 plant was supplied automatically by the plant's standby diesel generators. To address the loss of land-line communication, extra land lines were installed and satellite communications equipment was employed for communication following the hurricane's passage at this site. Backup satellite communications equipment was employed by NRC staff at the site, NRC Region IV, and NRC Headquarters to ensure continuous communications with the Waterford 3 site.

Prior to restart of the Waterford 3 plant, the NRC staff independently verified that key plant systems and structures were able to support safe operations at the plant, and in cooperation with DHS/FEMA, the NRC confirmed that the offsite infrastructure was adequate to support plant operations. An NRC regional team evaluated onsite emergency preparedness and the readiness of the plant for restart. Also, the NRC participated in the DHS/FEMA Disaster Initiated Review Team for the offsite assessment of the Waterford 3 site by reviewing and evaluating offsite emergency preparedness and response capabilities. After successful completion of these evaluations, the Waterford 3 power plant resumed operation, supplying electricity to support recovery of the regional infrastructure.

#### **NRC Response for Radioactive Material Control**

NRC and the Agreement States of Alabama, Louisiana, and Mississippi share the regulatory oversight responsibilities for ensuring the safety and security of radioactive materials in the region affected by Katrina. These Agreement States have regulatory authority over

approximately 98 percent of the total number of radioactive materials licensees located within their borders. The NRC has jurisdiction for the remainder, which includes Federal facilities such as Veterans Hospitals and the U.S. military.

The majority of the NRC and Agreement State licensed material is in the form of sealed sources. Devices containing sources of the greatest concern from a radiological standpoint are designated as Category 1 or 2 in the International Atomic Energy Agency (IAEA) Code of Conduct on the Safety and Security of Radioactive Sources and are designed and manufactured in accordance with strict NRC regulatory requirements. To ensure that the source is designed to meet or exceed standards as specified in the regulatory requirements, the NRC or its equivalent Agreement States must review the manufacturers' application to produce a sealed source. Typically, these sources are doubly encapsulated in stainless steel and are manufactured to withstand accidental conditions such as immersion, fire, and drop/crushing. When not in use, the sources are stored in a shielded configuration to ensure the safety of the general public, as well as workers.

The NRC worked closely with its Agreement State partners and its own materials licensees (Federal facilities) in those States to monitor the safety and security of radioactive sources of concern during the recovery from Hurricane Katrina. The NRC contacted its IAEA Category 1 and Category 2 licensees (Federal facilities) in the affected States to obtain additional information on the status and security of facilities and materials listed in an existing database. This database list included information on facilities regulated by the NRC, Louisiana, Alabama, and Mississippi, which was updated daily. Coordination with the Agreement States proved successful in obtaining current information regarding the control and status of radioactive materials. The NRC, through its Agreement State liaisons, was able to verify the control and

status of all IAEA Category 1 and Category 2 sources located in Alabama and Mississippi within days of Katrina's landfall. The NRC continues to coordinate with Louisiana to confirm the continued control of radioactive sources and licensed facilities in locations with limited access.

The NRC also discussed the availability of resources for assisting in recovery efforts with its Federal partners, including the Center for Disease Control, DOE, EPA, FEMA, and the U.S. Army Corp. of Engineers. The NRC also assisted Louisiana with its request for use of the DOE's Aerial Monitoring System to detect any misplaced or missing radiation sources. On September 13, 2005, the NRC sent staff to the Louisiana Department of Environmental Quality (LDEQ) for an extended period to enhance communications and provide assistance at facilities that contained IAEA Category 1 and 2 sources in Louisiana. On September 26, 2005, the NRC sent additional staff to Baton Rouge and Lafayette, Louisiana, to provide support that includes participation in LDEQ field teams.

In addition, the NRC provided current information regarding the status of radioactive sources for situation reports (SITREPs) required by DHS, and developed the DHS/NRC Joint Bulletin, "Assessment of Security of Radioactive Sources in the Hurricane Affected Area." The NRC remains ready to provide staff with technical expertise concerning radioactive materials safety and control to DOE, EPA, FEMA, and State radiological emergency response teams.

### **Conclusion**

For more than 25 years, the NRC has implemented improvements in its emergency preparedness and incident response programs, and continues today to be vigilant in ensuring the adequate protection of public health and safety, common defense and security, and the environment before, during, and after natural or man-made emergencies. During this time,

the combination of robust nuclear power plant design and construction, comprehensive emergency preparedness programs and implementing procedures which improved significantly after September 11, 2001, and well-trained staff has proven effective against severe natural phenomena. As the response to Hurricane Katrina demonstrates, NRC and its licensees' emergency preparedness capabilities and established procedures have proven to be effective in responding to events at licensee facilities, including natural phenomena. We are committed to continuous assessment and enhancement of these capabilities. As it has done routinely following previous hurricanes, the NRC is conducting a lessons learned from Hurricane Katrina. The NRC has already applied insights from the experience with Hurricane Katrina in preparing for and responding to Hurricanes Rita and Wilma and will further enhance coordination with DHS/FEMA to ensure effective emergency preparedness and timely return to service of nuclear power plants. The NRC will continue to exercise strong oversight of each facility it licenses and work closely with Federal, State, and local agencies to protect the public.

I appreciate the opportunity to appear before you today, and I welcome your comments and questions.

**NRC Preparations and Response to Hurricane Katrina**

**August 24, 2005 - (Five days before landfall in Louisiana)**

- NRC's Headquarters Operation Center (HOC) in Rockville, Maryland and Region II office in Atlanta, Georgia, begin to track Tropical Depression 12 as it formed 270 miles ESE of the SE coast of Florida.
- NRC Region II began implementation of NRC Procedure #2651 for Hurricane Response.
- NRC Region II issued a Tropical Weather Update to NRC Headquarters and NRC Regions.
- NRC Region II coordinated with the Department of Homeland Security (DHS)/Federal Emergency Management Agency's (FEMA) Region IV office in Atlanta, Georgia, the State of Florida, and applicable NRC licensees.
- NRC issued status reports for the two power plants in Florida, the Turkey Point plant in Florida City and the Saint Lucie plant on Hutchinson Island, that had the potential to be affected by the hurricane. These status reports kept stakeholders informed about the preparations that the power plant licensees were taking in response to the approaching storm.

- NRC's site resident inspectors at the Turkey Point and Saint Lucie plants examined site conditions and monitored the licensees' implementation of their established procedures for hurricane preparations.
- NRC Headquarters received a "Notification Of an Unusual Event" declaration from the Turkey Point and Saint Lucie power plant licensees. This is the lowest level of emergency classification for events at nuclear power plants. The licensees made the declarations in response to the issuance of the hurricane warning for Tropical Depression 12. NRC notified other Federal agencies of the declaration, consistent with established procedures.

**August 25, 2005 - (Four days before landfall in Louisiana)**

- NRC Region II issued a Tropical Weather Update on Tropical Storm Katrina.
- As it approached the east coast of Florida, the storm strengthened to a Category 1 hurricane and, as predicted by the hurricane tracking software utilized by the NRC, it passed between the Turkey Point and Saint Lucie power plants. There were no impacts to either power plant except heavy rain.
- NRC Region II was in communication with the Turkey Point and Saint Lucie power plants prior to the storm becoming a hurricane and during the hurricane's passage.

**August 26, 2005 - (Three days before landfall in Louisiana)**

- NRC Region II issued a Tropical Weather Update on Hurricane Katrina.
- NRC resident inspectors at the Grand Gulf power plant in Port Gibson, Mississippi, the River Bend power plant in Saint Francisville, Louisiana, and the Waterford 3 power plant in Killona, Louisiana, began to closely monitor licensee preparations for the approaching hurricane.
- NRC Region IV in Arlington, Texas, prepared staffing plans for onsite resident inspector coverage at the Grand Gulf, River Bend, and Waterford 3 power plants during the weekend.

**August 27, 2005 - (Two days before landfall in Louisiana)**

- As Hurricane Katrina passed west of longitude W87, NRC Region II transferred the tracking of the hurricane to NRC Region IV, in accordance with established hurricane tracking procedures. NRC Region IV implemented NRC Procedure #2651 for Hurricane Tracking.
- NRC Region IV dispatched a region-based inspector to augment the resident inspector staff at the Waterford 3 power plant. Resident inspectors at the Grand Gulf, River Bend, and Waterford 3 power plants were prepared to provide 24-hour coverage beginning August 28, 2005, in accordance with NRC procedures.

- NRC Headquarters received a “Notification Of an Unusual Event” declaration from the Waterford 3 power plant due to the issuance of a hurricane warning. NRC then notified the Department of Agriculture, Department of Energy, Department of Health and Human Services, DHS/FEMA, and the Environmental Protection Agency, consistent with established procedures.

**August 28, 2005 - (Day before landfall in Louisiana)**

- NRC Headquarters made numerous phone calls in the morning to update NRC Regions on the hurricane preparations being performed at the Grand Gulf, River Bend, and Waterford 3 power plants.
- The NRC Chairman participated in multiple Executive Team briefings with senior Headquarters and NRC Region IV management on Hurricane Katrina preparations.
- In accordance with plant procedures, the Waterford 3 power plant shut down as a precautionary measure, based on projected wind speeds exceeding 74 miles per hour.
- At 1600 EST, the NRC entered Monitoring Mode. NRC RIV activated and fully staffed its Incident Response Center. The NRC HOC and NRC Region IV continued to closely monitor the onsite and offsite activities at power plants located along the Gulf Coast.

- NRC Region IV dispatched a NRC State/Federal Liaison Officer to FEMA's Region VI Office in Denton, Texas.
- NRC initiated routine conference calls with the State of Louisiana and the parishes surrounding the Waterford 3 site, and offered support to the State of Louisiana's Emergency Operations center in Baton Rouge.
- NRC Region IV contacted and offered assistance to the Louisiana Department of Environmental Quality (LDEQ) and made arrangements for further contacts with them after the hurricane passed. NRC management was briefed on NRC and Agreement State materials licenses in Louisiana.
- NRC issued a press release on Hurricane Katrina preparations.

**August 29, 2005 - (Landfall of Hurricane Katrina)**

- Before Hurricane Katrina made landfall, NRC staffed the Homeland Security Operations Center (HSOC), and NRC HOC and NRC RIV began receiving information from the Grand Gulf, River Bend, and Waterford 3 power plants' Emergency Response Data System, which provides plant status and weather information directly to NRC.
- The NRC Chairman participated in multiple Executive Team briefings on the status of Hurricane Katrina and NRC licensee activities.

- NRC HOC and NRC Region IV continued routine communications with the Waterford 3, River Bend, and Grand Gulf power plants throughout the hurricane's passage. NRC HOC was fully staffed with four teams of specialists. Members became familiar with the Waterford 3 plant's flooding and wind design bases.
- NRC Region IV began daily contacts with the States of Mississippi and Louisiana to receive status reports and to offer assistance with regard to materials licensees.

**August 30, 2005 - (Day after landfall in Louisiana)**

- NRC HOC staff exercised responding to multiple events. NRC HQ management held periodic briefings on the status of Hurricane Katrina during the emergency preparedness exercise with the Monticello Nuclear Station.
- NRC Headquarters and NRC Region IV worked closely with the licensee that operates the Grand Gulf, River Bend, and Waterford 3 nuclear plants to identify potential supplemental communications resources. Satellite communications were used to continue communications with the Waterford 3 plant following loss of phone capability due to local flooding.
- NRC issued a press release on Hurricane Katrina monitoring activities.

**August 31, 2005 - (Two days after landfall in Louisiana)**

- As part of NRC Headquarters and NRC Region IV coordination efforts with Agreement States and the Federal government on the security and status of radioactive materials in the Gulf Coast area, NRC Headquarters coordinated with DHS on a request by the LDEQ for assistance in obtaining security guards for a radioactive source manufacturing facility located near New Orleans.
- NRC used an existing database to develop a report summarizing the status of Category 1 and Category 2 sources licensed by NRC, Alabama, Louisiana, and Mississippi and shared this information with DHS through the HSOC. Routine updates of the report were transmitted to HSOC from August 31, 2005, through September 20, 2005.

**September 2, 2005 - (Four days after landfall in Louisiana)**

- NRC Headquarters and NRC Region IV assisted LDEQ with a request to obtain surveys of New Orleans by using DOE's Aerial Monitoring System to detect any misplaced or stolen radiation sources.
- NRC Headquarters and NRC Region IV coordinated with a DOE liaison at HSOC to assist the Mississippi Department of Health in evaluating the use of DOE's Aerial Monitoring System to detect misplaced or stolen radiation sources in Mississippi.

**September 5-8, 2005 - (Week after landfall in Louisiana)**

- At the request of DHS/FEMA Region VI, NRC provided two Regional State/Federal Liaison Officers to serve as members of the Disaster Initiated Review Team for the offsite assessment of the Waterford 3 site to confirm that the offsite infrastructure was adequate to support plant operations.
- On September 6, 2005, NRC returned to Normal Mode and NRC Region IV shut down its Incident Response Center.
- NRC participated in DHS/FEMA's assessment of offsite emergency preparedness and response capabilities for the Waterford 3 plant. Prior to restart of the Waterford 3 plant, the NRC staff independently verified that key plant systems and structures were able to support safe operations at the plant.
- On September 8, 2005, NRC issued a press release on NRC's oversight of the Waterford 3 restart activities.

**September 9-13, 2005 - (Second week after landfall in Louisiana)**

- On September 9, 2005, NRC Headquarters notified the licensee of the Waterford 3 power plant (by phone and followed up by letter) that the NRC concurred with the assessment that the emergency preparedness infrastructure, both onsite and offsite, was adequate for the restart of the plant.

- On September 9, 2005, NRC issued a press release on the restart of Waterford 3.
- The NRC assisted Centers for Disease Control and Environmental Protection Agency representatives on the status of Category 1 and 2 sources licensed by Louisiana and Mississippi. Devices containing sources designated as Category 1 or 2 in the International Atomic Energy Agency Code of Conduct on the Safety and Security of Radioactive Sources are designed and manufactured in accordance with strict regulatory requirements.
- NRC assisted the LDEQ with preparation of written precautions and information for emergency workers entering the New Orleans area.
- On September 13, 2005, NRC dispatched a materials inspector to the LDEQ. The NRC inspector worked closely with the Louisiana Radiation Control Program Director and served as the primary communicator between LDEQ and the NRC Region IV.

**September 26 - October 5, 2005 - (Fourth and fifth weeks after landfall in Louisiana)**

- NRC sent additional staff to Baton Rouge and Lafayette, Louisiana, to provide support that included participation in LDEQ field teams. NRC assisted with inspections and communications through October 5, 2005.