

# Bureau of Nuclear Engineering

## Nuclear Emergency Preparedness Section



## Annual Update

January 1, 2006 - December 31, 2006

<http://www.nj.gov/dep/rpp/nep>

**State of New Jersey  
Department of Environmental Protection**

**Division of Environmental Safety and Health**

**BUREAU OF NUCLEAR ENGINEERING**

**NUCLEAR EMERGENCY PREPAREDNESS SECTION**

**ANNUAL UPDATE**

**January 1, 2006 - December 31, 2006**

**Jon S. Corzine, Governor  
Lisa P. Jackson, Commissioner**

March 2006

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**LIST OF ACRONYMS**

AI	Artificial Island
ARCA	Area Requiring Corrective Action
BCSS	Bureau of Communications and Support Services
BER	Bureau of Environmental Radiation
BNE	Bureau of Nuclear Engineering
BRH	Bureau of Radiological Health
CRCPD	Conference of Radiation Control Program Directors
CREST	Continuous Radiological Environmental Surveillance Telemetry
DEMA	Delaware Emergency Management Agency
DHS	Department of Homeland Security
DEP	Department of Environmental Protection
DOE	US Department of Energy
ENC	Emergency News Center
EOC	Emergency Operations Center
EOF	Emergency Operations Facility
EPA	Environmental Protection Agency
EPZ	Emergency Planning Zone
FCP	Forward Command Post
FEMA	Federal Emergency Management Agency
FMT	Field Monitoring Team
FRMAC	Federal Radiological Monitoring Assessment Center
GE	General Emergency
IPZ	Ingestion Pathway Zone

JIC	Joint Information Center
MWe	Megawatts (electric)
MWt	Megawatts (thermal)

**LIST OF ACRONYMS (continued)**

NEPS	Nuclear Emergency Preparedness Section
NRC	Nuclear Regulatory Commission
NUMARC	Nuclear Management Resource Council
OCNGS	Oyster Creek Nuclear Generating Station
PAR	Protective Action Recommendation
PAD	Protective Action Decision
PSEG	Public Service Enterprise Group
REP	Radiological Emergency Preparedness
RERP	Radiological Emergency Response Plan
SAE	Site Area Emergency
SPOEM	State Police Office of Emergency Management
UE	Unusual Event

## **1.0 INTRODUCTION**

### **1.1 The Nuclear Emergency Preparedness Section**

The State of New Jersey's Radiation Accident Response Act (N.J.S.A. 26:2D-37 et seq.) became effective October 27, 1981. This act provided for the establishment of procedures for implementing protective actions in the event of nuclear emergencies and for the preparation and implementation of a state radiation emergency response plan. The New Jersey Radiological Emergency Response Plan (RERP) for Nuclear Power Plants was developed as a joint effort by the New Jersey Department of Environmental Protection (DEP) and the New Jersey Division of State Police to coordinate and implement an immediate comprehensive state, county and municipal response to a radiological emergency at a nuclear power plant affecting the State of New Jersey. The RERP identifies the DEP as the lead state agency for accident assessment during a nuclear incident, protective action formulation and control of food, water and milk. The DEP is the support agency for evacuation, sheltering and access control, for personnel monitoring and record keeping and for decontamination.

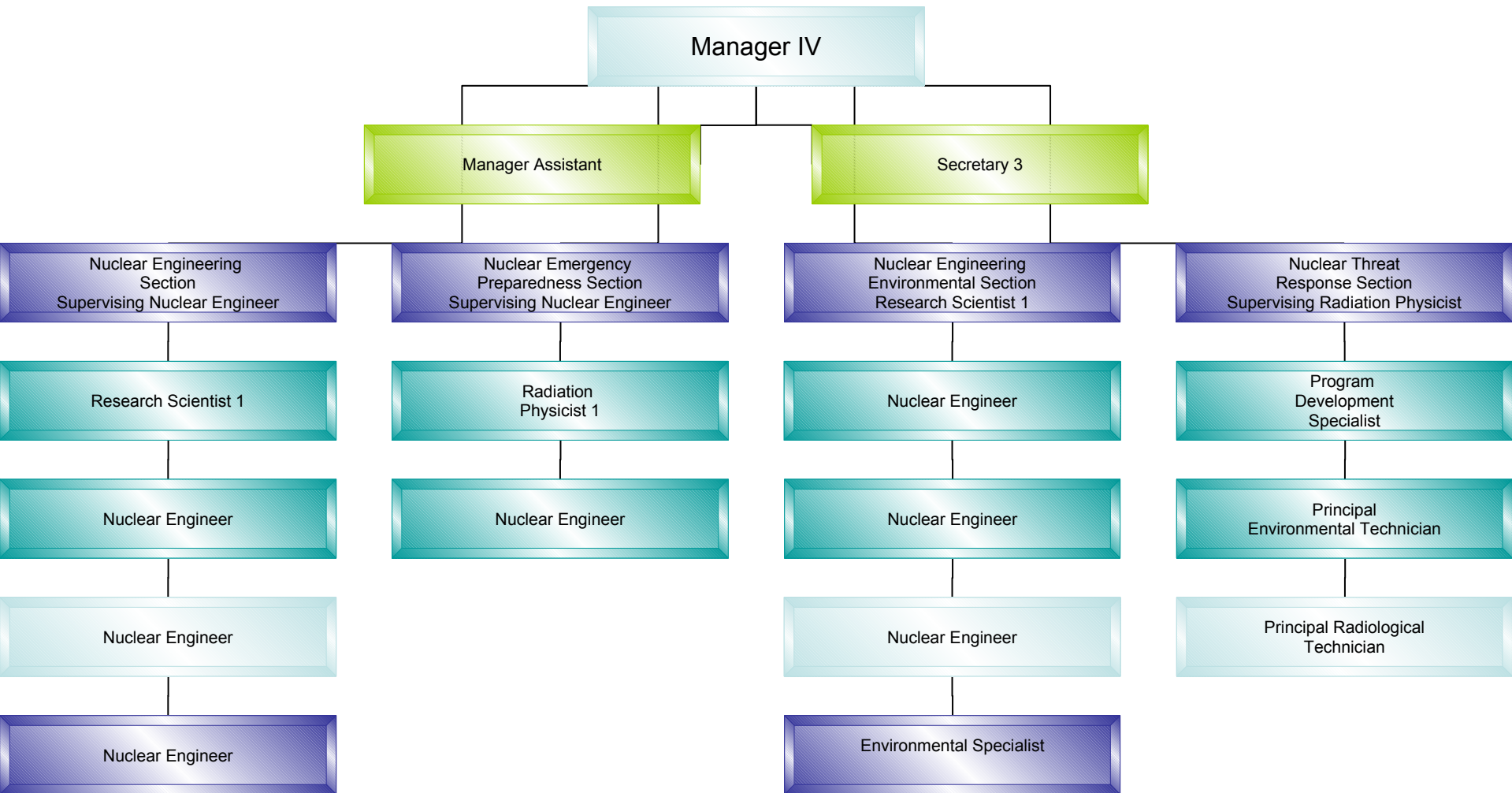
The DEP's responsibilities are addressed on a daily basis by the Nuclear Emergency Preparedness Section (NEPS) of the Bureau of Nuclear Engineering (BNE). NEPS activities include attending to the logistics of nuclear emergency response, developing and implementing training for all nuclear emergency response participants, planning for and initiating nuclear emergency response during exercises and nuclear emergency events, maintaining response facilities and preparing procedures. Most importantly, the NEPS maintains a highly trained organization of staff from throughout the DEP ready to initiate, at a moment's notice, an all-encompassing response to any nuclear power plant emergency affecting New Jersey.

In addition to the NEPS, three other sections operate within the BNE. The Nuclear Engineering Section is responsible for licensing issues and nuclear safety review of plant operations. The Nuclear Environmental Engineering Section is responsible for radiological and environmental monitoring near the nuclear power plants in the state. The Nuclear Threat Response Section is responsible for the real time monitoring of the ambient radiation levels around nuclear generating stations located in New Jersey through the Continuous Radiological Environmental Surveillance Telemetry (CREST). The section is also responsible for security and safeguard issues related to homeland security that affects nuclear generating stations and nuclear materials shipments. Figure 1-1 is an organizational chart of the BNE.





Figure 1-1  
**Bureau of Nuclear Engineering**



## 1.2 Nuclear Power Plants Affecting the State of New Jersey

There are four nuclear power plants located in New Jersey (see Figure 1-2). The Oyster Creek Nuclear Generating Station (OCNGS) is a boiling water reactor located nine miles south of Toms River in the coastal Pine Barrens in Lacey Township, Ocean County. The plant is operated by AmerGen Corporation. It has been in commercial operation since December 1969, and operates at a power level of 650 megawatts electric (MWe), 1930 megawatts thermal (MWt).

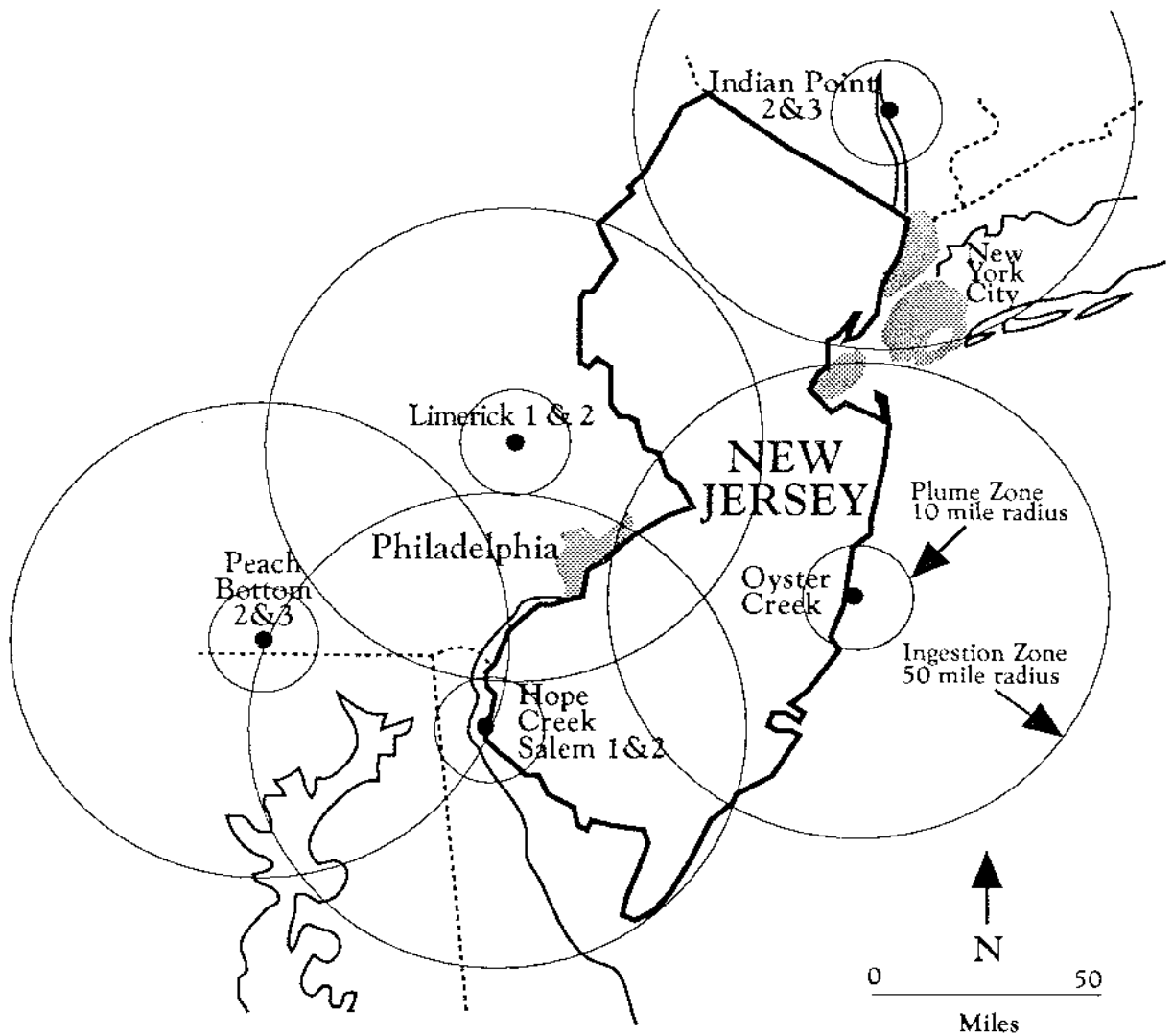
Public Service Enterprise Group (PSEG) operates three units at its Artificial Island (AI) site in Lower Alloways Creek Township, Salem County. Salem Units 1 and 2 are pressurized water reactors rated at 1090 MWe (3338 MWt) and 1115 MWe (3411 MWt), respectively. The Hope Creek unit is a boiling water reactor rated at 1067 MWe (3293 MWt). Salem Unit 1 has been in commercial operation since June 1977, and Salem Unit 2 has been operational since October 1981. The Hope Creek Unit was approved for commercial operation in February 1987.

New Jersey could also be affected by an accident at a plant in another state. States which have nuclear power plants within fifty miles of New Jersey state borders are Pennsylvania (Limerick Units 1 and 2, and Peach Bottom Units 2 and 3) and New York (Indian Point Units 2 and 3). See Figure 1-2.

## 1.3 Nuclear Emergency Planning Areas

For the purposes of nuclear emergency planning, two planning areas around nuclear power plants are specifically defined. The Emergency Planning Zone (EPZ) is the circular area around a nuclear power plant with a radius of ten miles. This is the area for which immediate protective actions for the public would be taken in the event of an accidental release of radioactive material. Initial state response for the EPZ may include evacuation, sheltering or access control. The response is intended to provide protection to the public from unnecessary exposure to radioactive noble gases (xenon and krypton), particulate and radioactive iodine from a radioactive plume which, in extreme cases, could be health threatening.

**Figure 1-2**  
**Nuclear Power Plants Affecting the State of New Jersey**



Small Circle: 10 Mile Emergency Planning Zone (EPZ)  
 Large Circle: 50 Mile Ingestion Pathway Zone (IPZ)

area with a radius of fifty miles around a nuclear power plant. Protective actions for the IPZ would be implemented on a long-term basis to prevent the ingestion of radioactive materials that may have been deposited on the ground by a radioactive plume. These protective actions may include embargo and condemnation of food and milk, evacuation, access control, hunting and fishing restrictions, shellfish consumption restrictions, restriction on public and private campgrounds and restriction on public bathing places.



Artificial Island Nuclear Generation Site

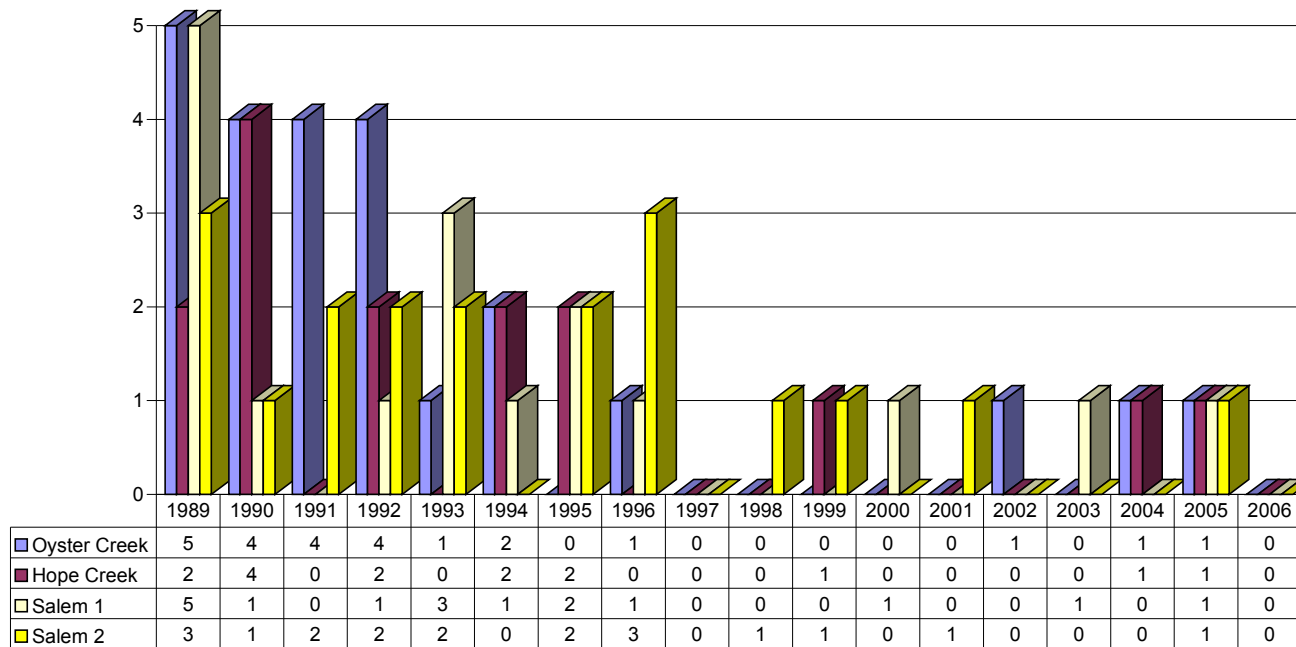
## 2.1 Overview: Response to Nuclear Emergency Events

Nuclear emergency response to any of the four nuclear power plants in New Jersey is initiated by the BNE Duty Roster Officer (see Section 2.4). The magnitude of the state's response is dictated by the severity of the incident. The methodology for the classification of emergency events at a fixed nuclear facility is outlined in Nuclear Management Resource Council (NUMARC), "Methodology for Development of Emergency Action Levels". Nuclear power plants classify incidents in one of the following categories: Unusual Event (UE), Alert, Site Area Emergency (SAE) and General Emergency (GE). The UE classification describes occurrences at a nuclear power plant which indicate a potential for degradation of the level of safety of the plant. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs. An Alert describes events at a nuclear power plant which involve an actual or potential degradation of the level of safety of the plant. Any release of radioactive material is expected to be minimal. The SAE classification indicates that events have occurred which involve actual or likely major failures of plant functions needed for protection of the public. Any releases of radioactive material are expected to be limited to within the site boundary. A GE classification describes events which involve actual or imminent substantial reactor core degradation or melting with the potential for loss of containment integrity. Releases of radioactive material are expected to extend beyond the site boundary.

## 2.2 Nuclear Emergency Events in 2006

Between January 1, 2006 and December 31, 2006, no UEs were declared at nuclear power plants in New Jersey. Figure 2-1 identifies the number of UEs declared at each nuclear generating station over the past eighteen years. No Alerts were declared during 2006. Only six Alerts have been declared in the state since 1983, the last occurring in 1995. There has never been a SAE or GE declared in New Jersey.

Figure 2-1  
**Unusual Events**



■ Oyster Creek 
 ■ Hope Creek 
 ■ Salem 1 
 ■ Salem 2

### 2.3 Nuclear Emergency Responders

Nuclear emergency responders include personnel from the BNE, the Bureau of Environmental Radiation (BER), the Bureau of Radiological Health (BRH) and the Bureau of Communications and Support Services (BCSS). As of December 31, 2006, forty-five staff level personnel were involved in nuclear emergency response with active support from management personnel in the Division of Environmental Safety and Health. Figure 2-2 provides a breakdown of nuclear emergency response support by organization. Additional field support is provided by Salem and Ocean County personnel, the Bureau of Emergency Response, the Water Supply Element, the Division of Fish and Wildlife, the Division of Parks and Forestry and the Department of Health and Senior Services.

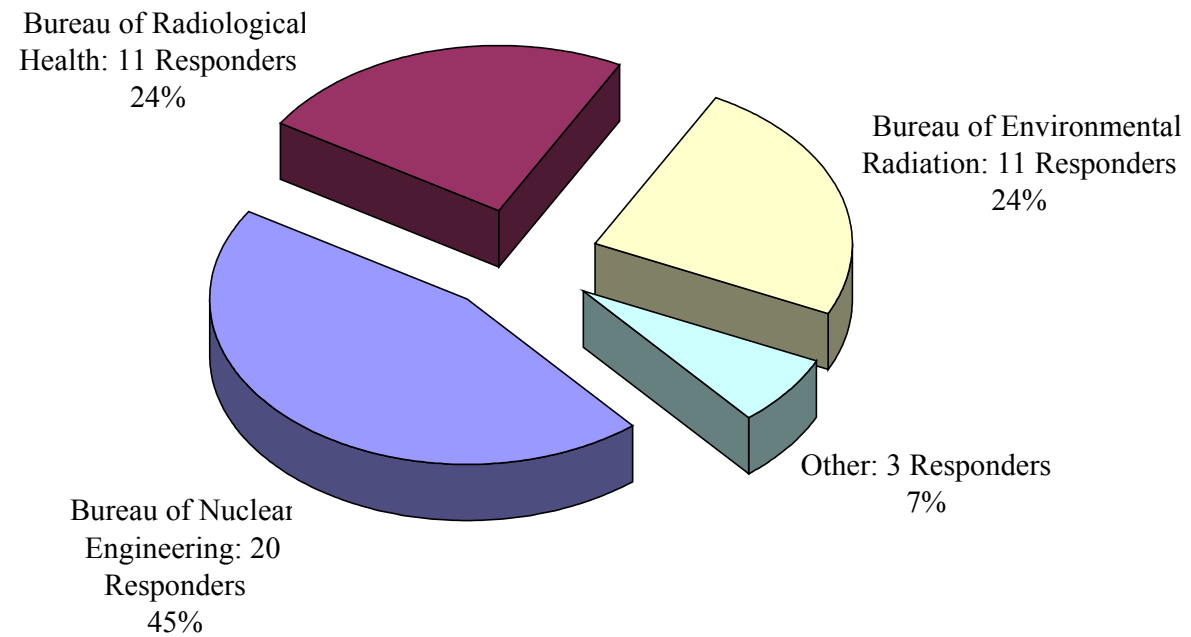
### 2.4 BNE Duty Roster

Fourteen of the 45 nuclear emergency responders have been chosen to staff the BNE Duty Roster. These responders are chosen based on their experience, knowledge of overall response activities and familiarity with nuclear power plant operations. Personnel on the BNE Duty Roster act as initial state contacts during a nuclear event. Two people are assigned on a weekly basis as primary and secondary contacts to provide continuous coverage (24 hours per day, 365 days per year) in the event of a nuclear incident.

For UEs, the BNE Duty Roster Officer provides continuous monitoring of the event until it ends. This involves obtaining engineering information from the control room of the affected nuclear power plant and updating DEP management and the New Jersey State Police. At the Alert level and above, in addition to monitoring the event, the BNE Duty Roster Officer initiates the call out of responders and the staffing of nuclear emergency response facilities.

Figure 2-2

## NUCLEAR EMERGENCY RESPONDERS BY PROGRAM





### **3.0 RADIOLOGICAL EMERGENCY PREPAREDNESS EXERCISES**

#### **3.1 State Requirements**

In order to ensure the health and safety of citizens during a nuclear event, the New Jersey Radiation Accident Response Act (N.J.S.A. 26:2D-43f) calls for testing of the New Jersey RERP. The Act specifically requires the "... testing and evaluation of all plans developed pursuant to this act upon their adoption, and annually thereafter, to assure that all personnel with emergency response duties and responsibilities effectively carry out their assigned tasks."

#### **3.2 Federal Requirements**

By presidential directive on December 7, 1979, the Federal Emergency Management Agency (FEMA) became the lead agency for all off-site nuclear power plant emergency planning and response. FEMA's responsibilities include review and evaluation of state and local nuclear emergency response plans, observation and evaluation of implementation of state and local plans and coordination of activities of other federal agencies that have radiological emergency planning responsibilities.

The adequacy of off-site nuclear emergency response is evaluated by FEMA through Radiological Emergency Preparedness (REP) exercises. Table 3-1 summarizes the 2006 exercises and the extent of play in which the NEPS participated. FEMA Graded EPZ exercises are required biennially at each site. IPZ exercises are evaluated once every six years at each site. REP exercises are designed to test the capability of off-site organizations to protect public health and safety through the implementation of emergency response plans and procedures under simulated accident conditions.

During REP exercises, FEMA evaluators compare state performance with federal response objectives and provide an Exercise Report detailing their observations. If exercise objectives are not met by state performance, FEMA classifies the performance inadequacy as one of the following: Deficiency, Area Requiring Corrective Action (ARCA), or Plan Issue. A deficiency is defined as "observed or identified inadequacies of organizational performance in an exercise that could cause a finding that off-site emergency preparedness is not adequate to provide reasonable assurance that appropriate protective measures can be taken in the event of a radiological emergency to protect the health and safety of the public living in the vicinity of a nuclear power plant." Deficiencies must be corrected and re-evaluated by FEMA within 120 days. An ARCA is defined as an inadequacy in state response that, by itself, does not adversely impact public health and safety. ARCAs must be corrected in the next FEMA-observed exercise

at that site. A Plan Issue is an observed or identified issue during and exercise which does not involve participant or organizational performance, but rather involves inadequacies in an organization's existing plan or procedures. A Plan Issue should be corrected by no later than the next annual plan review and update. Figure 3-1 displays the number of ARCAs by year for Artificial Island and Oyster Creek.

In addition to FEMA-evaluated REP exercises, nuclear emergency responders participate in annual state exercises, quarterly utility exercises, utility exercises observed by the Nuclear Regulatory Commission (NRC), table-top drills and field drills. During these exercises and drills, some of the 10 nuclear emergency response facilities maintained by the NEPS are activated and staffed. In 2006, program personnel participated in six quarterly exercises, two Department of Homeland Security (DHS) evaluated exercises, and two other exercises. See Table 3-1 for a summary of exercises.



Field Team Equipment Checkout

**TABLE 3-1****2006 EXERCISES AND EXTENT OF PLAY**

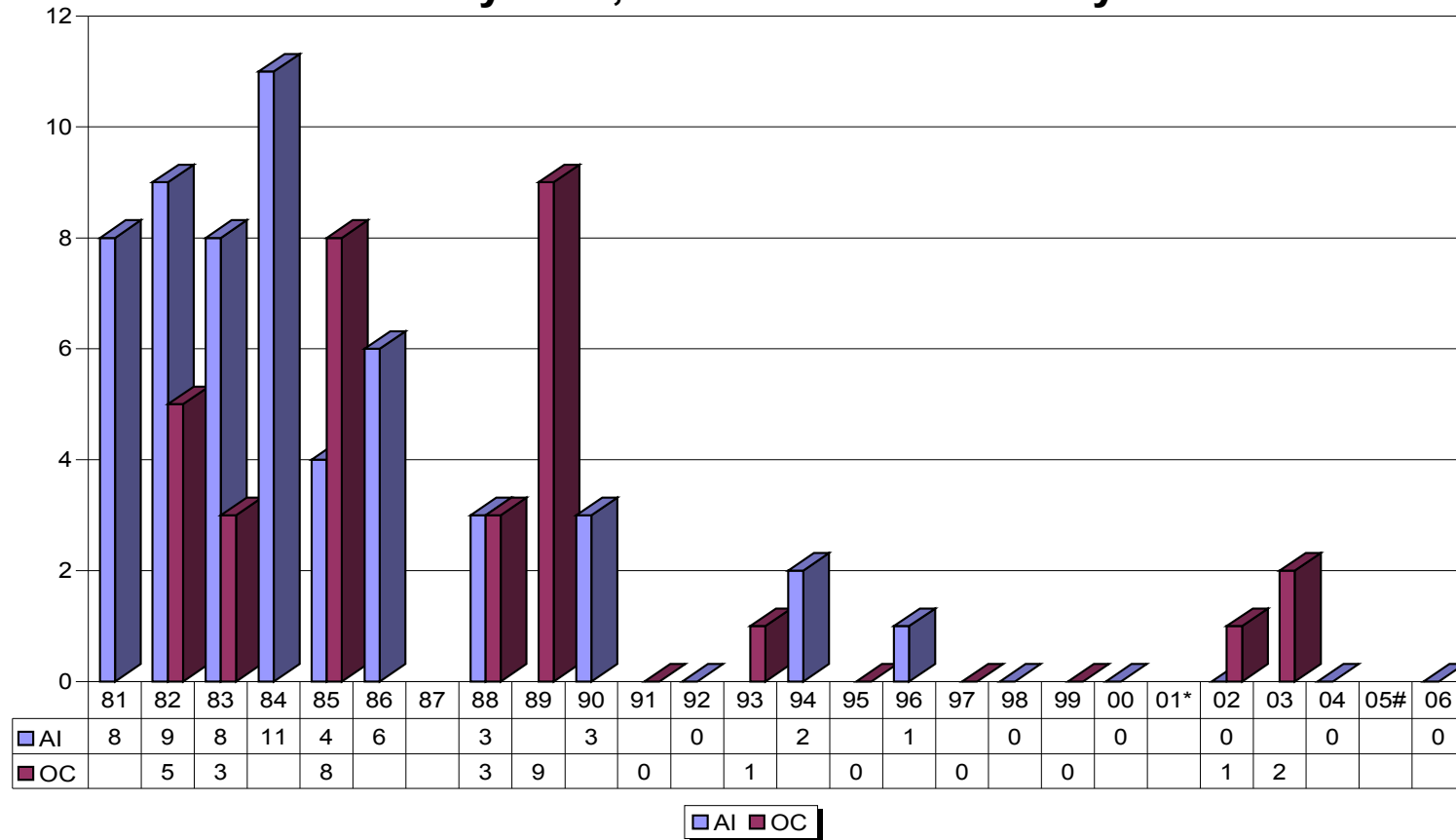
<u>Description</u>	<u>Date</u>	<u>BNE/HQ</u>	<u>EOF</u>	<u>EOC</u>	<u>ENC/JIC</u>	<u>FCP</u>	<u>FMT</u>
Salem Rehearsal	02/15/06	X	X	X	X	X	X
Salem DHS Evaluated	03/21/06	X	X	X	X	X	X
Oyster Creek Quarterly	04/05/06	*	X	*	X		
Salem Quarterly	06/07/06	*	X	X	X		
Oyster Creek Quarterly	07/12/06	*	X	X	X		
Salem Quarterly	07/19/06	*	X	*	X		
Oyster Creek Rehearsal	08/16/06	X	X	X	X	X	X
Oyster Creek DHS Evaluated	09/12/06	X	X	X	X	X	X
Hope Creek Quarterly	09/14/06	*	X	*	X		
Oyster Creek Quarterly	11/29/06	*	X	X	X		

EOF: Emergency Operations Facility  
JIC: Joint Information Center  
X: Full staffing & participation

EOC: Emergency Operations Center  
FCP: Forward Command Post  
\* Partial Staffing

ENC: Emergency News Center  
FMT: Field Monitoring Teams

**Figure 3-1**  
**BNE Exercise Performance**  
**Total ARCAs by Year, Artificial Island and Oyster Creek**



\* Because of the terrorist attacks on September 11, 2001, the FEMA evaluated exercise for OC was postponed.

# Due to Hurricane Katrina, the FEMA evaluated exercise for Oyster Creek was postponed until 2006. The Post Exercise Report is pending.



## **4.0 ACTIVITIES IN SUPPORT OF NUCLEAR EMERGENCY PLANNING**

### **4.1 Spokesperson Crisis Communication Training**

On February 1, NEPs personnel attended Crisis Communication Training at the Woodstown Emergency News Center in Salem County. The training was hosted by PSEG and presented by M.K.Dunkle Consulting from Marietta, Georgia. The eight-hour course was attended by public information personnel from the state, Salem and Cumberland counties, and the licensee. The purpose of the course was to provide offsite agency spokespersons with information in order to identify their roles and objectives and to provide guidelines for crisis communication. Included in the training were topics on: defining credibility and how to gain credibility and trust; understanding the news media's motivations, strategies and techniques; and what to do and not to do in order to promote effective crisis communication. During the training, attendees were divided into public information groups and were handed emergency scenarios in which to analyze and prepare news statements. The groups were then assembled and video recorded while the rest of the attendees simulated the news media. Each group presentation was critiqued and given a second scenario in which to perfect their technique. The Emergency News Center is the primary source for providing the public with information during a nuclear incident at one of the nuclear generating sites affecting New Jersey.

### **4.2 Re-certification Seminar for Trainers**

On February 3, the Nuclear Emergency Preparedness Section in conjunction with the State Police Office of Emergency Management and the Ocean County Sheriff's Department hosted a Re-certification Seminar for Trainers. The seminar was the final training module that was developed and approved by the Radiological Emergency Response Program Standing Committee formed in 2003. The task of the sub-committee on training was to update all training modules presented by the state training team for nuclear emergency response. The seminar was designed to ensure that all members of the state training team provide consistent and uniform training to nuclear emergency responders and volunteers.

The Re-certification Seminar for Trainers was presented for the State/County/Licensee Radiological Emergency Response Program Training Team. The course included a review of the minimum required qualifications for trainers. The instruction covered training doctrine and methods used to conduct field and classroom training. Another module provided detailed training on the proper use of radiation detection instruments and survey techniques according to established radiological emergency response program

standard operating procedures. In addition to the training, all training team members were required to re-certify by passing a proficiency examination demonstrating proper use of equipment used in field operations and for emergency worker self protection. Finally, instructors provided information to trainers to ensure uniformity, consistency, and efficiency in the preparation, planning and conduct of all radiological emergency response training.

#### 4.3 Salem Unit 2 Department of Homeland Security Graded Exercise

On March 21, the Department of Homeland Security (DHS) evaluated the radiological emergency response capability of various state, county, and local agencies during a federally graded exercise at the Salem Unit 2 Nuclear Generating Station in Lower Alloway's Creek. In addition, emergency response operations at several support facilities were evaluated according to an out-of-sequence schedule. The purpose of the exercise was to assess the capabilities of state, county, and local emergency preparedness organizations in implementing nuclear emergency response plans and procedures to protect the public health and safety. The biennial exercise was conducted in accordance with the New Jersey Radiological Emergency Response Plan (RERP). The DHS evaluation criteria included emergency operations management, protective action decision making, protective action implementation, field measurement and analysis, emergency notifications to the public, and support operations.

DEP emergency response personnel participated and tested the plan with the State Police Office of Emergency Management (SPOEM), Salem and Cumberland counties, the Delaware Emergency Management Agency (DEMA), and Public Service Enterprise Group (PSEG). All emergency facilities were activated for the exercise. The BNE fully staffed the Emergency Operations Facility (EOF) in Salem; the Emergency News Center (ENC) and Forward Command Post (FCP) located at the Salem Office of Emergency Management in Woodstown; two state Field Monitoring Teams (FMT); and the Emergency Operations Center (EOC) located at State Police Headquarters in West Trenton.

During the exercise, engineering and dose assessments were conducted at the EOF in order to formulate protective action recommendations (PARs). Protective action decisions (PAD) used to protect the public were formulated by the Governor's designee at the EOC. Accident updates and protective action decisions for the public were disseminated to the press at the ENC. Field monitoring teams provided field data which was used to characterize the extent of the radioactive plume.

The DEP staff successfully met the criteria in each of the six evaluation areas outlined in

DHS's evaluation methodology. DHS's post exercise report specifically referenced good command and control, timely and effective communications, and professionalism.

#### 4.4 National Radiological Emergency Preparedness Conference

Mr. Patrick Mulligan of the Bureau of Nuclear Engineering and Chairperson of the Conference of Radiation Control Program Director's (CRCPD) E-6 Committee on Emergency Response Planning, attended the 16<sup>th</sup> Annual National Radiological Emergency Preparedness Conference in St. Louis Missouri from March 27 through March 31. The purpose of the conference was to provide a national forum for dialogue and sharing of information among professionals involved in offsite nuclear emergency response. The conference offered personal interaction with other state agencies and federal regulators on agency updates and current topics related to nuclear emergency response. Mr. Mulligan was invited by the Conference Steering Committee to make a presentation on the CRCPD and the E-6 Committee activities for the past year. He provided an overview of the CRCPD organization including its mission, goals, members and function.

The Nuclear Regulatory Commission (NRC) provided the conference attendees with an update on REP related activities within the organization. The overarching theme for their presentation was the integration of security with emergency preparedness. Over the past year the NRC has been involved with a comprehensive review of its radiological preparedness and planning program. The review resulted in a number of initiatives that were released for use industry wide in Regulatory Issue Summaries and Bulletins. The most notable was "NRC Bulletin 2005-02: Emergency Preparedness and Response Actions for Security Based Events" (July 18, 2005) U.S. Nuclear Regulatory Commission. The NRC is also sponsoring a study of Protective Action Recommendations (PAR). This study is designed to assist the nuclear industry in addressing the NRC request that all licensees reconsider sheltering as a PAR for nuclear emergencies. Finally, the NRC and DHS are working together to develop security based drills and exercises that will become part of the six year evaluation cycle for nuclear power plants.

The Department of Homeland Security (DHS) provided a detailed update on activities and initiatives to the Conference in a plenary session. During the update the DHS has publicly recognized that NUREG-0654 (the planning basis for all Radiological Emergency Response Plans) is severely outdated and needs a total overhaul to make the document current. The DHS plans to undertake this project in the near future.

The Department of Energy (DOE) provided the conference with an update on the Consequence Management Home Team Concept. The concept is designed to provide support to states before the Consequence Management Response Team arrives. The DOE is also continuing to hold regular meetings of working groups addressing the review and revision to Federal Radiological Management and Assessment Center (FRMAC)



Manuals. The BNE and the CRCPD E-6 Committee participates on each of these working groups and works closely with the DOE on all issues related to FRMAC.

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The Environmental Protection Agency (EPA) is currently working with other federal agencies to review and revise the operational procedures for the Emergency Preparedness Advisory Team. The Advisory Team provides support to states during nuclear emergencies when federal assistance is requested. The group also is working on training initiatives for regional response staff and outreach for state and local response organizations.

#### 4.5 Southern Crossing Federal Field Exercise

Mr. DePierro, Supervisor of the NEPS, was invited and participated as a field team controller and evaluator in the multi-state Department of Energy led “Southern Crossing Interagency Radiological Consequence Management” exercise in Dothan, Alabama. The goals of the exercise were to test Consequence Management functions; the Federal Radiological Monitoring Assessment Center’s (FRMAC) ability to transition leadership with other federal and state agencies; and to demonstrate integration of federal, state, and local entities in nuclear/radiological emergency response. The Field Exercise ran 24/7 from Monday through Friday, August 14-18. There were over 450 participants including 15 integrated (federal, state and local) field monitoring teams, and 42 controller/evaluators involved in the exercise.

The exercise scenario involved two unknown individuals transporting explosives and a 5,000 curie Cs-137 source of an unknown origin and their involvement in a traffic accident in Alabama. As a result of the accident and explosion, a radioactive plume impacts Alabama, Georgia, and Florida. An Incident Command Center was activated in Dothan and FRMAC’s Consequence Managements Teams were requested.

During the first two days, field teams assessed the incident and confirmed evacuation actions, FRMAC arrived, and DOE’s Aerial Monitoring System actually flew a fixed wing survey of the area. Day three of the exercise simulated a time jump to day six allowing field teams to perform ingestion sampling in the potentially contaminated areas (which included Alabama, Georgia and Florida). During day five (a time jump to day 30 of the event) a table-top exercised the transition of leadership from DOE to the EPA. During the week long exercise Mr. DePierro evaluated state, federal and integrated field monitoring teams and prepared written evaluation reports for the exercise control cell evaluation team.

#### 4.6 Oyster Creek Department of Homeland Security Graded Exercise

In order to ensure the health and safety of our citizens during a nuclear event, the Department of Homeland Security (DHS) requires the testing and evaluation of the New Jersey Radiological Emergency Response Plan (RERP). Each site is required to be evaluated biannually by DHS. However, due to the federal response to events following Hurricane Katrina, the DHS evaluated exercise scheduled at the Oyster Creek nuclear generating station in Lacey Township in 2005 was cancelled. The exercise was rescheduled and conducted on the evening of September 12<sup>th</sup>, 2006. During the exercise, DEP emergency response personnel tested the plan with the State Police Office of Emergency Management (SPOEM), Ocean County, and AmerGen. DEP staff activated the Emergency Operations Center (EOC) located at State Police Headquarters in West Trenton, the Emergency Operations Facility (EOF) and the Joint Information Center (JIC) located in Toms River, and the Forward Command Post (FCP) located in Berkeley Township. Two state and one county Field Monitoring Teams (FMTs) also participated.

During the evaluated exercise, engineering and dose assessments were conducted at the EOF in order to formulate protective action recommendations (PARs). DEP staff presented accident assessment and PARs at the EOC where the Governor's designee formulated protective action decisions for the public. Accident information and protective action decisions for the public were presented to the press at the JIC. Field monitoring teams characterized the extent of the radioactive plume and provided the FCP with field data. Each facility was evaluated against six evaluation areas outlined in DHS's evaluation methodology.

DHS presented its draft Post Exercise Report in late November. The only issue identified was a discrepancy in two separate procedures concerning emergency worker exposure control. The issue will be evaluated and may be identified in the final report as either a "plan issue" or an "area requiring corrective action" (ARCA). Either inadequacy by itself does not adversely impact public health and safety. The BNE, SPOEM and Department of Health and Senior Services (DHSS) have convened several post-exercise meetings in order to resolve the inconsistency and revise all associated procedures. The final Post Exercise Report is expected to be available in February. All other exercise evaluation objectives were successfully met at DEPs emergency facilities and field teams.

#### 4.7 Nuclear Regulatory Commission (NRC) Region 1 Joint Exercise Scheduling Conference

On November 27 – November 30, a representative of the Nuclear Emergency Preparedness Section attended the annual Regional Scheduling Conference in Annapolis,



## **5.0 TRAINING OF NUCLEAR EMERGENCY RESPONDERS**

### **5.1 State/County/Licensee Training**

Federal guidelines require that nuclear emergency responders receive annual training to maintain a state of preparedness. The State Police Office of Emergency Management is the lead agency for the development and coordination of training for both paid and volunteer staff in the emergency planning zone counties and municipalities. To ensure the state provides a comprehensive training program for emergency responders, the State Police Office of Emergency Management has created a training team within the Radiological Emergency Preparedness program to address training issues. The training team consists of members of the State Police Office of Emergency Management, the Bureau of Nuclear Engineering's Nuclear Emergency Preparedness Section, Ocean, Salem and Cumberland Counties, AmerGen, and Public Service Enterprise Group. Together, these trainers provide all required training at the state, county and local level to ensure consistency for all responders. In addition, the State Police Office of Emergency Management Radiological Emergency Preparedness Standing Committee created a training subcommittee. The subcommittee is comprised of staff from the State Police Office of Emergency Management and the Nuclear Emergency Preparedness Section as well as county training coordinators. The task of the subcommittee is to develop course outlines, objectives and training modules to ensure that all responders are trained to the same standards and guidelines. The efforts of the subcommittee have resulted in a comprehensive training program that meets the requirements of federal guidance.

### **5.2 Training Provided by NEPS Personnel**

In order to ensure that all responders are able to perform their assigned duties in a timely, knowledgeable and professional manner, the NEPS provides a wide range of training throughout the year. During 2006, NEPS implemented and supported the implementation of thirty-one training sessions. Table 5-1 summarizes all nuclear emergency response training provided during 2006.

### **5.3 Training Attended by NEPS Personnel**

In 2006, NEPS personnel attended training offered by the BNE, SPOEM, PSEG, AmerGen and M.K.Dunkle Consultant. Table 5-2 summarizes training attended by

NEPS personnel.

5-1  
**TABLE 5-1**

2006 NEPS Annual Update

**NUCLEAR EMERGENCY RESPONSE TRAINING PROVIDED BY NEPS**

<b><u>TRAINING</u></b>	<b><u>DATES</u></b>
State Trainers Certification	02/03/06
Train the Trainers (Ocean County)	02/17/06
State Field Monitoring Team (FMT)	03/15/06
Forward Command Post Training (FCP)	03/15/06
Emergency Operations Facility (EOF)	03/16/06
Emergency Operations Center (EOC)	03/17/06
Monitoring Instrument Training (Cumberland County)	03/27/06
Emergency Worker Decon Center (Pinewald)	04/03/06
Reception Center (Bridgeton)	04/04/06
Emergency Worker Decon Center (Hopewell)	04/18/06
Reception Center (Bridgeton)	05/02/06
Reception Center (Salem Vo. Tech.)	05/03/06
Reception Center (Salem Vo. Tech.)	05/04/06
Emergency Operations Center (Beach Haven)	05/05/06
Train the Trainers (Ocean County)	05/19/06
Emergency Worker Decon Center (Pennsville)	05/31/06
Emergency Worker Decon Center (Pennsville)	06/01/06

Reception Center (Jackson)

07/17/06

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**TABLE 5-1 (continued)**

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**NUCLEAR EMERGENCY RESPONSE TRAINING PROVIDED BY NEPS**

<b><u>TRAINING</u></b>	<b><u>DATES</u></b>
Reception Center (Jackson)	07/18/06
Reception Center (Jackson)	07/24/06
Reception Center (Jackson)	07/25/06
Field Monitoring Team (Ocean County)	08/01/06
Emergency Operations Facility (EOF)	08/30/06
Forward Command Post (FCP)	08/30/06
State Field Monitoring Team (FMT)	09/11/06
RERP Overview Training (Ocean County)	09/22/06
Emergency Worker Decon Center (Stafford)	10/17/06
Emergency Worker Decon Center (Stafford)	10/19/06
Emergency Worker Decon Center (Stafford)	10/23/06
Emergency Worker Decon Center (Stafford)	10/26/06
Monitoring Instrument Training (Barnegat Light)	12/07/06

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**TABLE 5-2**

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**TRAINING ATTENDED BY NEPS  
PERSONNEL**

<b><u>TRAINING</u></b>	<b><u>DATES</u></b>	<b><u>PROVIDED BY</u></b>
Crisis Communication	02/01/06	M.K.Dunkle Consult.
State Trainers Certification	02/03/06	SPOEM/NEPS
State Field Monitoring Team (FMT)	03/15/06	BNE/NEPS
Forward Command Post (FCP)	03/15/06	BNE/NEPS
Emergency Operations Facility (EOF)	03/16/06	BNE/NEPS
Emergency Operations Center (EOC)	03/17/06	BNE/NEPS
State Field Monitoring Team (FMT)	09/11/06	BNE/NEPS
Emergency Action Level Training (EAL)	09/28/06	PSEG
Plume Tracker Instrumentation	12/06/06	Exelon Corp.
Emergency Action Level Training (EAL)	12/12/06	AmerGen

## **6.0 RADIOLOGICAL EMERGENCY RESPONSE PLAN PUBLIC HEARINGS**

The DEP, in cooperation with the New Jersey Division of State Police, is required by the New Jersey Radiation Accident Response Act (N.J.S.A. Title 26:2D-37 et seq.), to hold public hearings to take comment on and answer questions relevant to the New Jersey RERP for nuclear power plants. The purpose of the RERP is to coordinate and implement an immediate comprehensive state, county and municipal response to a radiological emergency at a nuclear power plant affecting the State of New Jersey. These public hearings are held annually in each of the three counties affected by the RERP; Ocean County for the OCNGS site and Salem and Cumberland counties for the AI site (Hope Creek and Salem Units 1 and 2).

The NEPS coordinated and presided over three public hearings in 2006: July 11<sup>th</sup> in Ocean County, July 19<sup>th</sup> in Cumberland County and October 11<sup>th</sup> in Salem County. Statements were made by representatives of the DEP, the SPOEM, and the Department of Health and Senior Services. Questions and comments from the public were addressed by the appropriate agency.

Copies of the transcripts for the three hearings are available for inspection on the Bureau of Nuclear Engineering's web site.



## **How to Contact Us**

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